PROJECT MANUAL

Wheeler Terrace Demolition for….

Casper College®

Project: **25110, (Casper College #CC613-26)**
March 31, 2026

AMUNDSEN ASSOCIATES
ARCHITECTURE • PLANNING • INTERIOR DESIGN

CASPER COLLEGE
WHEELER TERRACE DEMOLITON PROJECT

BIDDING REQUIREMENTS

CONTRACT FORMS

PROJECT FORMS

SPECIFICATIONS

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DIVISION 02 – EXISTING CONDITIONS

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AMUNDSEN ASSOCIATES
ARCHITECTURE • PLANNING • INTERIOR DESIGN
212 East 2nd Street Casper, Wyoming 82601
Phone: (307) 234-9999 office@amundsenassociates.com Fax: (307) 234-4542

CERTIFICATE OF NON-DISCRIMINATION

This form shall be completed and submitted with the Bid Form.

PROJECT: Wheeler Terrace Demolition

The Bidder hereby certifies that all persons employed by their firm, their affiliates, and subsidiaries of holding companies are treated equally by their firm without regard to or because of race, religion, ancestry, national origin or sex as required by Federal and State anti-discrimination laws. The Bidder further certifies and agrees that it will deal with subcontractors, bidders or vendors without regard to or because of race, religion, ancestry, national origin or sex. Violation of their certification may constitute a material breach of contract upon which the Owner may determine to cancel, terminate or suspend the contract.

_____
(Firm)

By: _____

_____
(Title)

DATE: _____

AIA® Document A104® – 2017

Standard Abbreviated Form of Agreement Between Owner and Contractor

AGREEMENT made as of the Twelfth day of February in the year Two Thousand Twenty-Six
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

Casper College
125 College Drive
Casper, WY 82601
307-268-2633

and the Contractor:
(Name, legal status, address and other information)

To Be Determined

for the following Project:
(Name, location and detailed description)

Casper College Wheeler Terrace Demolition
475 College Drive
Casper, WY 82601
Demolition and removal of the existing building, utilities, site features, etc. as described in the plans and specifications. The materials are to be properly disposed of at the City of Casper Landfill. The scope of work includes handling and disposal of asbestos containing materials. The asbestos scope can be completed 100% by the Demolition Contractor who has the trained personnel and certifications to complete such work or the asbestos work can be completed in conjunction with the Owner provided consultant - Safetech.

The Architect:
(Name, legal status, address and other information)

Amundsen Associates, LLC
212 E. Second Street
Casper, WY 82601
307-234-9999

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document may have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

TABLE OF ARTICLES

ARTICLE 1 THE WORK OF THIS CONTRACT

The Contractor shall execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The date of commencement of the Work shall be:
(Check one of the following boxes.)

[ ] The date of this Agreement.

[ ] A date set forth in a notice to proceed issued by the Owner.

[X] Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

May 18, 2026

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 2.2 The Contract Time shall be measured from the date of commencement.

§ 2.3 Substantial Completion
§ 2.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:
(Check the appropriate box and complete the necessary information.)

[ ] Not later than ( ) calendar days from the date of commencement of the Work.

[X] By the following date: July 31, 2026

§ 2.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date

§ 2.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 2.3, liquidated damages, if any, shall be assessed as set forth in Section 3.5.

ARTICLE 3 CONTRACT SUM
§ 3.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:
(Check the appropriate box.)

[X] Stipulated Sum, in accordance with Section 3.2 below

[ ] Cost of the Work plus the Contractor's Fee, in accordance with Section 3.3 below

[ ] Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 3.4 below

(Based on the selection above, complete Section 3.2, 3.3 or 3.4 below.)

§ 3.2 The Stipulated Sum shall be ($), subject to additions and deductions as provided in the Contract Documents.

§ 3.2.1 The Stipulated Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 3.2.2 Unit prices, if any:
(Identify the item and state the unit price and the quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit ($0.00)

§ 3.2.3 Allowances, if any, included in the stipulated sum:

(Identify each allowance.)

Item	Price

§ 3.3 Cost of the Work Plus Contractor's Fee (Not Applicable)
§ 3.3.1 The Cost of the Work is as defined in Exhibit A, Determination of the Cost of the Work.
§ 3.3.1 The Cost of the Work is as defined in Exhibit A, Determination of the Cost of the Work.

§ 3.3.2 The Contractor's Fee:
(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor's Fee and the method of adjustment to the Fee for changes in the Work.)

§ 3.4 Cost of the Work Plus Contractor's Fee With a Guaranteed Maximum Price (Not Applicable)
§ 3.4.1 The Cost of the Work is as defined in Exhibit A, Determination of the Cost of the Work.

§ 3.4.2 The Contractor's Fee:
(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor's Fee and the method of adjustment to the Fee for changes in the Work.)

§ 3.4.3 Guaranteed Maximum Price (Not Applicable)
§ 3.4.3.1 The sum of the Cost of the Work and the Contractor's Fee is guaranteed by the Contractor not to exceed ($), subject to additions and deductions by changes in the Work as provided in the Contract Documents. This maximum sum is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the Owner.
(Insert specific provisions if the Contractor is to participate in any savings.)

§ 3.4.3.2 The Guaranteed Maximum Price is based on the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 3.4.3.3 Unit Prices, if any:
(Identify the item and state the unit price and the quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit ($0.00)

§ 3.4.3.4 Allowances, if any, included in the Guaranteed Maximum Price:
(Identify each allowance.)

Item	Price

§ 3.4.3.5 Assumptions, if any, on which the Guaranteed Maximum Price is based:

§ 3.4.3.6 To the extent that the Contract Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Contract Documents and reasonably inferable therefrom. Such further development does not include changes in scope, systems, kinds and quality of materials, finishes or equipment, all of which, if required, shall be incorporated by Change Order.

§ 3.4.3.7 The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon

assumptions contained in Section 3.4.3.5. The Owner shall promptly furnish such revised Contract Documents to the Contractor. The Contractor shall notify the Owner and Architect of any inconsistencies between the agreed-upon assumptions contained in Section 3.4.3.5 and the revised Contract Documents.

§ 3.5 Liquidated damages, if any:
(Insert terms and conditions for liquidated damages, if any.)

$500 per day

ARTICLE 4 PAYMENT

§ 4.1 Progress Payments

§ 4.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 4.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 4.1.3 Provided that an Application for Payment is received by the Architect not later than the Fifth day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the Twenty-First day of the following month. If an Application for Payment is received by the Architect after the date fixed above, payment shall be made by the Owner not later than Sixty (60) days after the Architect receives the Application for Payment.
(Federal, state or local laws may require payment within a certain period of time.)

§ 4.1.4 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold retainage from the payment otherwise due as follows:
(Insert a percentage or amount to be withheld as retainage from each Application for Payment and any terms for reduction of retainage during the course of the Work. The amount of retainage may be limited by governing law.)

5%

§ 4.1.5 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

1.50 % monthly

§ 4.2 Final Payment

§ 4.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- **.1** the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 18.2, and to satisfy other requirements, if any, which extend beyond final payment;
- **.2** the Contractor has submitted a final accounting for the Cost of the Work, where payment is on the basis of the Cost of the Work with or without a Guaranteed Maximum Price; and
- **.3** a final Certificate for Payment has been issued by the Architect in accordance with Section 15.7.1.
- .4 the Contractor files with Owner a sworn statement, as required by Wyo. Stat. 16-6-117, stating that all claims for material and labor performed under the Contract have been made and paid to all subcontractors and suppliers. Contractor payments shall not be withheld due to claims against Contractor's Surety Bond except as required by Wyo. Stat. 16-6-117, if applicable.
- .5 the requirements of Wyo. Stat. 16-6-116 have been met.

§ 4.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

ARTICLE 5 DISPUTE RESOLUTION

§ 5.1 Binding Dispute Resolution

For any claim subject to, but not resolved by, mediation pursuant to Section 21.5, the method of binding dispute resolution shall be as follows:
(Check the appropriate box.)

[ ] Arbitration pursuant to Section 21.6 of this Agreement

[X] Litigation in a court of competent jurisdiction

[ ] Other *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, claims will be resolved in a court of competent jurisdiction.

ARTICLE 6 ENUMERATION OF CONTRACT DOCUMENTS

§ 6.1 The Contract Documents are defined in Article 7 and, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 6.1.1 The Agreement is this executed AIA Document A104™–2017, Standard Abbreviated Form of Agreement Between Owner and Contractor.

§ 6.1.2 Building information modeling exhibit, dated as indicated below:
(Insert the date of the building information modeling exhibit incorporated into this Agreement.)

Not Applicable

§ 6.1.3 The Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

§ 6.1.4 The Specifications:
(Either list the Specifications here or refer to an exhibit attached to this Agreement.)

Section	Title	Date	Pages

§ 6.1.5 The Drawings:
(Either list the Drawings here or refer to an exhibit attached to this Agreement.)

Number	Title	Date

§ 6.1.6 The Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are enumerated in this Article 6.

§ 6.1.7 Additional documents, if any, forming part of the Contract Documents:

.1 Other Exhibits:
(Check all boxes that apply.)

[ ] Exhibit A, Determination of the Cost of the Work.

[ ] AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

[ ] The Sustainability Plan:

Title	Date	Pages

[ ] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.2 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents.)

ARTICLE 7 GENERAL PROVISIONS

§ 7.1 The Contract Documents

The Contract Documents are enumerated in Article 6 and consist of this Agreement (including, if applicable, Supplementary and other Conditions of the Contract), Drawings, Specifications, Addenda issued prior to the execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 7.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between any persons or entities other than the Owner and the Contractor.

§ 7.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 7.4 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 7.5 Ownership and use of Drawings, Specifications and Other Instruments of Service

§ 7.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 7.5.2 The Contractor, Subcontractors, Sub-subcontractors and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to the protocols established pursuant to Sections 7.6 and 7.7, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any,

shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants.

§ 7.6 Digital Data Use and Transmission
The parties shall agree upon written protocols governing the transmission and use of, and reliance on, Instruments of Service or any other information or documentation in digital form.

§ 7.7 Building Information Models Use and Reliance
Any use of, or reliance on, all or a portion of a building information model without agreement to written protocols governing the use of, and reliance on, the information contained in the model shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

§ 7.8 Severability
The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 7.9 Notice
§ 7.9.1 Except as otherwise provided in Section 7.9.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission in accordance with a building information modeling exhibit, if completed, or as otherwise set forth below:
(If other than in accordance with a building information modeling exhibit, insert requirements for delivering Notice in electronic format such as name, title and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 7.9.2 Notice of Claims shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 7.10 Relationship of the Parties
Where the Contract is based on the Cost of the Work plus the Contractor's Fee, with or without a Guaranteed Maximum Price, the Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Contractor's skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents.

ARTICLE 8 OWNER
§ 8.1 Information and Services Required of the Owner
§ 8.1.1 Prior to commencement of the Work, at the written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 8.1.1, the Contract Time shall be extended appropriately.

§ 8.1.2 The Owner shall furnish all necessary surveys and a legal description of the site.

§ 8.1.3 The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 8.1.4 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 9.6.1, the Owner shall secure and pay for other necessary approvals, easements, assessments,

and charges required for the construction, use, or occupancy of permanent structures or for permanent changes in existing facilities.

§ 8.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents, or repeatedly fails to carry out the Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order is eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

§ 8.3 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to any other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 15.4.3, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including the Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 21.

ARTICLE 9 CONTRACTOR

§ 9.1 Review of Contract Documents and Field Conditions by Contractor

§ 9.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

§ 9.1.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 8.1.2, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies, or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents.

§ 9.1.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 9.2 Supervision and Construction Procedures

§ 9.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters.

§ 9.2.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors.

§ 9.3 Labor and Materials

§ 9.3.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 9.3.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 9.3.3 The Contractor may make a substitution only with the consent of the Owner, after evaluation by the Architect and in accordance with a Modification.

§ 9.4 Warranty

The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation or normal wear and tear under normal usage. All other warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 15.6.3.

§ 9.5 Taxes

The Contractor shall pay sales, consumer, use, and other similar taxes that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 9.6 Permits, Fees, Notices, and Compliance with Laws

§ 9.6.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 9.6.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work. If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 9.7 Allowances

The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. The Owner shall select materials and equipment under allowances with reasonable promptness. Allowance amounts shall include the costs to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Contractor's costs for unloading and handling at the site, labor, installation, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowance.

§ 9.8 Contractor's Construction Schedules

§ 9.8.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

§ 9.8.2 The Contractor shall perform the Work in general accordance with the most recent schedule submitted to the Owner and Architect.

§ 9.9 Submittals

§ 9.9.1 The Contractor shall review for compliance with the Contract Documents and submit to the Architect Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents in coordination with the Contractor's construction schedule and in such sequence as to allow the Architect reasonable time for review. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them; (2) determined and verified materials, field measurements, and field construction criteria related thereto, or will do so; and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. The

Work shall be in accordance with approved submittals.

§ 9.9.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents.

§ 9.9.3 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents or unless the Contractor needs to provide such services in order to carry out the Contractor's own responsibilities. If professional design services or certifications by a design professional are specifically required, the Owner and the Architect will specify the performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional. If no criteria are specified, the design shall comply with applicable codes and ordinances. Each Party shall be entitled to rely upon the information provided by the other Party. The Architect will review and approve or take other appropriate action on submittals for the limited purpose of checking for conformance with information provided and the design concept expressed in the Contract Documents. The Architect's review of Shop Drawings, Product Data, Samples, and similar submittals shall be for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. In performing such review, the Architect will approve, or take other appropriate action upon, the Contractor's Shop Drawings, Product Data, Samples, and similar submittals.

§ 9.10 Use of Site
The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 9.11 Cutting and Patching
The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

§ 9.12 Cleaning Up
The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus material from and about the Project.

§ 9.13 Access to Work
The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 9.14 Royalties, Patents and Copyrights
Not Applicable ~~The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.~~

§ 9.15 Indemnification
§ 9.15.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 9.15.1.

§ 9.15.2 In claims against any person or entity indemnified under this Section 9.15 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 9.15.1 shall not be limited by a limitation on amount or type of damages,

compensation or benefits payable by or for the Contractor or Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 10 ARCHITECT

§ 10.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction, until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

§ 10.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 10.3 The Architect will visit the site at intervals appropriate to the stage of the construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 10.4 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 10.5 Based on the Architect's evaluations of the Work and of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 10.6 The Architect has authority to reject Work that does not conform to the Contract Documents and to require inspection or testing of the Work.

§ 10.7 The Architect will review and approve or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 10.8 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect will make initial decisions on all claims, disputes, and other matters in question between the Owner and Contractor but will not be liable for results of any interpretations or decisions rendered in good faith.

§ 10.9 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

ARTICLE 11 SUBCONTRACTORS

§ 11.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site.

§ 11.2 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the Subcontractors or suppliers proposed for each of the principal portions of the Work. The Contractor shall not contract with any Subcontractor or supplier to whom the Owner or Architect has made reasonable written objection within ten days after receipt of the Contractor's list of Subcontractors and suppliers. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 11.3 Contracts between the Contractor and Subcontractors shall (1) require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by the Contract Documents, assumes toward the Owner and Architect, and (2) allow the Subcontractor the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Contract Documents, has against the Owner.

ARTICLE 12 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 12.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 12.2 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's activities with theirs as required by the Contract Documents.

§ 12.3 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a Separate Contractor because of delays, improperly timed activities, or defective construction of the Contractor. The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work, or defective construction of a Separate Contractor.

ARTICLE 13 CHANGES IN THE WORK

§ 13.1 By appropriate Modification, changes in the Work may be accomplished after execution of the Contract. The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, with the Contract Sum and Contract Time being adjusted accordingly. Such changes in the Work shall be authorized by written Change Order signed by the Owner, Contractor, and Architect, or by written Construction Change Directive signed by the Owner and Architect. Upon issuance of the Change Order or Construction Change Directive, the Contractor shall proceed promptly with such changes in the Work, unless otherwise provided in the Change Order or Construction Change Directive.

§ 13.2 Adjustments in the Contract Sum and Contract Time resulting from a change in the Work shall be determined by mutual agreement of the parties or, in the case of a Construction Change Directive signed only by the Owner and Architect, by the Contractor's cost of labor, material, equipment, and reasonable overhead and profit, unless the parties agree on another method for determining the cost or credit. Pending final determination of the total cost of a Construction Change Directive, the Contractor may request payment for Work completed pursuant to the Construction Change Directive. The Architect will make an interim determination of the amount of payment due for purposes of certifying the Contractor's monthly Application for Payment. When the Owner and Contractor agree on adjustments to the Contract Sum and Contract Time arising from a Construction Change Directive, the Architect will prepare a Change Order.

§ 13.3 The Architect will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work.

§ 13.4 If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum and Contract Time shall be equitably adjusted as mutually agreed between the Owner and Contractor; provided that the Contractor provides notice to the Owner and Architect promptly and before conditions are disturbed.

ARTICLE 14 TIME

§ 14.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing this Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 14.2 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 14.3 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 14.4 The date of Substantial Completion is the date certified by the Architect in accordance with Section 15.6.3.

§ 14.5 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) changes ordered in the Work; (2) by labor disputes, fire, unusual delay in deliveries, abnormal adverse weather conditions not reasonably anticipatable, unavoidable casualties, or any causes beyond the Contractor's control; or (3) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine, subject to the provisions of Article 21.

ARTICLE 15 PAYMENTS AND COMPLETION

§ 15.1 Schedule of Values

§ 15.1.1 Where the Contract is based on a Stipulated Sum or the Cost of the Work with a Guaranteed Maximum Price pursuant to Section 3.2 or 3.4, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Stipulated Sum or Guaranteed Maximum Price to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy required by the Architect. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 15.1.2 The allocation of the Stipulated Sum or Guaranteed Maximum Price under this Section 15.1 shall not constitute a separate stipulated sum or guaranteed maximum price for each individual line item in the schedule of values.

§ 15.2 Control Estimate

§ 15.2.1 Where the Contract Sum is the Cost of the Work, plus the Contractor's Fee without a Guaranteed Maximum Price pursuant to Section 3.3, the Contractor shall prepare and submit to the Owner a Control Estimate within 14 days of executing this Agreement. The Control Estimate shall include the estimated Cost of the Work plus the Contractor's Fee.

§ 15.2.2 The Control Estimate shall include:

- **.1** the documents enumerated in Article 6, including all Modifications thereto;
- **.2** a list of the assumptions made by the Contractor in the preparation of the Control Estimate to supplement the information provided by the Owner and contained in the Contract Documents;
- **.3** a statement of the estimated Cost of the Work organized by trade categories or systems and the Contractor's Fee;
- **.4** a project schedule upon which the Control Estimate is based, indicating proposed Subcontractors, activity sequences and durations, milestone dates for receipt and approval of pertinent information, schedule of shop drawings and samples, procurement and delivery of materials or equipment the Owner's occupancy requirements, and the date of Substantial Completion; and
- **.5** a list of any contingency amounts included in the Control Estimate for further development of design and construction.

§ 15.2.3 When the Control Estimate is acceptable to the Owner and Architect, the Owner shall acknowledge it in writing. The Owner's acceptance of the Control Estimate does not imply that the Control Estimate constitutes a Guaranteed Maximum Price.

§ 15.2.4 The Contractor shall develop and implement a detailed system of cost control that will provide the Owner and Architect with timely information as to the anticipated total Cost of the Work. The cost control system shall compare the Control Estimate with the actual cost for activities in progress and estimates for uncompleted tasks and proposed changes. This information shall be reported to the Owner, in writing, no later than the Contractor's first Application for Payment and shall be revised and submitted with each Application for Payment.

§ 15.2.5 The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon assumptions contained in the Control Estimate. The Owner shall promptly furnish such revised Contract Documents to the Contractor. The Contractor shall notify the Owner and Architect of any inconsistencies between the Control Estimate and the revised Contract Documents.

§ 15.3 Applications for Payment

§ 15.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 15.1, for completed portions of the Work. The application shall be notarized, if required; be supported by all data

substantiating the Contractor's right to payment that the Owner or Architect require; shall reflect retainage if provided for in the Contract Documents; and include any revised cost control information required by Section 15.2.4. Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 15.3.2 With each Application for Payment where the Contract Sum is based upon the Cost of the Work, or the Cost of the Work with a Guaranteed Maximum Price, the Contractor shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner to demonstrate that cash disbursements already made by the Contractor on account of the Cost of the Work equal or exceed progress payments already received by the Contractor plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Contractor's Fee.

§ 15.3.3 Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing.

§ 15.3.4 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or other encumbrances adverse to the Owner's interests.

§ 15.4 Certificates for Payment

§ 15.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner of the Architect's reasons for withholding certification in whole or in part as provided in Section 15.4.3.

§ 15.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluations of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 15.4.3 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 15.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 15.4.1. If the Contractor and the Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 9.2.2, because of

- **.1** defective Work not remedied;
- **.2** third-party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- **.3** failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- **.4** reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- **.5** damage to the Owner or a Separate Contractor;
- **.6** reasonable evidence that the Work will not be completed within the Contract Time and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or

.7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 15.4.4 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 15.4.3, in whole or in part, that party may submit a Claim in accordance with Article 21.

§ 15.5 Progress Payments

§ 15.5.1 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to sub-subcontractors in a similar manner.

§ 15.5.2 Neither the Owner nor Architect shall have an obligation to pay or see to the payment of money to a Subcontractor or supplier except as may otherwise be required by law.

§ 15.5.3 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 15.5.4 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 15.6 Substantial Completion

§ 15.6.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 15.6.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 15.6.3 Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. When the Architect determines that the Work or designated portion thereof is substantially complete, the Architect will issue a Certificate of Substantial Completion which shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 15.6.4 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 15.7 Final Completion and Final Payment

§ 15.7.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions stated in Section 15.7.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 15.7.2 Final payment shall not become due until the Contractor has delivered to the Owner a complete release of all liens

arising out of this Contract or receipts in full covering all labor, materials and equipment for which a lien could be filed, or a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including costs and reasonable attorneys' fees.

§ 15.7.3 The making of final payment shall constitute a waiver of claims by the Owner except those arising from

- **.1** liens, claims, security interests or encumbrances arising out of the Contract and unsettled;
- **.2** failure of the Work to comply with the requirements of the Contract Documents;
- **.3** terms of special warranties required by the Contract Documents; or
- **.4** audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 15.7.4 Acceptance of final payment by the Contractor, a Subcontractor or supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of the final Application for Payment.

ARTICLE 16 PROTECTION OF PERSONS AND PROPERTY

§ 16.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- **.1** employees on the Work and other persons who may be affected thereby;
- **.2** the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- **.3** other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with, and give notices required by, applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons and property and their protection from damage, injury, or loss. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, a Subcontractor, a sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 16.1.2 and 16.1.3. The Contractor may make a claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 9.15.

§ 16.2 Hazardous Materials and Substances

§ 16.2.1 The Contractor is responsible for compliance with the requirements of the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents, and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 16.2.2 To the fullest extent permitted under the Wyoming Governmental Claims Act~~by law~~, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area, if in fact, the material or substance presents the risk of bodily injury or death as described in Section 16.2.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 16.2.3 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.

ARTICLE 17 INSURANCE AND BONDS

§ 17.1 Contractor's Insurance

§ 17.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in this Section 17.1 or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the insurance required by this Agreement from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 18.4, unless a different duration is stated below:

§ 17.1.2 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) each occurrence, Two Million Dollars and Zero Cents ($ 2,000,000.00) general aggregate, and Two Million Dollars and Zero Cents ($ 2,000,000.00) aggregate for products-completed operations hazard, providing coverage for claims including

- **.1** damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
- **.2** personal and advertising injury;
- **.3** damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
- **.4** bodily injury or property damage arising out of completed operations; and
- **.5** the Contractor's indemnity obligations under Section 9.15.

§ 17.1.3 Automobile Liability covering vehicles owned by the Contractor and non-owned vehicles used by the Contractor, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.

§ 17.1.4 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella insurance policies result in the same or greater coverage as those required under Section 17.1.2 and 17.1.3, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 17.1.5 Workers' Compensation at statutory limits.

§ 17.1.6 Not Applicable ~~Employers' Liability with policy limits not less than ($) each accident, ($) each employee, and ($) policy limit.~~

§ 17.1.7 ~~o~~If the Contractor is required to furnish professional services as part of the Work, the Contractor shall procure Professional Liability insurance covering performance of the professional services, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per claim and Two Million Dollars and Zero Cents ($ 2,000,000.00) in the aggregate.

§ 17.1.8 If the Work involves the transport, dissemination, use, or release of pollutants, the Contractor shall procure Pollution Liability insurance, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per claim and Two Million Dollars and Zero Cents ($ 2,000,000.00) in the aggregate.

§ 17.1.9 Coverage under Sections 17.1.7 and 17.1.8 may be procured through a Combined Professional Liability and Pollution Liability insurance policy, with combined policy limits of not less than Two Million Dollars and Zero Cents ($ 2,000,000.00) per claim and Four Million Dollars and Zero Cents ($ 4,000,000.00) in the aggregate.

§ 17.1.10 The Contractor shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Section 17.1 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's written request. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the period required by Section 17.1.1. The certificates will show the Owner as an additional insured on the Contractor's

Commercial General Liability and excess or umbrella liability policy.

§ 17.1.11 The Contractor shall disclose to the Owner any deductible or self- insured retentions applicable to any insurance required to be provided by the Contractor.

§ 17.1.12 To the fullest extent permitted by law, the Contractor shall cause the commercial liability coverage required by this Section 17.1 to include (1) the Owner, the Architect, and the Architect's Consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions for which loss occurs during completed operations. The additional insured coverage shall be primary and non-contributory to any of the Owner's general liability insurance policies and shall apply to both ongoing and completed operations. To the extent commercially available, the additional insured coverage shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 07 04, CG 20 37 07 04, and, with respect to the Architect and the Architect's Consultants, CG 20 32 07 04.

§ 17.1.13 Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by this Section 17.1, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 17.1.14 Other Insurance Provided by the Contractor
(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

Coverage	Limits

§ 17.2 Owner's Insurance
§ 17.2.1 Owner's Liability Insurance
The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ 17.2.2 Property Insurance
§ 17.2.2.1 The Owner shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, property insurance written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner's property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed or materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion and thereafter as provided in Section 17.2.2.2, unless otherwise provided in the Contract Documents or otherwise agreed in writing by the parties to this Agreement. This insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as insureds. This insurance shall include the interests of mortgagees as loss payees.

§ 17.2.2.2 Unless the parties agree otherwise, upon Substantial Completion, the Owner shall continue the insurance required by Section 17.2.2.1 or, if necessary, replace the insurance policy required under Section 17.2.2.1 with property insurance written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 18.4.

§ 17.2.2.3 If the insurance required by this Section 17.2.2 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.

§ 17.2.2.4 If the Work involves remodeling an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 18.4, "all-risks" property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.

§ 17.2.2.5 Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Section 17.2.2 and, upon the Contractor's request, provide a copy of the property insurance policy or policies required by this Section 17.2.2. The copy of the policy or policies provided shall contain all applicable

conditions, definitions, exclusions, and endorsements.

§ 17.2.2.6 Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any insurance required by this Section 17.2.2, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 17.2.2.7 Waiver of Subrogation

§ 17.2.2.7.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by this Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 17.2.2.7 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 17.2.2.7.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 17.2.2.7.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 17.2.2.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements, written where legally required for validity, the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 17.2.3 Other Insurance Provided by the Owner

(List below any other insurance coverage to be provided by the Owner and any applicable limits.)

Coverage	Limits

§ 17.3 Performance Bond and Payment Bond

§ 17.3.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in the Contract Documents on the date of execution of the Contract.

§ 17.3.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

ARTICLE 18 CORRECTION OF WORK

§ 18.1 The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed, or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and

replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense, unless compensable under Section A.1.7.3 in Exhibit A, Determination of the Cost of the Work.

§ 18.2 In addition to the Contractor's obligations under Section 9.4, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 15.6.3, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty.

§ 18.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 8.3.

§ 18.4 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 18.5 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Article 18.

ARTICLE 19 MISCELLANEOUS PROVISIONS

§ 19.1 Assignment of Contract

Neither party to the Contract shall assign the Contract without written consent of the other, except that the Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 19.2 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 21.6.

§ 19.3 Tests and Inspections

Tests, inspections, and approvals of portions of the Work required by the Contract Documents or by applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 19.4 The Owner's representative:
(Name, address, email address and other information)

Shane Pulliam
125 College Drive
Casper, WY 82601
307-268-2633
shane.pulliam@caspercollege.edu

§ 19.5 The Contractor's representative:
(Name, address, email address and other information)

§ 19.6 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 19.7 ~~Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.~~The parties agree College is a governmental entity under the Wyoming Governmental Claims Act, W.S. §§ 1–39–101, et seq. College does not waive, and nothing contained herein shall be deemed to have waived, its sovereign and/or governmental immunity by entering into this Agreement, and fully retains all immunities and defenses provided by law with regard to any action based on this Agreement.

ARTICLE 20 TERMINATION OF THE CONTRACT

§ 20.1 Termination by the Contractor

If the Architect fails to certify payment as provided in Section 15.4.1 for a period of 30 days through no fault of the Contractor, or if the Owner fails to make payment as provided in Section 4.1.3 for a period of 4530 days, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 20.2 Termination by the Owner for Cause

§ 20.2.1 The Owner may terminate the Contract if the Contractor

- **.1** repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- **.2** fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- **.3** repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- **.4** otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 20.2.2 When any of the reasons described in Section 20.2.1 exists, the Owner, upon certification by the Architect that sufficient cause exists to justify such action, may, without prejudice to any other remedy the Owner may have and after giving the Contractor seven days' notice, terminate the Contract and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever reasonable method the Owner may deem expedient. Upon request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 20.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 20.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 20.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Architect, upon application, and this obligation for payment shall survive termination of the Contract.

§ 20.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. The Owner shall pay the Contractor for Work executed; and costs incurred by reason of such termination, including costs attributable to termination of Subcontracts; and a termination fee, if any, as follows:

(Insert the amount of or method for determining the fee payable to the Contractor by the Owner following a termination for the Owner's convenience, if any.)

ARTICLE 21 CLAIMS AND DISPUTES

§ 21.1 Claims, disputes, and other matters in question arising out of or relating to this Contract, including those alleging an error or omission by the Architect but excluding those arising under Section 16.2, shall be referred initially to the Architect for decision. Such matters, except those waived as provided for in Section 21.11 and Sections 15.7.3 and 15.7.4, shall, after initial decision by the Architect or 30 days after submission of the matter to the Architect, be subject to mediation as a condition precedent to binding dispute resolution.

§ 21.2 Notice of Claims

§ 21.2.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 18.2, shall be initiated by notice to the Architect

within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 21.2.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 18.2, shall be initiated by notice to the other party.

§ 21.3 Time Limits on Claims

The Owner and Contractor shall commence all claims and causes of action against the other and arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in this Agreement whether in contract, tort, breach of warranty, or otherwise, within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 21.3.

§ 21.4 If a claim, dispute or other matter in question relates to or is the subject of a mechanic's lien, the party asserting such matter may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 21.5 The parties shall endeavor to resolve their disputes by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with their Construction Industry Mediation Procedures in effect on the date of this Agreement. A request for mediation shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the mediation. The request may be made concurrently with the binding dispute resolution but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 21.6 If the parties have selected arbitration as the method for binding dispute resolution in this Agreement, any claim, subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association, in accordance with the Construction Industry Arbitration Rules in effect on the date of this Agreement. Demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 21.7 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 21.8 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, any party to an arbitration may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a Claim not described in the written Consent.

§ 21.9 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to this Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 21.10 Continuing Contract Performance

Pending final resolution of a Claim, except as otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 21.11 Waiver of Claims for Consequential Damages

The Contractor and Owner waive claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

.1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons;

and

.2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 20. Nothing contained in this Section 21.11 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

This Agreement entered into as of the day and year first written above.

OWNER *(Signature)*	**CONTRACTOR** *(Signature)*
(Printed name and title)	*(Printed name and title)*

Additions and Deletions Report for
AIA® Document A104® – 2017

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 12:55:54 MDT on 03/10/2026.

Changes to original AIA text

PAGE 4

§ 3.3 Cost of the Work Plus Contractor's Fee (Not Applicable)
§ 3.3.1 The Cost of the Work is as defined in Exhibit A, Determination of the Cost of the Work.

§ 3.4 Cost of the Work Plus Contractor's Fee With a Guaranteed Maximum Price (Not Applicable)

§ 3.4.3 Guaranteed Maximum Price (Not Applicable)

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.3 a final Certificate for Payment has been issued by the Architect in accordance with Section 15.7.1.
.4 the Contractor files with Owner a sworn statement, as required by Wyo. Stat. 16-6-117, stating that all claims for material and labor performed under the Contract have been made and paid to all subcontractors and suppliers. Contractor payments shall not be withheld due to claims against Contractor's Surety Bond except as required by Wyo. Stat. 16-6-117, if applicable.
.5 the requirements of Wyo. Stat. 16-6-116 have been met.

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Not Applicable ~~The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.~~

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§ 16.2.2 To the fullest extent permitted under the Wyoming Governmental Claims Act~~by law~~, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area, if in fact, the material or substance presents the risk of bodily injury or death as described in Section 16.2.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

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§ 17.1.6 Not Applicable ~~Employers' Liability with policy limits not less than ($) each accident, ($) each employee, and ($) policy limit.~~

§ 17.1.7 ~~o~~If the Contractor is required to furnish professional services as part of the Work, the Contractor shall procure Professional Liability insurance covering performance of the professional services, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per claim and Two Million Dollars and Zero Cents ($ 2,000,000.00) in the aggregate.

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§ 19.7 ~~Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.~~The parties agree College is a governmental entity under the Wyoming Governmental Claims Act, W.S. §§ 1–39–101, et seq. College does not waive, and nothing contained herein shall be deemed to have waived, its sovereign and/or governmental immunity by entering into this Agreement, and fully retains all immunities and defenses provided by law with regard to any action based on this Agreement.

If the Architect fails to certify payment as provided in Section 15.4.1 for a period of 30 days through no fault of the Contractor, or if the Owner fails to make payment as provided in Section 4.1.3 for a period of ~~45~~30 days, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

Variable Information

PAGE 1

AGREEMENT made as of the Twelfth day of February in the year Two Thousand Twenty-Six
(In words, indicate day, month and year.)

Casper College

125 College Drive
Casper, WY 82601

307-268-2633

To Be Determined

Casper College Wheeler Terrace Demolition

475 College Drive
Casper, WY 82601

Demolition and removal of the existing building, utilities, site features, etc. as described in the plans and specifications. The materials are to be properly disposed of at the City of Casper Landfill. The scope of work includes handling and disposal of asbestos containing materials. The asbestos scope can be completed 100% by the Demolition Contractor who has the trained personnel and certifications to complete such work or the asbestos work can be completed in conjunction with the Owner provided consultant - Safetech.

Amundsen Associates, LLC

212 E. Second Street
Casper, WY 82601

307-234-9999

PAGE 3

[ ] The date of this Agreement.

[ ] A date set forth in a notice to proceed issued by the Owner.

[X] Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

May 18, 2026

[ ] Not later than ( ) calendar days from the date of commencement of the Work.

[X] By the following date: July 31, 2026

[X] Stipulated Sum, in accordance with Section 3.2 below

[ ] Cost of the Work plus the Contractor's Fee, in accordance with Section 3.3 below

[ ] Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 3.4 below

(Based on the selection above, complete Section 3.2, 3.3 or 3.4 below.)

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$500 per day

§ 4.1.3 Provided that an Application for Payment is received by the Architect not later than the Fifth day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the Twenty-First day of the following month. If an Application for Payment is received by the Architect after the date fixed above, payment shall be made by the Owner not later than Sixty (60) days after the Architect receives the Application for Payment.
(Federal, state or local laws may require payment within a certain period of time.)

5%

1.50 % monthly

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[ ] Arbitration pursuant to Section 21.6 of this Agreement

[X] Litigation in a court of competent jurisdiction

[ ] Other *(Specify)*

Not Applicable

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§ 17.1.2 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) each occurrence, Two Million Dollars and Zero Cents ($ 2,000,000.00) general aggregate, and Two Million Dollars and Zero Cents ($ 2,000,000.00) aggregate for products-completed operations hazard, providing coverage for claims including

§ 17.1.3 Automobile Liability covering vehicles owned by the Contractor and non-owned vehicles used by the Contractor, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.

§ 17.1.7 If the Contractor is required to furnish professional services as part of the Work, the Contractor shall procure Professional Liability insurance covering performance of the professional services, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per claim and Two Million Dollars and Zero Cents ($ 2,000,000.00) in the aggregate.

§ 17.1.8 If the Work involves the transport, dissemination, use, or release of pollutants, the Contractor shall procure Pollution Liability insurance, with policy limits of not less than One Million Dollars and Zero Cents ($ 1,000,000.00) per claim and Two Million Dollars and Zero Cents ($ 2,000,000.00) in the aggregate.

§ 17.1.9 Coverage under Sections 17.1.7 and 17.1.8 may be procured through a Combined Professional Liability and Pollution Liability insurance policy, with combined policy limits of not less than Two Million Dollars and Zero Cents ($ 2,000,000.00) per claim and Four Million Dollars and Zero Cents ($ 4,000,000.00) in the aggregate.

PAGE 21

Shane Pulliam

125 College Drive
Casper, WY 82601

307-268-2633

shane.pulliam@caspercollege.edu

SCOTT ENVIRONMENTAL SERVICES, LLC
P.O. 2478, Mills, Wyoming 82644
307-262-9309

June 19, 2025

Mr. Mitch Masters
Casper College
125 College Drive
Casper, Wyoming 82601
mitchell.masters@caspercollege.edu

Re: Asbestos inspection and bulk sampling at the Wheeler Terrace Apartments on the Casper College Campus.

Dear Mr. Masters:

This report presents the findings of the bulk sampling for asbestos-containing materials conducted at the Wheeler Terrace Apartment Building on the Casper Community College Campus, Casper, Wyoming. The asbestos survey and sampling were carried out on June 3 and June 4, and June 17, 2025, upon your request, to identify asbestos-containing materials associated with the Wheeler Terrace Apartment Building. This investigation was performed to identify asbestos containing materials associated with the building prior to demolition of the building.

The inspection identified and sampled suspected asbestos-containing materials (ACMs) from exterior and interior portions of the building. All bulk samples collected during this inspection were shipped overnight to Crisp Analytical, L.L.C in Carrolton, TX for Polarized Light Microscopy (PLM) Analysis.

FINDINGS:

The following table provide a summary of asbestos-containing materials (ACMs) identified during this survey:

Table 1
Asbestos Containing Materials
Wheeler Terrace Apartment Building
Casper College, Casper, Wyoming

Sample Number	Location	Material	Friable	Condition	Asbestos Content (Point Count)	Asbestos Content (PLM)
14	Skylight/ roof access	Black tar sealant	no	Damaged	3% Chrysotile	3% Chrysotile
32	Boiler room ceiling	Painted drywall with taped and mudded seams	no	Good	NA	2% Chrysotile
44	Crawlspace	Black sealant on concrete footer	no	Good	1.75% Chrysotile	2% Chrysotile
47	Storage Room Ceiling 2nd floor (N)	Bare drywall with taped and mudded joints	yes	Good	1.25% Chrysotile	2% Chrysotile
49	Storage Room Ceiling 2nd floor (S)	Bare drywall with taped and mudded seams	yes	Good	2.5% Chrysotile	2% Chrysotile
HA3-2	Laundry Room Ceiling	Painted drywall with taped and mudded seams	no	Good	2.25% Chrysotile	2% Chrysotile

Table 1 lists materials identified during the survey that contain asbestos in concentration greater than 1%. Friable and damaged materials require immediate attention. The damaged and friable surfacing materials may be repaired in place. Once repaired, these materials may remain in place with minimal impact to human health and the environment. Activities that disturb or damage the material listed in Tables 1-5 such as cutting, sanding, removing, or demolition will increase the likelihood that asbestos fibers are released into the air thus potentially causing negative impact to human health and the environment. These activities

should be performed by a contractor certified in asbestos abatement. Additionally, if building with ACM are to be demolished, notice to and approval from the Wyoming Department of Environmental Quality (WDEQ) must be obtained.

ACM INSPECTION AND SAMPLING METHODOLOGY:

SES, LLC performed the ACM inspection and bulk sampling at the Wheeler Terrace Apartment Building in accordance with the standards of 40 CFR Part 763, Subpart E on June 4, June 5, and June 17, 2025, by a trained Asbestos Hazard Emergency Response Act (AHERA) Building Inspector. The sample information for this survey has been detailed below:

BULK SAMPLING:

This asbestos survey for the Wheeler Terrace Apartment Building included the collection of one hundred (105) bulk samples (and associated layers) of suspected asbestos containing materials. Analytical results for each bulk sample are provided in the Appendix to this report. A photograph of each bulk sampling location has been included in the Appendix to this report.

HOMOGENEOUS AREAS:

Suspect ACMs were separated into areas on the exterior and interior of this building that contained surfacing materials (uniform in color, texture, and date of application). Nine (9) homogeneous areas were identified for sampling. Samples were collected from random locations within each homogeneous area. The homogeneous areas identified during this survey are listed in Table 2.

Table 2
Homogeneous Area Information
Wheeler Terrace Apartment Building

Homogeneous Area	# of Samples Collected	Material	Material Category	Location	Total Quantity (ft^2)
1	7	Black tar sealant in roof core samples	Surfacing	Roof	~9,500
2	3	Black tar sealant in roof core samples	Surfacing	North roof	~600
3	2	Black sealant	Surfacing	Concrete support walls (crawlspace)	~250
4	5	Painted and textured ceiling drywall	Surfacing	Apartment ceilings 103, 201, 307, 306 reported abated and replaced	~2,400
5	7	Painted and textured ceiling drywall	Surfacing	Ceilings in Apts. #100, 101, 102, 104, 200, 202, 203, 204, 205, 300, 301, 302, 303, 304, 305	~8,400
6	3	Painted drywall with taped and mudded seams	Surfacing	Ceiling in the laundry room	~500
7	5	Painted and textured drywall walls	Surfacing	Walls in Apts #201, 306 reported to have been previously abated	~2,000
8	7	Painted and textured drywall walls	Surfacing	Walls in Apts #100, 101, 102, 103, 104, 200, 202, 203, 204, 205, 300, 301, 302,	~12,000
9	5	Bare drywall with taped and mudded seams	Surfacing	Boiler room, storage rooms, Fire equipment room, pipe chase ceiling	~6,750

THERMAL SYSTEM INSULATION:

Three (3) thermal system insulation (TSI) materials were identified for sampling during this survey. The TSI materials identified, and samples are listed in Table 3.

Table 3
Thermal System Insulation
Wheeler Terrace Apartment Building

TSI Material	# of Samples Collected	Material	Material Category	Location	Total Quantity (ft^2)
1	3	3" pipe insulation w/ woven fabric cover	TSI	Boiler Room and pipe chase	~200 linear feet
2	2	4" pipe insulation w/ woven fabric cover	TSI	Boiler Room	~10 linear feet
3	2	2" pipe insulation w/ woven fabric cover	TSI	Boiler Room and pipe chase	~500 linear feet

MISCELANEOUS MATERIALS:

Twenty-four (25) miscellaneous materials suspected to contain asbestos were identified during this survey. The miscellaneous materials identified and sampled are listed in Table 4.

Table 4
Miscellaneous Material Information
Wheeler Terrace Apartment Building

Miscellaneous Material	# of Samples Collected	Material	Material Category	Location	Total Quantity (ft^2)
1	2	Green carpet and yellow adhesive	Misc.	Apts. #201, 300, 305, 306, 307	~1,950
2	2	Brown linoleum and yellow adhesive	Misc.	Apts. #201, 203, 205, 300, 302, 306, 307	~1,440
3	2	Green wall base trim and yellow adhesive	Misc.	Apts. 201, 305, 300, 306, 307	~3,500 linear feet
4	2	Fire resistant wall paneling (kitchens and bathrooms)	Misc.	All apartments	~7,500
5	2	Brown/gray self - adhesive carpet tile	Misc.	Apts. 101, 103, 203, 205, 301, 302, 303, 304	~3,200

Table 4 (Cont.)
Miscellaneous Material Information
Wheeler Terrace Apartment Building

Miscellaneous Material	# of Samples Collected	Material	Material Category	Location	Total Quantity (ft^2)
6	2	Off-white (tan) wall base trim and yellow adhesive	Misc.	Apts. 103, 106, 302, 303, 304	~3,500 linear feet
7	2	White vinyl tile (under carpet)	Misc.	Apts. #303, #304	~1,500
8	2	Tan linoleum	Misc.	Apts. #101, 103, 303, 304	~1,000
9	1	Multi-colored linoleum	Misc.	Apt. #301	~200
10	2	Off-white linoleum	Misc.	Laundry room	~400
11	2	Taupe Wall base trim	Misc.	Laundry room	~115
12	2	Off-white brown accent vinyl floor tile	Misc.	Apt. #102	~750
13	2	Off-white linoleum	Misc.	Apt. #101	~200
14	3	Gray caulking	Misc	Sealant between sill plate bricks on side walls of building	Not measured
15	2	Black flashing	Misc.	Sidewall of roof	~200
16	2	Black tar sealant	Misc.	Roof (vent stacks)	~10
17	2	Gray sealant with foil backing	Misc.	Vent stack wrap	~4
18	1	Weathered gray sealant	Misc	Roof skylight penetration	~4 linear feet
19	2	Gray brick and gray mortar	Misc.	Sill plate perimeter of the roof	~400
20	2	Yellow brick and gray mortar	Misc.	North and south walls of the building	~2,500
21	2	Gray fibrous material	Misc.	Spacer between S. concrete driveway and S. wall of building	~66 linear feet
20	1	Yellow glass fiber insulation	Misc.	Exterior walls of building	Not measured
22	3	Drywall under exterior siding	Misc.	Exterior walls of building	Not measured

Table 4 (Cont.)
Miscellaneous Material Information
Wheeler Terrace Apartment Building

Miscellaneous Material	# of Samples Collected	Material	Material Category	Location	Total Quantity (ft^2)
23	3	Brown painted, black sealant	Misc.	East and west covered walkways 2nd and 3rd floors	~3,000
24	1	Brown glass fiber insulation	Misc.	Interior ceiling cavities	Not measured
25	1	Pink glass fiber insulation	Misc.	Exterior wall cavities	Not measured

FINDINGS:

ACM (greater than 1%)

- The black tar sealant around the skylight/roof access hatch on the roof of the Wheeler Terrace Building has been confirmed to contain asbestos in in concentration greater than (>) 1%.
- The drywall joint compound on the boiler room ceiling has been confirmed to contain asbestos in concentrations > 1%.
- The black sealant on the surface of the concrete walls in the west and east crawlspaces has been confirmed to contain asbestos in concentrations >1%.
- The drywall joint compound on the ceilings in the storage rooms, fire room, and pipe chase has been confirmed to contain asbestos in concentrations >1%.
- The drywall joint compound on the painted ceiling in the laundry room has been confirmed to contain asbestos in concentrations >1%.

SUMMARY ASBESTOS CONTAINING MATERIAL (ACM):

Homogeneous areas were considered asbestos containing if at least one sample showed that asbestos was present in concentrations greater than one percent (>1%). Homogeneous areas were considered non asbestos containing if all results from all samples collected in the homogeneous area had no detectable (ND) asbestos.

Miscellaneous and TSI materials were considered asbestos containing if at least one sample showed that asbestos was present in concentrations greater than one percent (>1%). Miscellaneous and TSI materials were considered non asbestos containing if the sample results from each type of material collected had no detectable (ND) asbestos.

LIMITATIONS:

This survey was designed to provide the client with observable materials (materials which were readily accessible and visible) that were collected and analyzed for asbestos content. Scott Environmental Services, LLC neither expresses nor implies a guarantee that all asbestos-containing materials were identified during this survey. If suspect materials are encountered during renovations, repairs, or demolition these materials should be sampled by a certified building inspector and the samples analyzed by an accredited laboratory for asbestos content prior to disturbance and removal from the building.

This concludes our report. Attached are the lab data, photographs, and resumes. If you have any questions or comments regarding this report, please call me at the Casper office. Thank you for allowing us this opportunity to be of service to you.

Sincerely,

J. Scott Mortimer
Project Manager
cc: File No. 2025-082

LABORATORY REPORT

CA Labs
Dedicated to Quality

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Phone 225-751-5632
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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Attn: Scott Mortimer
Customer Project: 2025-082, Wheeler Terrace Apts. - Casp
Reference #: CAL25064211AS Date: 06/11/25

Analysis and Method

Summary of polarized light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of a stereomicroscope. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may contain trace amounts of actinolite/tremolite. When not detected by PLM, these samples should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may contain a regulated asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Since allowable variation in quantification of samples close to 1% is high, <1% may be reported. Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos or "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses or hold a degree in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one these disciplines is preferred, but not required. Extensive in-house training programs are used to augment the educational background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
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Overview of Project Sample Material Containing Asbestos

Customer Project: 2025-082, Wheeler Terrace Apts. - Casper College **CA Labs Project #:** CAL25064211AS

Laboratory Sample ID	Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
49493	14	*14-1*	*black weathered tar*	***3% Chrysotile***	***black weathered tar***
49511	32	*32-1*	*white surfaced white compound*	***2% Chrysotile***	***white surfaced white compound***
49523	44	*44-1*	*black debris*	***2% Chrysotile***	***black debris***
49526	47	*47-1*	*tan surfaced white compound*	***2% Chrysotile***	***tan surfaced white compound***
49528	49	*49-1*	*white compound*	***2% Chrysotile***	***white compound***
49540	HA3-2	*HA3-2-1*	*white surfaced white compound*	***2% Chrysotile***	***white compound***
49540		*HA3-2-2*	*white compound (beneath tape)*	***2% Chrysotile***	***white compound (beneath tape)***

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College

Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49480	1		*1-1*	*black tar*	*y*	***None Detected***		100% qu,bi
49480			*1-2*	*black foam insulation*	*y*	***None Detected***		100% ot
49481	2		*2-1*	*black tar*	*y*	***None Detected***		100% qu,bi
49481			*2-2*	*blue foam insulation*	*y*	***None Detected***		100% ot
49482	3		*3-1*	*black tar*	*y*	***None Detected***		100% qu,bi
49482			*3-2*	*blue foam insulation*	*y*	***None Detected***		100% ot
49483	4		*4-1*	*brown insulation*	*y*	***None Detected***	25% ce	75% qu,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College
Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49483			*4-2*	*black tar*	*y*	***None Detected***		100% qu,bi
49483			*4-3*	*blue foam insulation*	*y*	***None Detected***		100% ot
49484	5		*5-1*	*brown insulation*	*y*	***None Detected***	25% ce	75% qu,ma
49484			*5-2*	*black tar*	*y*	***None Detected***		100% qu,bi
49484			*5-3*	*blue foam insulation*	*y*	***None Detected***		100% ot
49485	6		*6-1*	*brown insulation*	*y*	***None Detected***	25% ce	75% qu,ma
49485			*6-2*	*black tar*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM *TDSHS 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
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PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College

Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49485			*6-3*	*blue foam insulation*	*y*	***None Detected***		100% ot
49486	7		*7-1*	*black tar*	*y*	***None Detected***		100% qu,bi
49486			*7-2*	*blue foam insulation*	*y*	***None Detected***		100% ot
49487	8		*8-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
49488	9		*9-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
49489	10		*10-1*	*gray sealant*	*y*	***None Detected***		100% qu,bi
49490	11		*11-1*	*black rubber covering*	*y*	***None Detected***		100% qu,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
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Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College
Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49491	12		*12-1*	*black tar and black felt*	*n*	***None Detected***	10% ce 5% fg	85% qu,bi
49492	13		*13-1*	*black tar*	*y*	***None Detected***		100% qu,bi
49493	14		*14-1*	*black weathered tar*	*y*	***3% Chrysotile***		97% qu,bi
49494	15		*15-1*	*gray mortar*	*y*	***None Detected***		100% qu,ca
49495	16		*16-1*	*gray mortar*	*y*	***None Detected***		100% qu,ca
49496	17		*17-1*	*gray vinyl covering*	*y*	***None Detected***	5% ce	95% qu,ma
49496			*17-2*	*tan foam insulation*	*y*	***None Detected***		100% ot

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College

Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49497	18		*18-1*	*gray vinyl covering*	*y*	***None Detected***	5% ce	95% qu,ma
49497			*18-2*	*tan foam insulation*	*y*	***None Detected***		100% ot
49498	19		*19-1*	*black vinyl covering*	*y*	***None Detected***	5% ce	95% qu,ma
49498			*19-2*	*tan foam insulation*	*y*	***None Detected***		100% ot
49499	20		*20-1*	*tan bricking*	*y*	***None Detected***		100% qu,ot
49499			*20-2*	*gray mortar*	*y*	***None Detected***		100% qu,ca
49499			*20-3*	*gray sealant*	*y*	***None Detected***		100% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM *TDSHS 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College
Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49500	21		*21-1*	*tan bricking*	*y*	***None Detected***		100% qu,ot
49500			*21-2*	*gray mortar*	*y*	***None Detected***		100% qu,ca
49501	22		*22-1*	*gray layered insulation*	*y*	***None Detected***	100% ce	
49502	23		*23-1*	*gray layered insulation*	*y*	***None Detected***	100% ce	
49503	24		*24-1*	*yellow insulation*	*y*	***None Detected***	100% fg	
49504	25		*25-1*	*yellow insulation*	*y*	***None Detected***	100% fg	
49505	26		*26-1*	*white drywall*	*y*	***None Detected***		100% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
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Justin Cox
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Technical Manager
Tanner Rasmussen

Senior Analyst
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CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49505			*26-2*	*tan wooden fragments*	*y*	***None Detected***	100% ce	
49506	27		*27-1*	*white drywall*	*y*	***None Detected***		100% qu,gy
49506			*27-2*	*tan wooden fragments*	*y*	***None Detected***	100% ce	
49507	28		*28-1*	*white drywall*	*y*	***None Detected***		100% qu,gy
49507			*28-2*	*tan wooden fragments*	*y*	***None Detected***	100% ce	
49508	29		*29-1*	*brown surfaced black sealant*	*n*	***None Detected***		100% qu,gy,bi
49509	30		*30-1*	*brown surfaced black sealant*	*n*	***None Detected***		100% qu,gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Turnaround Time:
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CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
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Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49510	31		*31-1*	*brown surfaced black sealant*	*n*	***None Detected***		100% qu,gy,bi
49511	32		*32-1*	*white surfaced white compound*	*n*	***2% Chrysotile***		98% qu,ca
49511			*32-2*	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
49512	33		*33-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
49512			*33-2*	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
49513	34		*34-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
49513			*34-2*	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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2025-082, Wheeler Terrace Apts. - Casper College
Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49514	35		*35-1*	*white paper with silver foil*	*n*	***None Detected***	60% ce 10% fg	30% qu,ot
49514			*35-2*	*yellow insulation*	*y*	***None Detected***	100% fg	
49515	36		*36-1*	*gray sealant with off-white paper and silver foil*	*n*	***None Detected***	30% ce 10% fg	60% qu,gy,bi,ot
49515			*36-2*	*yellow insulation*	*y*	***None Detected***	100% fg	
49516	37		*37-1*	*gray sealant with off-white paper and silver foil*	*n*	***None Detected***	30% ce 10% fg	60% qu,gy,bi,ot
49516			*37-2*	*yellow insulation*	*y*	***None Detected***	100% fg	
49517	38		*38-1*	*white paper with silver foil*	*n*	***None Detected***	60% ce 10% fg	30% qu,ot

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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Approved Signatories:

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Josh Strange
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Justin Cox
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Technical Manager
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Julio Robles

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2 Days

CA Labs Project #:
CAL25064211AS

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49517			*38-2*	*off-white insulation*	*y*	***None Detected***	10% ce 5% fg	85% qu,bi,ca
49518	39		*39-1*	*white paper with silver foil*	*n*	***None Detected***	60% ce 10% fg	30% qu,ot
49518			*39-2*	*yellow insulation*	*y*	***None Detected***	100% fg	
49519	40		*40-1*	*off-white paper with silver foil*	*n*	***None Detected***	60% ce 10% fg	30% qu,ot
49519			*40-2*	*yellow insulation*	*y*	***None Detected***	100% fg	
49520	41		*41-1*	*off-white paper with silver foil*	*n*	***None Detected***	60% ce 10% fg	30% qu,ot
49520			*41-2*	*yellow insulation*	*y*	***None Detected***	100% fg	

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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49521	42		*42-1*	*off-white paper with silver foil*	*n*	***None Detected***	60% ce 10% fg	30% qu,ot
49521			*42-2*	*yellow insulation*	*y*	***None Detected***	100% fg	
49522	43		*43-1*	*black tar*	*y*	***None Detected***		100% qu,bi
49522			*43-2*	*tan wooden fragments*	*y*	***None Detected***	100% ce	
49523	44		*44-1*	*black debris*	*y*	***2% Chrysotile***		98% qu,bi,ca
49524	45		*45-1*	*off-white insulation*	*y*	***None Detected***	100% fg	
49525	46		*46-1*	*black sealant with brown paper*	*y*	***None Detected***	20% ce	80% qu,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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49525			*46-2*	*off-white insulation*	*y*	***None Detected***	100% fg	
49526	47		*47-1*	*tan surfaced white compound*	*n*	***2% Chrysotile***		98% qu,bi,ca
49526			*47-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49527	48		*48-1*	*pink insulation*	*y*	***None Detected***	100% fg	
49528	49		*49-1*	*white compound*	*y*	***2% Chrysotile***		98% qu,ca
49528			*49-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49529	HA1-1		*HA1-1-1*	*off-white surfaced white compound*	*n*	***None Detected***		100% qu,bi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

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49529			*HA1-1-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49530	HA1-2		*HA1-2-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49530			*HA1-2-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49531	HA1-3		*HA1-3-1*	*blue surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49531			*HA1-3-2*	*gray drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy
49532	HA1-4		*HA1-4-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49532			*HA1-4-2*	*white drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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Tanner Rasmussen

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Julio Robles

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8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College
Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49533	HA1-5		*HA1-5-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49533			*HA1-5-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49534	HA2-1	***5***	*HA2-1-1*	*white compound*				
49534			*HA2-1-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49535	HA2-2		*HA2-2-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49535			*HA2-2-2*	*white drywall with brown paper*	*y*	***None Detected***	22% ce	78% qu,gy
49536	HA2-3		*HA2-3-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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CAL25064211AS

Date: 6/11/2025
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Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49536			*HA2-3-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49537	HA2-4		*HA2-4-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49537			*HA2-4-2*	*white drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy
49538	HA2-5		*HA2-5-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49538			*HA2-5-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49539	HA3-1		*HA3-1-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49539			*HA3-1-2*	*white drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM *TDSHS 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

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CA Labs Project #:
CAL25064211AS

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Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49540	HA3-2		*HA3-2-1*	*white surfaced white compound*	*n*	***2% Chrysotile***		98% mi,qu,bi,ca
49540			*HA3-2-2*	*white compound (beneath tape)*	*y*	***2% Chrysotile***		98% mi,qu,ca
49540			*HA3-2-3*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49541	HA3-3		*HA3-3-1*	*white surfacing*	*y*	***None Detected***		100% qu,bi
49541			*HA3-3-2*	*white drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy
49542	HA4-1		*HA4-1-1*	*white surfaced white finishing compound*	*n*	***None Detected***		100% qu,bi,ca
49542			*HA4-1-2*	*tan plaster*	*y*	***None Detected***		100% qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

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Turnaround Time:
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CA Labs Project #:
CAL25064211AS

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Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49542			*HA4-1-3*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49543	HA4-2		*HA4-2-1*	*gray surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49543			*HA4-2-2*	*white drywall with brown paper*	*y*	***None Detected***	22% ce	78% qu,gy
49544	HA4-3		*HA4-3-1*	*tan surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49544			*HA4-3-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49545	HA4-4		*HA4-4-1*	*white surfaced white finishing compound*	*n*	***None Detected***		100% qu,bi,ca
49545			*HA4-4-2*	*tan plaster*	*y*	***None Detected***		100% qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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Polarized Light Asbestiform Materials Characterization

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CA Labs Project #:
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49545			*HA4-4-3*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49546	HA4-5		*HA4-5-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49546			*HA4-5-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49547	HA5-1		*HA5-1-1*	*white surfaced white finishing compound*	*n*	***None Detected***		100% qu,bi,ca
49547			*HA5-1-2*	*white plaster*	*y*	***None Detected***		100% qu,ca
49547			*HA5-1-3*	*white drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy
49548	HA5-2		*HA5-2-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49548			*HA5-2-2*	*tan drywall with brown paper*	*y*	***None Detected***	22% ce	78% qu,gy
49549	HA5-3		*HA5-3-1*	*tan plaster*	*y*	***None Detected***		100% qu,ca
49549			*HA5-3-2*	*white drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49550	HA5-4		*HA5-4-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49550			*HA5-4-2*	*white drywall with brown paper*	*y*	***None Detected***	21% ce	79% qu,gy
49551	HA5-5		*HA5-5-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49551			*HA5-5-2*	*white compound (beneath tape)*	*y*	***None Detected***		100% mi,qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
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49551			*HA5-5-3*	*tan drywall with brown paper*	*y*	***None Detected***	20% ce	80% qu,gy
49552	HA5-6		*HA5-6-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49552			*HA5-6-2*	*tan drywall with brown paper*	*y*	***None Detected***	22% ce	78% qu,gy
49553	HA5-7		*HA5-7-1*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49553			*HA5-7-2*	*tan drywall with brown paper*	*y*	***None Detected***	22% ce	78% qu,gy
49554	MM-1		*MM-1-1*	*blue carpeting*	*y*	***None Detected***	100% sy	
49554			*MM-1-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

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ca - carbonate
gy - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastonite
ta - talc
sy - synthetic
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49555	MM-2		*MM-2-1*	*blue carpeting*	*y*	***None Detected***	100% sy	
49555			*MM-2-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49556	MM-3		*MM-3-1*	*tan linoleum*	*y*	***None Detected***	18% ce 2% fg	80% gy,ma
49557	MM-4		*MM-4-1*	*tan linoleum*	*y*	***None Detected***	18% ce 3% fg	79% gy,ma
49557			*MM-4-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49558	MM-5		*MM-5-1*	*green baseboard*	*y*	***None Detected***		100% gy,ma
49558			*MM-5-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Jose Matute
Analyst

Josh Strange
Analyst

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

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2. Fire Damage no significant fiber damages effecting fibrous percentages
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace Apts. - Casper College
Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211AS

Date: 6/11/2025
Samples Rec'd: 6/9/25 10:30AM
Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49559	MM-6		*MM-6-1*	*green baseboard*	*y*	***None Detected***		100% gy,ma
49559			*MM-6-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49560	MM-7		*MM-7-1*	*white fibrous paneling*	*y*	***None Detected***	45% fg	55% qu,ma
49560			*MM-7-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49560			*MM-7-3*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49560			*MM-7-4*	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
49561	MM-8		*MM-8-1*	*white fibrous paneling*	*y*	***None Detected***	40% fg	60% qu,ma

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49561			*MM-8-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49561			*MM-8-3*	*white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
49561			*MM-8-4*	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% qu,gy
49562	MM-9		*MM-9-1*	*black carpeting*	*y*	***None Detected***	100% sy	
49562			*MM-9-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49563	MM-10		*MM-10-1*	*black carpeting*	*y*	***None Detected***	100% sy	
49564	MM-11		*MM-11-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma

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CA Labs Project #:
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Date Of Sampling: 6/4/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49564			*MM-11-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49565	MM-12		*MM-12-1*	*tan baseboard*	*y*	***None Detected***		100% gy,ma
49565			*MM-12-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49566	MM-13		*MM-13-1*	*tan linoleum*	*y*	***None Detected***	18% ce 2% fg	80% gy,ma
49566			*MM-13-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49566			*MM-13-3*	*white drywall*	*y*	***None Detected***	2% ce	98% qu,gy
49567	MM-14		*MM-14-1*	*tan linoleum*	*y*	***None Detected***	20% ce	80% gy,ma

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bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
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49567			*MM-14-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49568	MM-15		*MM-15-1*	*tan linoleum*	*y*	***None Detected***	18% ce 2% fg	80% gy,ma
49568			*MM-15-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49569	MM-16		*MM-16-1*	*off-white linoleum*	*y*	***None Detected***	20% ce	80% gy,ma
49569			*MM-16-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49570	MM-17		*MM-17-1*	*gray linoleum*	*y*	***None Detected***	18% ce 3% fg	79% gy,ma
49570			*MM-17-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi

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Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
49572	MM-19		*MM-19-1*	*off-white linoleum with gray backing*	*y*	***None Detected***	21% ce	79% qu,gy
49572			*MM-19-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49573	MM-20		*MM-20-1*	*off-white linoleum with gray backing*	*y*	***None Detected***	20% ce	80% gy,ma
49573			*MM-20-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49574	MM-21		*MM-21-1*	*brown baseboard*	*y*	***None Detected***		100% gy,ma
49575	MM-22		*MM-22-1*	*brown baseboard*	*y*	***None Detected***		100% gy,ma
49575			*MM-22-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi

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49576	MM-23		*MM-23-1*	*white and brown vinyl flooring*	*y*	***None Detected***		100% gy,ma
49576			*MM-23-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49577	MM-24		*MM-24-1*	*tan floor tile*	*y*	***None Detected***		100% qu,ca
49577			*MM-24-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49578	MM-25		*MM-25-1*	*gray linoleum*	*y*	***None Detected***	20% ce	80% gy,ma
49578			*MM-25-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49579	MM-26		*MM-26-1*	*tan linoleum*	*y*	***None Detected***	18% ce 2% fg	80% gy,ma

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49579			*MM-26-2*	*tan mastic*	*y*	***None Detected***		100% gy,bi
49579			*MM-26-3*	*brown linoleum*	*y*	***None Detected***	20% ce 2% fg	78% gy,ma
49579			*MM-26-4*	*tan mastic*	*y*	***None Detected***		100% gy,bi

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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Attn: Scott Mortimer
Customer Project: 2025-082, Wheeler Terrace
Reference #: CAL25064487AS Date: 06/18/25

Analysis and Method

Summary of polarized light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of a stereomicroscope. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may contain trace amounts of actinolite/tremolite. When not detected by PLM, these samples should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may contain a regulated asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Since allowable variation in quantification of samples close to 1% is high, <1% may be reported. Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos or "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses or hold a degree in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one these disciplines is preferred, but not required. Extensive in-house training programs are used to augment the educational background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: 2025-082, Wheeler Terrace **CA Labs Project #:** CAL25064487AS

Laboratory Sample ID	Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235
AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
2025-082, Wheeler Terrace
Turnaround Time:
24 Hours

CA Labs Project #:
CAL25064487AS
Date: 6/18/2025
Samples Rec'd: 6/18/25 10:30AM
Date Of Sampling: 6/17/2025
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
42910	50		*50-1*	***Roof**/ black tar and black felt*	*n*	***None Detected***	30% ce	70% qu,bi
42911	51		*51-1*	***Roof**/ gray sealant and silver covering*	*n*	***None Detected***		100% qu,gy,bi,ot
42912	52		*52-1*	***Roof**/ gray sealant and silver covering*	*n*	***None Detected***		100% qu,gy,bi,ot
42913	HA2-6		*HA2-6-1*	***Apt 303**/ white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
42913			*HA2-6-2*	*gray drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
42914	HA2-7		*HA2-7-1*	***Apt 301**/ white surfaced white compound*	*n*	***None Detected***		100% mi,qu,bi,ca
42914			*HA2-7-2*	*gray drywall with brown paper*	*n*	***None Detected***	21% ce	79% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116). *All samples received in good condition unless noted.*
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gy - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot - other	wo - wollastonite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Justin Cox
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
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Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Analysis and Method

Point counting was performed on a polarized light microscope with a calibrated reticle according to the revised NESHAP method of November 20, 1990 (Federal Register, V.55, N.224, 11/20/90). Origional asbestos content of bulk materials was determined using procedures outlined in the interim method (40 CFR part 763, Appendix E to subpart E) and AHERA method (EPA-600/R-93/116). Samples were prepared using HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion staining / becke line method.

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have completed college courses in a natural science (geology, biology, or environmental science). Recognition by a state professional board in one of these disciplines is preferred, but not required. Extensive in-house training programs are used to augment education background of the analyst. The Laboratory Director and Quality Manager have received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of NVLAP accreditation. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Customer Info: **Attn:** Scott Mortimer

Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
RE:CAL25064211
2025-082, Wheeler Terrace Apts. - Casper College

Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211BAS

Date: 06/13/25
Samples Rec'd: 6/11/25 4:00PM
Date Of Sampling: 06/04/25
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	*Layer #*	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
49523	44	*44-1*	*black debris*	*y*	***1.75% Chrysotile***
49526	47	*47-1*	*tan surfaced white compound*	*n*	***1.25% Chrysotile***
49528	49	*49-1*	*white compound*	*y*	***2.50% Chrysotile***

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Approved Signatories:

Jose Matute
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Point Count

Laboratory Analysis Report - Point Count

Customer Info: **Attn:** Scott Mortimer
Scott Environmental Services, LLC
PO Box 2478
Mills, WY 82644

Phone # 307-262-9309
Fax #

Customer Project:
RE:CAL25064211
2025-082, Wheeler Terrace Apts. - Casper College

Turnaround Time:
2 Days

CA Labs Project #:
CAL25064211BAS

Date: 06/13/25
Samples Rec'd: 6/11/25 4:00PM
Date Of Sampling: 06/04/25
Purchase Order #: 25-082

Laboratory Sample ID	Sample #	*Layer #*	Analysts Physical Description of Subsample	Homo-geneous (Y/N)	Point Counted % / Asbestos Type
49540	HA3-2	*HA3-2-1*	*white surfaced white compound*	*n*	***1.00% Chrysotile***
49540	HA3-2	*HA3-2-2*	*white compound (beneath tape)*	*y*	***2.25% Chrysotile***

Dallas NVLAP Lab Code 200349-0 TEM/PLM TDSHS 30-0235

AIHA LAP, LLC Laboratory #102929

Approved Signatories:

Jose Matute
Analyst

Technical Manager
Tanner Rasmussen

Senior Analyst
Julio Robles

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Client Name:	Scott Environmental Services, LLC	**CA Labs job**	**CAL#** 25064211
Client Address:	P.O. Box 2478 Mills, WY 82644	Billing Address: (if different)	
phone number:	307-262-9309	P.O. #:	25-082
fax number:	N/A	Project Name:	Wheeler Terrace APTS. - Casper College
Send Reports to:	seswyoming@gmail.com Scott	Project Number:	2025-082

Total # Samples Submitted:	**Total # Samples to be Analyzed:**	**Material Matrix:** Air / Bulk / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	**TA Time**	**PLM**	**TA Time**	**Optical / IAQ**	**TA Time**
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		**2 days**	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	3 days	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround 3 Days for Lead TCLP and water)

Lead: *Circle analysis and TA time*

1 of 5

10:30AM

JUN 09 2025

2065

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Roof Layers (Felt, Blue Insulation Black Tar)

Sample Information: 2025-082

CAL2506 4211

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1	Roof SE	6/4/2025 0900	Bulk
2	E		
3	NE		
4	NW		
5	SW		
6	S		
7	N		
8	Gray Caulking	6/4/2025 1000	
9	↓		
10	Black Caulking		
11	Black Flushing		
12	↓		
13	Black Sealant		
14	↓		
15	Brick + Mortar		
16	↓		
17	N Roof		
18	↓		
19	↓		
20	Yellow Brick, gray Mortar	6/4/2025 1100	
21	↓		
22	gray gap filler		
23	↓		
24	Yellow Insulation		
25	↓		
JSM 26			

Custody Information:

Samples relinquished: J. Craig Parker — 6/6/2025 1400 hrs
Signature / Date / Time

Samples received: 10:30AM JUN 09 2025
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

3 of 5

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Sample Information: 2025-082

OAL25064211

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
26	Exterior Wall	6/4/2025 1300	Bulk
27	↓	↓	
28	↓	↓	
29	Black Sealant	↓	
30	↓	↓	
31	↓	↓	
32	Ceiling Drywall - Boiler	↓	
33	↓	↓	
34	↓	↓	
35	3" Pipe Insulation	↓	
36	3" Pipe Insulation	↓	
37	3" Pipe Insulation	↓	
38	4" Pipe Insulation	↓	
39	4" Pipe Insulation	↓	
40	2" Pipe Insulation	↓	
41	2" Pipe Insulation	↓	
42	2" Pipe Insulation	↓	
43	Black Concrete Sealant	↓	
44	↓	↓	
45	Brown Insulation	↓	
46	↓	↓	
47	Drywall	↓	
48	Pink Insulation	↓	
49	Drywall	↓	
JSM			

10:30AM

JUN 09 2025

Custody Information:

Samples relinquished: [signature] 6/6/2025 1400
Signature / Date / Time

Samples received:
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

4 of 5

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Sample Information: 2025-082 Painted a Text Drywall
042506 4211

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
HA1-1	#306 Ceiling	6/5/2025 0900	Bulk
HA1-2	#201		
HA1-3	#307		
HA1-4	#103		
HA1-5	#103		
HA2-1	#101 Ceiling	6/5/2025 1000	
-2	#100		
-3	#202		
-4	#205		
-5	#305		
HA3-1	Laundry Room Ceiling	6/5/2025 1030	
-2	Laundry Room Ceiling		
-3	Laundry Room Ceiling		
HA4-1	Wall Drywall #201	6/5/2025 1100	
-2	#201		
-3	#306		
-4	#306		
-5	#306		
HA5-1	Wall Drywall #304	6/5/2025 1300	
2	#303		
3	#203		
4	#200		
5	#100		
6	#101		
7	#103		

JSM

Custody Information:

Samples relinquished: [signature] 6/6/2025 1400
Signature / Date / Time

Samples received: 10:30AM JUN 09 2025
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

505

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Sample Information: 2025-082 Floor Coverings & Other Misc. Materials

CAL25064211

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
MM-1	#300 Floor	6/5/2025	Bulk
-2	#306		
MM-3	Brown Linoleum #300		
4	#302		
MM-5	#300 Green WBT		
6	#306		
MM-7	Wall Paneling #300		
8	#304		
MM-9	Brown Carpet Tile 302		
10	#304		
MM-11	Tan WBT #302		
12	#304		
MM-13	White Vinyl Tile #304		
14	#303		
MM-15	Tan Linoleum #303		
-16	#103		
MM-17	Multi Colored Linoleum #301		
-18	NO Sample Collected		
MM-19	off White Linoleum - Laundry Room		
20	↓		
MM-21	Taupe WBT - Laundry Room		
-22	↓		
MM-23	White w/Brown VFT #102		
24	#102		
MM-25	off White Linoleum #101		
* 26	#101		

* 2 Layers of Linoleum

10:30AM
JUN 09 2025

Custody Information:

Samples relinquished: [signature] 6/6/2025 1400
Signature / Date / Time

Samples received:
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

CA Labs

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1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Client Name:	Scott Environmental Services, LLC	**CA Labs job**	**CAL#** 25064487
Client Address:	P.O. Box 2478 Mills, WY 82644	Billing Address: (if different)	
phone number:	307-262-9309	P.O. #:	25-082
fax number:	N/A	Project Name:	Wheeler Terrace
Send Reports to:	seswyoming@gmail.com Scott	Project Number:	2025-082

Total # Samples Submitted:	**Total # Samples to be Analyzed:**	**Material Matrix:**
5	5	Air / Bulk / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	**TA Time**	**PLM**	**TA Time**	**Optical / IAQ**	**TA Time**
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		**2 days**	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	3 days	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround 3 Days for Lead TCLP and water)

Lead: *Circle analysis and TA time*

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
S2	Roof	6/17/2025	Bulk
S1	Roof	6/17/2025	Bulk
S2	Roof	6/17/2025	Bulk
HA2-6	Apt 303	6/17/2025	Bulk
HA2-7	Apt 301	6/17/2025	Bulk
			10:30AM

Custody Information:

Samples relinquished: [signature] 6/17/2025 1600
Signature / Date / Time

Samples received: JUN 18 2025
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received: Andrew Sites
Signature / Date / Time

CA Labs

Crisp Analytical Laboratories, L.L.C.
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-242-2754
Fax: 972-242-2798
Mobile: 972-987-7515 / 972-963-0670

Chain of Custody

Client Name: Scott ES
Client Address:

CA Labs Job # CAL 250642 1 B

Billing Address: (if different)

Phone Number:
Fax Number:
Send Reports to:

P.O. #: RE: CAL250642 1,
Project Name:
Project Number:

Report Results:
Contact: Via: Email FAX Verbal

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix: Air / Bulk / Water
	5	

Please indicate appropriate analysis type and turnaround time.

Asbestos: *please call ahead for availability of all rush and/or after hour/weekend samples*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time	
Circle analysis and select TA time		*Circle analysis and select TA time*	2 hour	**PCM**: NIOSH 7400	2 hour	(2 hour is not available for mold analyses)
AHERA	4 hour	EPA 600- PLM Bulk	4 hour	**Allergen Particle**:	4 hour	2 days
EPA Level II	8 hour		8 hour	tape/bulk/swab	8 hour	3 days
Drinking Water	24 hour	AG	~~24 hour~~	Cyclex-d cassettes	24 hour	5 days
Wipe	2 days	AHERA 6-11-25	2 days	Air-o-cell cassettes		
Micro-vac	3 days		~~3 days~~	Anderson cultures	Please Specify	
NIOSH 7402	5 days	Point Count - (NESHAPS)	5 days	Bulk/swab cultures	Mold or	
Chatfield Bulk				Bacteria cultures	bacteria	

Lead: *Circle analysis and select TA time* 2-day TAT

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater
TA Time:	8 hour	1 day	2 days	3 days	5 days

Sample Information:

Sample Number:	Sample Description:	Sample Location:	Volume: (if applicable)	Sample Date/Time:
44-1	Layer 1			
47-1	" "			
49-1	" "			
HA3-2-1	" "			
HA3-2-2	Layer 2			

Custody Information:

Samples relinquished: In-House
Signature / Date / Time

Samples received:
Signature / Date / Time 4:00PM 6-11-25

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

PHOTOS

Wheeler Apartment Building (subject property) on the Casper Community College campus.

Sampling Locations-Roof Core

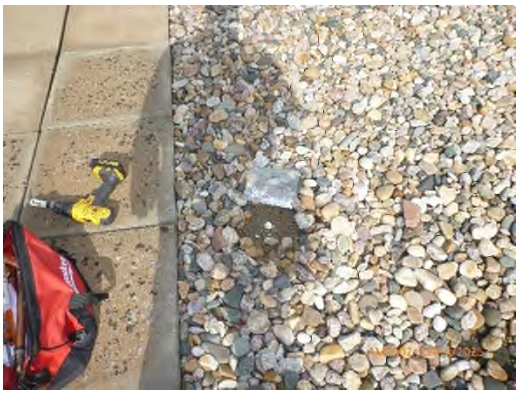
25-082-1(SE Corner)

25-082-2 (E)

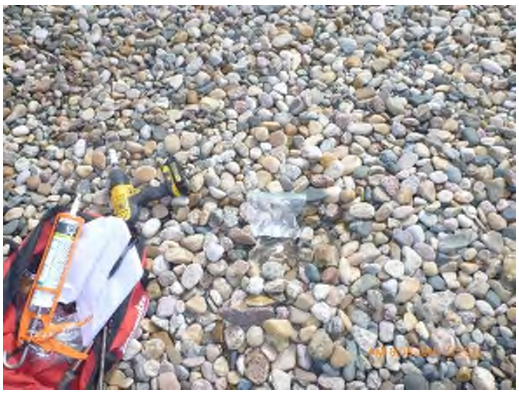
25-082-3 (NE Corner)

25-082-4 (NW Corner)

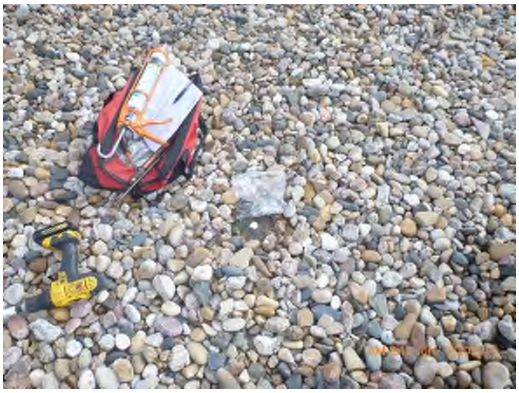
Sampling Locations-Roof (Cont.)



25-082-5 (SW Corner)



25-082-6 (S Central)



25-082-7 (N Central)

Sampling Locations-Gray Sealant

25-082-8 (S Sill plate)

25-082-9 (S wall)

Sampling Locations-Gray Sealant (Cont.)

25-082-10 (N wall)

Sampling Locations-Black Flashing

25-082-11 (N. wall)

25-082-12 (S wall)

Black Tar Sealant-Roof Vent Pipe Penetrations

25-082-13 (S. vent pipe)

25-082-50 (N. vent pipe)

Gray Weather Sealant

25-082-14 (Skylight/roof access)

Gray Foil Backed Sealant-Vent Pipes

25-082-51 (N. vent pipe)

25-082-52 (S. vent pipe)

Sill Plate Brick and Mortar

25-082-15 (S wall)

25-082-16 (N wall)

North Roof-Core Samples

25-082-17(W)

25-082-18 (N)

25-082-19 (SE corner)

Yellow Brick and Gray Mortar

25-082-20 (N wall)

25-082-21 (S wall)

Gray Fibrous Spacer

25-082-22 (S wall)

25-082 -23 (S wall)

Yellow Insulation-Exterior Wall Cavity

25-082-24 (E wall, Apt. #307)

25-082-25 (W wall, Apt. #300)

Drywall Under Exterior Siding

25-082-26 (W wall, Apt. #304)

25-082-27 (W wall, Apt. #300)

Drywall Under Exterior Siding (Cont.)

25-082-28 (E wall, Apt. #305)

Brown Painted Black Sealant

25-082-29 (3rd Floor E)

25-082-30 (3rd Floor E)

25082-31 (2nd Floor E)

Taped Ceiling Drywall (Boiler Room and Storage Rooms)

25-082-32 (SE Corner Boiler Room)

25-082-33 (Boiler Room)

Picture not available

25-082-34 (W Boiler Room)

25-082-47 (Room #300 Storage Room)

25-082-49 (2nd Floor Storage Room)

3” Pipe Insulation W/Woven Cover

25-082-35 (Boiler Room)

25-082-36 (Pipe chase)

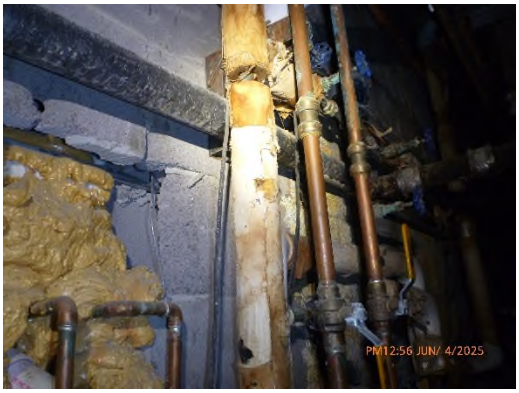
25-082-37 (Pipe chase)

4” Pipe Insulation W/Woven Cover

25-082-38 (Boiler Room)

25-082-39 (Boiler Room)

2” Pipe Insulation W/Woven Cover



25-082-40 (Pipe chase)

25-082-41 (Pipe chase)

25-082-42 (Pipe chase)

Black Sealant Concrete Middle Support Wall-Crawlspace

25-082-43 (W crawlspace)

25-082-44 (E crawlspace)

Brown Insulation Ceiling

Picture Not Available

25-082-45 (E bedroom Room #201)

Pink Insulation (Wall Cavity)

25-082-48 (E wall, Apt. #303)

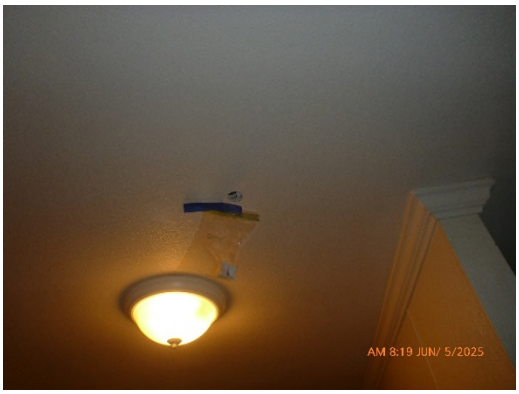
Ceiling Drywall (Reported abated and replaced)

HA1-1 (Hallway, Apt. #301)

HA1-2 (S. Bedroom, Apt. #201)

Ceiling Drywall (Reported abated and replaced) (Cont.)

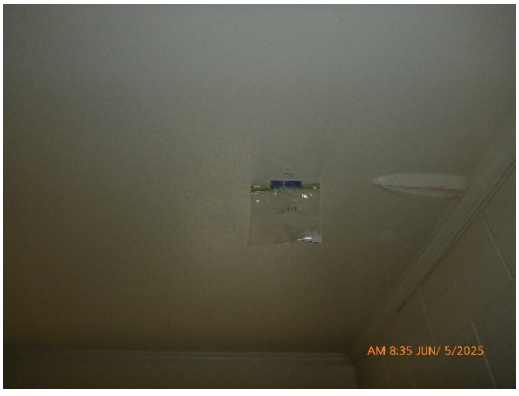
HA1-3 (N Bedroom, Apt. #307)



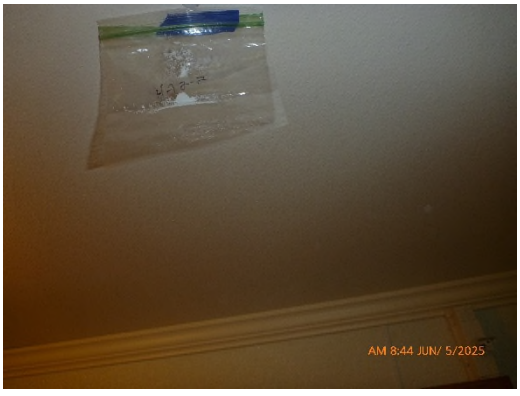
HA1-4 (Kitchen, Apt. #103)

HA1-5 (Bathroom, Apt. #103)

Ceiling Drywall



HA2-1 (Livingroom, Apt. #101)



HA2-2 (Kitchen, Apt. #100)

HA2-3 (S Bedroom, Apt. #202)

HA2-4 (N Bedroom Closet, Apt. #205)

HA2-5 (Hallway, Apt. #305)

HA2-6 (Living Room, Apt. #303

HA2-7 (S. Bedroom, Apt. #301)

Laundry Room Ceiling

HA3-1 (E Entrance)

HA3-2 (Central)

HA3-3 (W Entrance)

Painted and Textured Drywall (Reported abated and replaced)

HA4-1 (Living room, Apt. #201)

HA4-2 (N bedroom, Apt. #201)

Painted and Textured Drywall (Reported abated and replaced) (Cont.)

HA4-3 (Kitchen, Apt. #306)

HA4-4 (Coat closet, Apt. #306)

HA4-5 (N bedroom, Apt. #306)

Painted and Textured Drywall

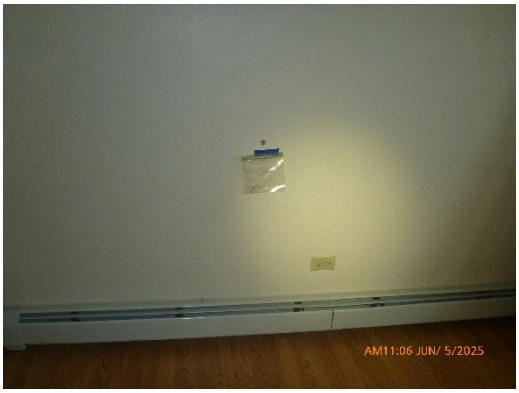
HA5-1 (S bedroom, Apt. #304)

HA5-2 (Living Room, Apt. #303)

Painted and Textured Drywall (Cont.)

HA5-3 (S bedroom, Apt. #203)

HA5-4 (N bedroom, Apt #200)



HA5-5 (Dining Room, Apt. #100)

HA5-6 (Hallway, Apt. #101)

HA5-7 (Closet, Apt. #103)

Flooring and Other Miscellaneous Materials

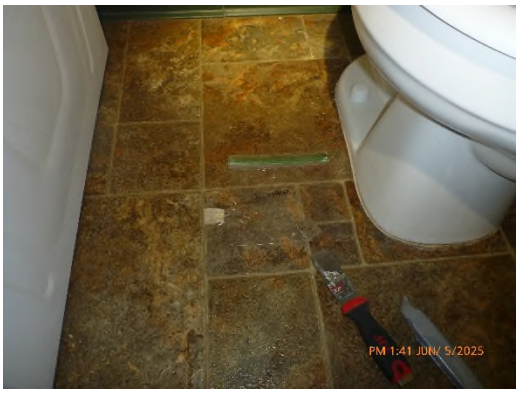
Green Carpet and Yellow Matic Adhesive

MM-1 (Apt. #300)

MM-2 (Apt. #306)

Brown Linoleum

MM-3 (Apt. #300)



MM-4 (Apt. #302)

Green Wall Base Trim and Yellow Mastic Adhesive

MM-5 (Apt. #300)

MM-6 (Apt. #306)

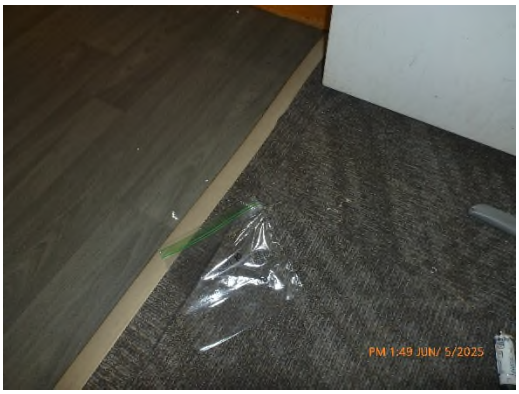
Fire Resistant Wall Paneling (FRP) and Mastic Adhesive

MM-7 (Apt. #300)

MM-8 (Apt. #102)

Brown Self Adhesive Carpet Tile

MM-9 (Apt. #302)



MM-10 (Apt. #304)

Tan Wall Base Trim and Yellow Mastic Adhesive

MM-11 (Apt. #302)

MM-12 (Apt. #304)

White Vinyl Floor Tile

MM-13 (Apt. #304)

MM-14 (Apt. #303)

Tan Linoleum

MM-15 (Apt. #303)

MM-16 (Apt. #103)

Multi Colored Linoleum

MM-17 (Apt. #301)

No Sample Collected

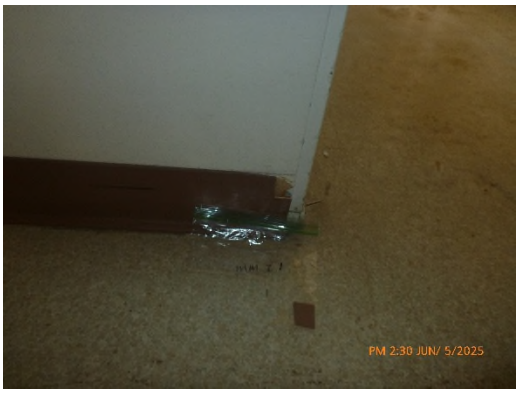
MM-18 (No Sample Collected)

Off-White Linoleum and Adhesive

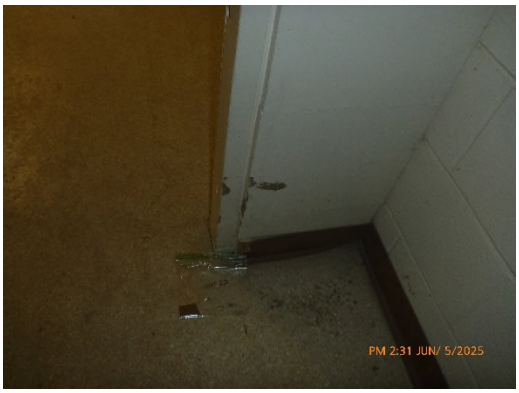
MM-19 (Laundry Room)

MM-20 (Laundry Room

Taupe Wall Base Trim and Yellow Matic Adhesive

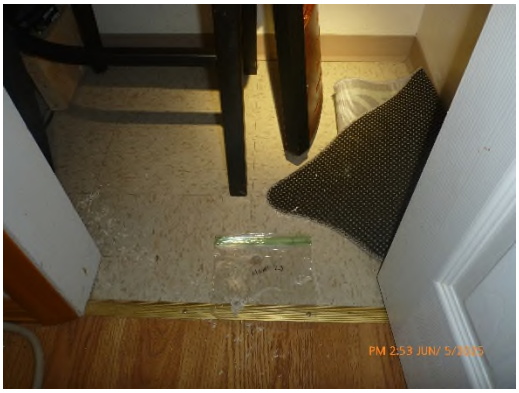


MM-21 (Laundry Room)

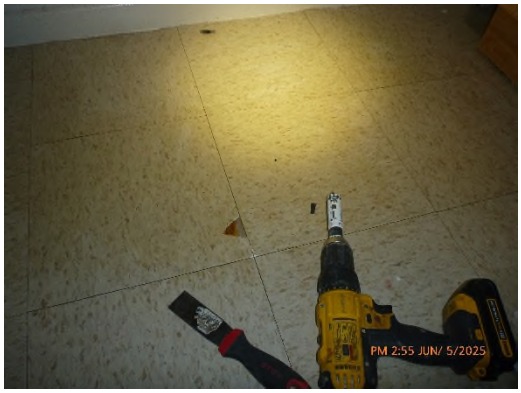


MM-22 (Laundry Room)

Off White W/Brown Accent Vinyl Floor Tile

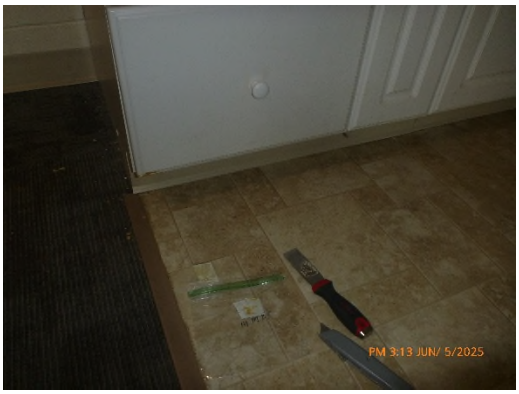


MM-23 (Apt. #102)



MM-24 (Apt. #102)

Tan Linoleum



MM-25 (Apt. # 101)

MM-26 (Apt. #101 (2 layers))

RESUMES OF PROJECT PERSONNEL

SCOTT ENVIRONMENTAL SERVICES, LLC

J. Scott Mortimer

Owner

Technical Expertise:

- Project Management
- Air Quality Compliance Testing
- Ambient Air Quality Testing
- Indoor Air Quality Testing
- Source Emissions Testing
- Continuous Emission Monitor Testing
- QA/QC Procedures
- Hazardous Waste Characterization & Sampling
- Hazardous Waste Material Trial Burns
- Portable Analyzer Operating and Testing
- Sample Analysis

Technical Experience:

Mr. Mortimer has worked in the environmental services industry since 1987. His experience includes: sample preparation, sample analysis, environmental sampling, sampling protocol preparation, job planning, project management and reporting. Mr. Mortimer has served his clients in both domestic, as well as, international venues.

Mr. Mortimer was a major shareholder in Western Environmental Services and Testing, Inc. from 2004 until 2018. Western Environmental is a multifaceted environmental firm with heavy emphasis on air quality compliance sampling. As the Chief Operations Officer, Mr. Mortimer was directly involved with all aspects of the business. Stationary Source Sampling, Leak Detection and Repair Programs, Indoor Air Quality Sampling, Mold Inspection, Mold Sampling, Radon Sampling, Environmental Assessments for Commercial Property Transactions, Phase 1 Site Assessments and an environmental laboratory. During his tenure he was charged with overseeing all operational activities including; site assessment, sampling protocol preparation, field sampling, sample collection, sample transport, sample result interpretation, client interaction, regulatory personnel interaction as well as formal reporting of the sampling results.

Mr. Mortimer was employed by Western Environmental Services and Testing, Inc. for 30 years. Initially hired in 1987 as a soil and water sample prep technician and advancing to Chief Operations Officer. Throughout his 30 year career Mr. Mortimer has consulted hundreds of clients concerning environmental matters. He has successfully utilized many scientific disciplines

	and scientific sampling methodology in order to accurately qualify, quantify and report environmental concerns for his clients. Mr. Mortimer maintained ambient air quality sampling stations in several regions of the United States. He has sampled air, soil, water, mold and asbestos utilizing U.S. Environmental Protection Agency (EPA), National Institution for Occupational Safety and Health (NIOSH) and ASTM International sampling methodology and sampling techniques. He has completed environmental projects for various industries including; Hazardous Waste Incinerators, Municipal Waste Incinerators, Medical Waste Incinerators, Oil & Gas Refineries, Semi-conductor Manufacturer Facilities, Cement Kilns, Metallic and Non-Metallic Mineral Facilities, Fiberglass Manufacturing Plants, Titanium Manufacturing Facilities, Ethanol Plants, Residential Real Estate and Commercial Real Estate.
Education:	A.A.S., Business Administration, Casper Community College
	Inspecting Buildings For Asbestos Containing Materials
Certification:	Certified Visual Emissions Evaluator
	Residential Radon Measurement Certification Course OSHA 40-Hour Safety Training Course H_2S Safety Training MSHA Safety Training Course Qualified Source Test Individual, (QSTI, National Professional Qualification) Fire Extinguisher Training HAZWOPER 8 Hour Refresher Defensive Driver Training Safeland USA/PEC
Professional Affiliations:	Air and Waste Management Association
	Indoor Air Quality Association
	Source Evaluation Society
Teaching:	Lectured in short course "Performing and Observing Source Sampling". Conducted source sampling and ambient air sampling training for regulatory and industrial personnel at various locations.

CHC Training, LLC. is now BetterCertify, LLC. (Effect. 5/1/2024)

BetterCertify
Certification & Compliance Solutions
www.bettercertify.com
303.412.6360
855.60.CERTIFY

1775 West 55th Avenue
Denver, Colorado 80221
United States of America

Certificate of Achievement

This certificate is awarded to:

J. Scott Mortimer

In recognition of satisfactory completion of the EPA-approved annual asbestos refresher training (online-asynchronous) provided in accordance with the Model Accreditation Plan (MAP) (40 CFR Part 763, Subpart E, Appendix C) and AHERA (Subchapter II) of the Toxic Substances Control Act (TSCA) entitled:

Building Inspector

Course Completion Date: February 7, 2025
Examination Date: February 7, 2025

Expiration Date: February 7, 2026
Course Hours: 4.0

Verify Credential

Danaya N. Wilson
CEO & Training Program Manager

Credential License ID:
133085646

BetterCertify
Compliance
Quality Safety
Accredited Alumni
Est. 2007

Aaron I. Hix
Instructor

Certificate No.:
R25-0179-AI-O

Renew Credential

AMUNDSEN ASSOCIATES
ARCHITECTURE • PLANNING • INTERIOR DESIGN
212 East 2nd Street Casper, Wyoming 82601
Phone: (307) 234-9999 office@amundsenassociates.com Fax: (307) 234-4542

WAIVER OF LIEN & RELEASE CLAIMS

_____Interim Final _____

County of: _____ State of: _____

KNOWN ALL MEN BY THESE PRESENTS: PROJECT NO._____

That the undersigned:

_____
(SUBCONTRACTOR/SUPPLIER)

Having furnished the following:

_____
(DESCRIBE WORK AND/OR MATERIAL)

For the use in the construction of:

_____
(PROJECT)

Contracted to the Owner by:

_____
(GENERAL CONTRACTOR)

For and in consideration of the payment on our contract/purchase order in the amount as tabulated below:

1.	Sub-contract/purchase order (As shown on Schedule of Values)	$ _____
2.	Change Orders to date	$ _____
3.	Revised Contract amount (add 1 & 2)	$ _____
4.	Amount earned to date (_____%)	$ _____
5.	Less retention (if applicable) (5% of line 4 up to 50% complete)	($ _____)
6.	Less previous payments	($ _____)
7.	Current payment due (subtract 5 & 6 from 4)	$ _____

The undersigned, upon receipt of said payment (line 7), will remise, release and forever discharge all claims of every kind, nature and character he (it) may have had as a result of the agreement to perform the work

and/or supply the materials referred to herein. All funds listed on line 6 above are certified to have been previously released.

IN WITNESS WHEREOF, I/WE, have hereunto set our hands and seals this ____ day of _____, 20___.

_____ _____
(COMPANY NAME) (BY-TYPE NAME)

_____ _____ SEAL
(TITLE) (SIGNATURE)

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public: _____ Notes:

My commission expires _____/_____/20 _____

Waiver(s) shall be submitted for every subcontractor and/or material supplier listed on the SCHEDULE OF VALUES and/or as direct by the Architect/Owner for any sub-sub tier contractor/supplier.

SECTION 01 1000 - SUMMARY

PART 1 GENERAL

1.01 PROJECT

A. Project Identification: 25110 (Casper College #CC613-26) - Wheeler Terrace Demolition Project
   1. Project Location: Wheeler Terrace - Casper College
B. Project Name: Casper College - Wheeler Terrace Demolition Project
C. Owner's Name: Casper College, 125 College Drive, Casper, Wyoming, 82601
D. Architect's Name: Amundsen Associates, 212 East 2nd Street, Casper, Wyoming, 82601.
   1. Architect's Representative: Ronald Shosh, JR., AIA, Architect, rshosh@amundsenassociates.com
E. Architect's Consultants: Architect has retained the following design professionals, who have prepared designated portions of the Contract Documents:
   1. Civil Engineer: WLC Engineering and Surveying, Justin Stearns, PE, 307-266-2524, jstearns@wlcwyo.com
   2. Landscape Architect: Civil Engineering Professionals, Inc. (CEPI), Jared Fehringer, PLA, ASLA, 307-266-4346, jared@cepi-casper.com
   3. Electrical Engineer: West Plains Engineering (WPE), Todd Weidner, PE, 605-718-8225, todd.weidner@westplainsengineering.com
   4. Geotechnical: JB Engineers, Jared Jung, PE, 307-259-4302, jared.jung@jb-engineers.com
F. The Project consists of the demolition of the Wheeler Terrace facility completely including the building, foundations, surrounding site concrete, etc. This work also includes the removal of asbestos containing materials (concrete foundation walls) for a portion of the building. The demolition contractor with the proper experience, training, and certifications can handle this work in its entirety (Add Alternate #1), or the Owner will provide a third-party Environmental Consultant (Safetech) for supervising asbestos containing material disposal and filing of paperwork as described on the plans (Base Bid). Additionally, the electrical transformer and switchgear will remain and be modified to control necessary parking lot lighting. The overall site will be backfilled, compacted, seeded/sod/erosion control, irrigation modifications, and siterestored restoration, and curb and gutter installation. See the attached plans and specifications..

1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on a Stipulated Price as described in Document, "AIA 104-2017 Standard Abbreviated Form of Agreement Between Owner and Contractor".

1.03 DESCRIPTION OF ALTERATIONS WORK

A. Scope of alterations work is indicated on drawings and specified specfication sections listed in this manual.

1.04 OWNER OCCUPANCY

A. Owner intends to occupy the Project upon Substantial Completion.

B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

C. Schedule the Work to accommodate Owner occupancy.

1.05 CONTRACTOR USE OF SITE AND PREMISES

A. Provide access to and from site as required by law and by Owner:

1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
2. Do not obstruct roadways, sidewalks, or other public ways without permit.
3. Demolition Operations: Limited to areas noted on the drawings.

1.06 WORK RESTRICTIONS

A. Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work to between 7 a.m. to 5 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.

1. Weekend Hours: Permitted, by arrangement with Owner .
2. Early Morning Hours: Comply with local requlation for noisy activitiies .

1.07 MISCELLANEOUS PROVISIONS

A. It is not anticipated that hazardous materials will be encountered during performance of the Work with the exception of Asbestos Containing Materials (ACM) coating on a portion of the foundations. If Contractor observes or encounters materials suspected to be hazardous, Contractor shall cease work in the area, enclose the suspect material, and contact the Owner or the Architect for additional instructions.

1. If the presence of additional hazardous materials is confirmed, the Owner will arrange for abatement through separate contract or negotiate with the general contractor providing demolition and abatement services.

END OF SECTION

SECTION 01 2000 - PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Procedures for preparation and submittal of applications for progress payments.
B. Documentation of changes in Contract Sum and Contract Time.
C. Change procedures.
D. Correlation of Contractor submittals based on changes.
E. Procedures for preparation and submittal of application for final payment.

1.02 RELATED REQUIREMENTS

A. Agreement Form: Contract Price, retainages, and payment method.
B. General Conditions: Additional requirements for progress payments, final payment, changes in the Work.
C. Section 01 7800 - Closeout Submittals: Project record documents.

1.03 SCHEDULE OF VALUES

A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
C. Forms filled out by hand will not be accepted.
D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification section. Identify site mobilization.
E. Include within each line item, a direct proportional amount of Contractor's overhead and profit.
F. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

A. Payment Period: Submit at intervals stipulated in the Agreement.
B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
D. Forms filled out by hand will not be accepted.
E. For each item, provide a column for listing each of the following:
    1. Item Number.
    2. Description of work.
    3. Scheduled Values.
    4. Previous Applications.

5. Work in Place and Stored Materials under this Application.
6. Authorized Change Orders.
7. Total Completed and Stored to Date of Application.
8. Percentage of Completion.
9. Balance to Finish.
10. Retainage.

F. Execute certification by signature of authorized officer.

G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.

H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.

I. Submit one electronic copy of each Application for Payment.

J. Include the following with the application:

1. Transmittal letter as specified for submittals in Section 01 3000.
2. Construction progress schedule, revised and current as specified in Section 01 3000.
3. Partial release of liens from major subcontractors and vendors.
4. Affidavits attesting to off-site stored products.

K. When Architect requires substantiating information, submit data justifying dollar amounts in question.

1.05 MODIFICATION PROCEDURES

A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to Contract Documents.

B. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.

C. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.

1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
2. Promptly execute the change.

D. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 7 days.

E. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the work, with a statement describing the reason for the change,

and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on work by separate or other contractors.

F. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.

G. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.

I. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.

J. Promptly enter changes in Project Record Documents.

1.06 APPLICATION FOR FINAL PAYMENT

A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.

B. Application for Final Payment will not be considered until the following have been accomplished:

1. All closeout procedures specified in Section 01 7000.

END OF SECTION

SECTION 01 2200 - UNIT PRICES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. List of unit prices, for use in preparing Bids.

B. Measurement and payment criteria applicable to Work performed under a unit price payment method.

1.02 RELATED REQUIREMENTS

A. Section 01 2000 - Price and Payment Procedures: Additional payment and modification procedures.

1.03 COSTS INCLUDED

A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.04 UNIT QUANTITIES SPECIFIED

A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

1.05 ABBREVATIONS

A. LF - Linear Foot

B. LS - Lump Sum

C. CY - Cubic Yard

D. SY – Square Yard

E. SF – Square Foot

F. FA - Force Amount

G. EA - EACH

1.06 SCHEDULE OF UNIT PRICES

A. Unit Price No. 1 - Removal and disposal of clean concrete/CMU

1. Desciption: This line item includes demolition, removal, hauling, disposal, backfill, compaction and all other materials and labor necessary to complete the work. For unexpected concrete / CMU that was not indicated on any of the existing plans below grade and is unforeseen.
2. Unit of Measurement: CY

B. Unit Price No. 2 - Removal of coated concrete/CMU with dampproofing that has tested positive as ACM (Asbestos Containing Material)

1. This line item includes demolition, removal, hauling, disposal, backfill, compaction, asbestos related coordination, disposal, etc. and all other materials and labor necessary to complete the

work. For unexpected coated concrete / CMU with dampproofing that was not indicated on any of the existing plans below grade and is unforeseen.

2. Unit of Measurement: CY

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 3000 - ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. General administrative requirements.
B. Pre-demolition meeting.
C. Site mobilization meeting.
D. Progress meetings.
E. Demolition progress schedule.
F. Coordination drawings.
G. Submittals for information and project closeout.

1.02 RELATED REQUIREMENTS

A. Section 01 3216 - Construction Progress Schedule: Form, content, and administration of schedules.
B. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.

1.03 REFERENCE STANDARDS

A. AIA G810 - Transmittal Letter; 2001.

1.04 GENERAL ADMINISTRATIVE REQUIREMENTS

A. Comply with requirements of Section 01 7000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
B. Make the following types of submittals to Architect:
    1. Requests for Interpretation (RFI).
    2. Product data, and samples.
    3. Test and inspection reports.
    4. Applications for payment and change order requests.
    5. Progress schedules.
    6. Coordination drawings.
    7. Correction Punch List and Final Correction Punch List for Substantial Completion.
    8. Closeout submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRE-DEMOLITION MEETING

A. Schedule meeting after Notice of Award.
B. Attendance Required:

1. Owner.
2. Architect.
3. Contractor.

C. Agenda:

1. Execution of Owner-Contractor Agreement.
2. Submission of executed bonds and insurance certificates.
3. Distribution of Contract Documents.
4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
5. Designation of personnel representing the parties to Contract and Architect.
6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
7. Scheduling.

D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.02 SITE MOBILIZATION MEETING

A. Attendance Required:

1. Contractor.
2. Owner.
3. Architect.
4. Contractor's superintendent.
5. Major subcontractors.

B. Agenda:

1. Use of premises by Owner and Contractor.
2. Owner's requirements.
3. Construction facilities and controls provided by Owner.
4. Temporary utilities provided by Owner.
5. Survey and building layout.
6. Security and housekeeping procedures.
7. Schedules.
8. Application for payment procedures.
9. Procedures for testing.
10. Procedures for maintaining record documents.
11. Requirements for start-up of equipment.
12. Inspection and acceptance of equipment put into service during construction period.

C. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 PROGRESS MEETINGS

A. Contractor shall schedule and administer meetings throughout progress of the work at maximum bi-monthly intervals or as requested by the Owner or Architect.

B. Attendance Required:

1. Contractor.
2. Owner.
3. Architect.
4. Special consultants.
5. Contractor's superintendent.
6. Major subcontractors.

C. Agenda:

1. Review minutes of previous meetings.
2. Review of work progress.
3. Field observations, problems, and decisions.
4. Identification of problems that impede, or will impede, planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of RFIs log and status of responses.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Maintenance of quality and work standards.
11. Effect of proposed changes on progress schedule and coordination.
12. Other business relating to work.

D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 CONSTRUCTION PROGRESS SCHEDULE

A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.

B. Submit updated schedule with each Application for Payment.

3.05 REQUESTS FOR INTERPRETATION (RFI)

A. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.

1. Prepare a separate RFI for each specific item.
2. Combine RFI and its attachments into a single electronic file. PDF format is preferred.

B. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.

C. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.

1. Official Project name and number, and any additional required identifiers established in Contract Documents.
2. Owner's, Architect's, and Contractor's names.
3. Discrete and consecutive RFI number, and descriptive subject/title.
4. Issue date, and requested reply date.
5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
6. Annotations: Field dimensions and/or description of conditions which have engendered the request.
7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.

D. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.

E. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.

1. Indicate current status of every RFI. Update log promptly and on a regular basis.
2. Note dates of when each request is made, and when a response is received.
3. Highlight items requiring priority or expedited response.
4. Highlight items for which a timely response has not been received to date.

F. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.

1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.

G. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.

1. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.

2. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

3.06 SUBMITTALS FOR REVIEW

A. When the following are specified in individual sections, submit them for review:
   1. Product data.
   2. Samples for selection.
   3. Samples for verification.
B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
C. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 - Closeout Submittals.

3.07 SUBMITTALS FOR INFORMATION

A. When the following are specified in individual sections, submit them for information:
   1. Design data.
   2. Test reports.
   3. Inspection reports.
   4. Other types indicated.
B. Submit for Architect's knowledge as contract administrator or for Owner.

3.08 SUBMITTALS FOR PROJECT CLOSEOUT

A. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 7800 - Closeout Submittals:
   1. Project record documents.
   2. Warranties.
   3. Bonds.
   4. Other types as indicated.
B. Submit for Owner's benefit during and after project completion.

3.09 SUBMITTAL PROCEDURES

A. General Requirements:
   1. Transmit using approved form.
      a. Use Form AIA G810.
   2. Submittals for review shall be numbered using the Specfication Section number from the project manual with a numerical suffix identifying the number of the submittal within the section.
      a. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.

3. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
4. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
5. Submittals which require physical samples shall be delivered to the address provided by the Architect. Contractor shall allow adequate delivery and return delivery time for such physical submittals in the project schedule.
6. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
7. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
8. Provide space for Contractor and Architect review stamps.
9. When revised for resubmission, identify all changes made since previous submission.
10. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
11. Submittals not requested will not be recognized or processed.

END OF SECTION

SECTION 01 3216 - DEMOLITION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
   1. Startup construction schedule.
   2. Contractor's Construction Schedule.
   3. Construction schedule updating reports.
   4. Daily construction reports.
   5. Site condition reports.
   6. Unusual event reports.

B. Related Requirements:
   1. Section 01 2000 "Price and Payment Procedures" for schedule of values and requirements for use of cost-loaded schedule for Applications for Payment.
   2. Section 01 4000 "Quality Requirements" for schedule of tests and inspections.

1.03 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.
   1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
   2. Predecessor Activity: An activity that precedes another activity in the network.
   3. Successor Activity: An activity that follows another activity in the network.

B. Cost Loading: The allocation of the schedule of values for completing an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum.

C. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine the critical path of Project and when activities can be performed.

D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

E. Event: The starting or ending point of an activity.

F. Float: The measure of leeway in starting and completing an activity.
   1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
   2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
   3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

G. Resource Loading: The allocation of manpower and equipment necessary for completing an activity as scheduled.

1.04 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in the following format:
   1. Working electronic copy of schedule file.

B. Startup construction schedule.
   1. Submittal of cost-loaded startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.

C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

D. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
   1. Activity Report: List of activities sorted by activity number and then early start date, or actual start date if known.
   2. Logic Report: List of preceding and succeeding activities for each activity, sorted in ascending order by activity number and then by early start date, or actual start date if known.
   3. Total Float Report: List of activities sorted in ascending order of total float.
   4. Earnings Report: Compilation of Contractor's total earnings from the Notice to Proceed until most recent Application for Payment.

E. Construction Schedule Updating Reports: Submit with Applications for Payment.

F. Daily Construction Reports: Submit at weekly intervals.

G. Site Condition Reports: Submit at time of discovery of differing conditions.

H. Unusual Event Reports: Submit at time of unusual event.

1.05 QUALITY ASSURANCE

1.06 COORDINATION

A. Coordinate Contractor's Construction Schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
   1. Secure time commitments for performing critical elements of the Work from entities involved.
   2. Coordinate each construction activity in the network with other activities, and schedule them in proper sequence.

1.07 CONTRACTOR'S PRE-DEMOLITION SCHEDULE

A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.

B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
   1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

C. Activities: Treat each floor or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
   1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
   2. Temporary Facilities: Indicate start and completion dates for the following as applicable:
      a. Securing of approvals and permits required for performance of the Work.
      b. Temporary facilities.
      c. Construction of mock-ups, prototypes and samples.
      d. Owner interfaces and furnishing of items.
      e. Interfaces with Separate Contracts.
      f. Regulatory agency approvals.
      g. Punch list.
   3. Procurement Activities: Include procurement process activities for the following long lead-time items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
   4. Submittal Review Time: Include review and resubmittal times indicated in Section 01 3000 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
   5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.

6. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and Final Completion.

D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
   1. Phasing: Arrange list of activities on schedule by phase.
   2. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
   3. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Section 01 1000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
   4. Work Restrictions: Show the effect of the following items on the schedule:
      a. Coordination with existing construction.
      b. Limitations of continued occupancies.
      c. Uninterruptible services.
      d. Partial occupancy before Substantial Completion.
      e. Use-of-premises restrictions.
      f. Provisions for future construction.
      g. Seasonal variations.
      h. Environmental control.
   5. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
      a. Subcontract awards.
      b. Submittals.
      c. Purchases.
      d. Sample testing.
      e. Deliveries.
      f. Installation.
      g. Tests and inspections.
      h. Adjusting.
      i. Curing.
      j. Startup and placement into final use and operation.
   6. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
      a. As listed in the Schedule of Activities from the Proposal Request.
      b. Substantial Completion.

E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion .
   1. Temporary enclosure and space conditioning.

F. Cost Correlation: Superimpose a cost correlation timeline, indicating planned and actual costs. On the line, show planned and actual dollar volume of the Work performed as of planned and actual dates used for preparation of payment requests.

G. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:

1. Unresolved issues.
2. Unanswered Requests for Information.
3. Rejected or unreturned submittals.
4. Notations on returned submittals.
5. Pending modifications affecting the Work and the Contract Time.

H. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate Final Completion percentage for each activity.

I. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.

J. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. Post copies in Project meeting rooms and temporary field offices.
2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

1.08 CPM SCHEDULE REQUIREMENTS

A. Prepare network diagrams using AON (activity-on-node) format.

B. Startup Network Diagram: Submit diagram within 14 days of date established for the Notice to Proceed . Outline significant construction activities for the first 90 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

C. CPM Schedule: Prepare Contractor's Construction Schedule using a time-scaled CPM network analysis diagram for the Work.

1. Develop network diagram in sufficient time to submit CPM schedule, so it can be accepted for use no later than 60 days after date established for the Notice to Proceed .
    a. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work within applicable completion dates.

2. Conduct educational workshops to train and inform key Project personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.
3. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
4. Use "one workday" as the unit of time for individual activities. Indicate nonworking days and holidays incorporated into the schedule to coordinate with the Contract Time.

D. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the startup network diagram, prepare a skeleton network to identify probable critical paths.

1. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
    a. Preparation and processing of submittals.
    b. Mobilization and demobilization.
    c. Purchase of materials.
    d. Delivery.
    e. Utility interruptions.
    f. Installation.
    g. Punch list and Final Completion.
    h. Activities occurring following Final Completion.
2. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
3. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
4. Format: Mark the critical path. Locate the critical path near center of network; locate paths with most float near the edges.
    a. Subnetworks on separate sheets are permissible for activities clearly off the critical path.
5. Cost- and Resource-Loading of CPM Schedule: Assign cost to construction activities on the CPM schedule. Do not assign costs to submittal activities. Obtain Architect's approval prior to assigning costs to fabrication and delivery activities. Assign costs under main subcontracts for testing and commissioning activities, operation and maintenance manuals, punch list activities, Project record documents, and demonstration and training (if applicable), in the amount of 5 percent of the Contract Sum.
    a. Each activity cost shall reflect an appropriate value subject to approval by Architect.
    b. Total cost assigned to activities shall equal the total Contract Sum.

E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall Project schedule.

F. Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:

1. Contractor or subcontractor and the Work or activity.
2. Description of activity.
3. Main events of activity.
4. Immediate preceding and succeeding activities.
5. Early and late start dates.
6. Early and late finish dates.
7. Activity duration in workdays.
8. Total float or slack time.
9. Average size of workforce.
10. Dollar value of activity (coordinated with the schedule of values).

G. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:

1. Identification of activities that have changed.
2. Changes in early and late start dates.
3. Changes in early and late finish dates.
4. Changes in activity durations in workdays.
5. Changes in the critical path.
6. Changes in total float or slack time.
7. Changes in the Contract Time.

H. Value Summaries: Prepare two cumulative value lists, sorted by finish dates.

1. In first list, tabulate activity number, early finish date, dollar value, and cumulative dollar value.
2. In second list, tabulate activity number, late finish date, dollar value, and cumulative dollar value.
3. In subsequent issues of both lists, substitute actual finish dates for activities completed as of list date.
4. Prepare list for ease of comparison with payment requests; coordinate timing with progress meetings.
    a. In both value summary lists, tabulate "actual percent complete" and "cumulative value completed" with total at bottom.
    b. Submit value summary printouts one week before each regularly scheduled progress meeting.

1.09 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. Approximate count of personnel at Project site.
4. Equipment at Project site.

5. Material deliveries.
6. High and low temperatures and general weather conditions, including presence of rain or snow.
7. Testing and inspection.
8. Accidents.
9. Meetings and significant decisions.
10. Unusual events.
11. Stoppages, delays, shortages, and losses.
12. Meter readings and similar recordings.
13. Emergency procedures.
14. Orders and requests of authorities having jurisdiction.
15. Change Orders received and implemented.
16. Construction Change Directives received and implemented.
17. Services connected and disconnected.
18. Equipment or system tests and startups.
19. Partial completions and occupancies.
20. Substantial Completions authorized.

B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

C. Unusual Event Reports: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, responses by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.
    1. Submit unusual event reports directly to Owner within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 4000 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Quality assurance.
B. References and standards.
C. Testing and inspection agencies and services.

1.02 RELATED REQUIREMENTS

A. Section 01 3000 - Administrative Requirements: Submittal procedures.
B. Section 01 4219 - Reference Standards.

1.03 REFERENCE STANDARDS

1.04 TESTING AND INSPECTION AGENCIES AND SERVICES

A. Owner will employ and pay for services of an independent testing agency to perform other specified testing.
B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
B. Comply with manufacturers' instructions, including each step in sequence.
C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
E. Have work performed by persons qualified to produce required and specified quality.
F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

3.03 TESTING AND INSPECTION

A. Testing Agency Duties:
   1. Test samples of mixes submitted by Contractor.
   2. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
   3. Perform specified sampling and testing of products in accordance with specified standards.
   4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
   5. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
   6. Perform additional tests and inspections required by Architect.
   7. Submit reports of all tests/inspections specified.

B. Limits on Testing/Inspection Agency Authority:
   1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
   2. Agency may not approve or accept any portion of the Work.
   3. Agency may not assume any duties of Contractor.
   4. Agency has no authority to stop the Work.

C. Contractor Responsibilities:
   1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
   2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
   3. Provide incidental labor and facilities:
      a. To provide access to Work to be tested/inspected.
      b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
      c. To facilitate tests/inspections.
      d. To provide storage and curing of test samples.
   4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
   5. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

D. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

3.04 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not complying with specified requirements.

END OF SECTION

SECTION 01 4200 - REFERENCES

PART 1 GENERAL

1.01 DEFINITIONS

A. General: Basic Contract definitions are included in the Conditions of the Contract.

B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."

D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."

E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.

H. "Provide": Furnish and install, complete and ready for the intended use.

I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.02 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

1. For standards referenced by applicable building codes, comply with dates of standards as listed in building codes.

C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.03 ABBREVIATIONS AND ACRONYMS

A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. The information in this list is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. AABC - Associated Air Balance Council; www.aabc.com.
2. AAMA - American Architectural Manufacturers Association; (See FGIA).
3. AAPFCO - Association of American Plant Food Control Officials; www.aapfco.org.
4. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
5. AATCC - American Association of Textile Chemists and Colorists; www.aatcc.org.
6. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
7. ABMA - American Boiler Manufacturers Association; www.abma.com.
8. ACI - American Concrete Institute; (Formerly: ACI International); www.concrete.org.
9. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
10. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
11. AF&PA - American Forest & Paper Association; www.afandpa.org.
12. AGA - American Gas Association; www.aga.org.
13. AHAM - Association of Home Appliance Manufacturers; www.aham.org.
14. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
15. AI - Asphalt Institute; www.asphaltinstitute.org.
16. AIA - American Institute of Architects (The); www.aia.org.
17. AISC - American Institute of Steel Construction; www.aisc.org.
18. AISI - American Iron and Steel Institute; www.steel.org.
19. AITC - American Institute of Timber Construction; www.plib.org.
20. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
21. ANSI - American National Standards Institute; www.ansi.org.
22. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
23. APA - APA - The Engineered Wood Association; www.apawood.org.
24. APA - Architectural Precast Association; www.archprecast.org.
25. API - American Petroleum Institute; www.api.org.
26. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
27. ARI - American Refrigeration Institute; (See AHRI).
28. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
29. ASCE - American Society of Civil Engineers; www.asce.org.

30. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
31. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
32. ASME - ASME International; (American Society of Mechanical Engineers); www.asme.org.
33. ASSE - American Society of Sanitary Engineering; www.asse-plumbing.org.
34. ASSP - American Society of Safety Professionals (The); www.assp.org.
35. ASTM - ASTM International; www.astm.org.
36. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
37. AVIXA - Audiovisual and Integrated Experience Association; (Formerly: Infocomm International); www.avixa.org.
38. AWEA - American Wind Energy Association; www.awea.org.
39. AWI - Architectural Woodwork Institute; www.awinet.org.
40. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
41. AWPA - American Wood Protection Association; www.awpa.com.
42. AWS - American Welding Society; www.aws.org.
43. AWWA - American Water Works Association; www.awwa.org.
44. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
45. BIA - Brick Industry Association (The); www.gobrick.com.
46. BICSI - BICSI, Inc.; www.bicsi.org.
47. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.org.
48. BISSC - Baking Industry Sanitation Standards Committee; www.bissc.org.
49. BWF - Badminton World Federation; (Formerly: International Badminton Federation); www.bissc.org.
50. CDA - Copper Development Association; www.copper.org.
51. CE - Conformite Europeenne; www.ec.europa.eu/growth/single-market/ce-marking.
52. CEA - Canadian Electricity Association; www.electricity.ca.
53. CFFA - Chemical Fabrics and Film Association, Inc.; www.chemicalfabricsandfilm.com.
54. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.
55. CGA - Compressed Gas Association; www.cganet.com.
56. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
57. CISCA - Ceilings & Interior Systems Construction Association; www.cisca.org.
58. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
59. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
60. CPA - Composite Panel Association; www.compositepanel.org.
61. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
62. CRRC - Cool Roof Rating Council; www.coolroofs.org.

63. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
64. CSA - CSA Group; www.csa-group.org.
65. CSI - Cast Stone Institute; www.caststone.org.
66. CSI - Construction Specifications Institute (The); www.csiresources.org.
67. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
68. CTA - Consumer Technology Association; www.cta.tech.
69. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.coolingtechnology.org.
70. CWC - Composite Wood Council; (See CPA).
71. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
72. DHA - Decorative Hardwoods Association; (Formerly: Hardwood Plywood & Veneer Association); www.decorativehardwoods.org.
73. DHI - Door and Hardware Institute; www.dhi.org.
74. ECA - Electronic Components Association; (See ECIA).
75. ECAMA - Electronic Components Assemblies & Materials Association; (See ECIA).
76. ECIA - Electronic Components Industry Association; www.ecianow.org.
77. EIA - Electronic Industries Alliance; (See TIA).
78. EIMA - EIFS Industry Members Association; www.eima.com.
79. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
80. EOS/ESD Association; (Electrostatic Discharge Association); www.esda.org.
81. ESTA - Entertainment Services and Technology Association; (See PLASA).
82. ETL - Intertek (See Intertek); www.intertek.com.
83. EVO - Efficiency Valuation Organization; www.evo-world.org.
84. FCI - Fluid Controls Institute; www.fluidcontrolsinstitute.org.
85. FGIA - Fenestration and Glazing Industry Alliance; https://fgiaonline.org.
86. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
87. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
88. FM Approvals - FM Approvals LLC; www.fmapprovals.com.
89. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
90. FRSA - Florida Roofing, Sheet Metal Contractors Association, Inc.; www.floridaroof.com.
91. FSA - Fluid Sealing Association; www.fluidsealing.com.
92. FSC - Forest Stewardship Council U.S.; www.fscus.org.
93. GA - Gypsum Association; www.gypsum.org.
94. GANA - Glass Association of North America; (See NGA).
95. GS - Green Seal; www.greenseal.org.

96. HI - Hydraulic Institute; www.pumps.org.
97. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
98. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
99. HPVA - Hardwood Plywood & Veneer Association; (See DHA).
100. IAPSC - International Association of Professional Security Consultants; www.iapsc.org.
101. IAS - International Accreditation Service; www.iasonline.org.
102. ICBO - International Conference of Building Officials; (See ICC).
103. ICC - International Code Council; www.iccsafe.org.
104. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
105. ICPA - International Cast Polymer Association; www.theicpa.com.
106. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
107. IEC - International Electrotechnical Commission; www.iec.ch.
108. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
109. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
110. IESNA - Illuminating Engineering Society of North America; (See IES).
111. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
112. IGMA - Insulating Glass Manufacturers Alliance; (See FGIA).
113. IGSHPA - International Ground Source Heat Pump Association; www.igshpa.org.
114. II - Infocomm International; (See AVIXA).
115. ILI - Indiana Limestone Institute of America, Inc.; www.iliai.com.
116. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA); www.intertek.com.
117. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); www.isa.org.
118. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).
119. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); www.isfanow.org.
120. ISO - International Organization for Standardization; www.iso.org.
121. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
122. ITU - International Telecommunication Union; www.itu.int.
123. KCMA - Kitchen Cabinet Manufacturers Association; www.kcma.org.
124. LMA - Laminating Materials Association; (See CPA).
125. LPI - Lightning Protection Institute; www.lightning.org.
126. MBMA - Metal Building Manufacturers Association; www.mbma.com.
127. MCA - Metal Construction Association; www.metalconstruction.org.
128. MFMA - Maple Flooring Manufacturers Association, Inc.; www.maplefloor.org.

129. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
130. MHI - Material Handling Industry; www.mhi.org.
131. MIA - Marble Institute of America; (See NSI).
132. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
133. MPI - Master Painters Institute; www.paintinfo.com.
134. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; www.mss-hq.org.
135. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
136. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
137. NADCA - National Air Duct Cleaners Association; www.nadca.com.
138. NAIMA - North American Insulation Manufacturers Association; www.nadca.com.
139. NALP - National Association of Landscape Professionals; www.landscapeprofessionals.org.
140. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
141. NBI - New Buildings Institute; www.newbuildings.org.
142. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
143. NCMA - National Concrete Masonry Association; www.ncma.org.
144. NEBB - National Environmental Balancing Bureau; www.nebb.org.
145. NECA - National Electrical Contractors Association; www.necanet.org.
146. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
147. NEMA - National Electrical Manufacturers Association; www.nema.org.
148. NETA - InterNational Electrical Testing Association; www.netaworld.org.
149. NFHS - National Federation of State High School Associations; www.nfhs.org.
150. NFPA - National Fire Protection Association; www.nfpa.org.
151. NFPA - NFPA International; (See NFPA).
152. NFRC - National Fenestration Rating Council; www.nfrc.org.
153. NGA - National Glass Association (The); (Formerly: Glass Association of North America); www.glass.org.
154. NHLA - National Hardwood Lumber Association; www.nhla.com.
155. NLGA - National Lumber Grades Authority; www.nlga.org.
156. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).
157. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.
158. NRCA - National Roofing Contractors Association; www.nrca.net.
159. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
160. NSF - NSF International; www.nsf.org.
161. NSI - National Stone Institute; (Formerly: Marble Institute of America); www.naturalstoneinstitute.org.

162. NSPE - National Society of Professional Engineers; www.nspe.org.
163. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.
164. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
165. NWFA - National Wood Flooring Association; www.nwfa.org.
166. NWRA - National Waste & Recycling Association; www.wasterecycling.org.
167. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
168. PDI - Plumbing & Drainage Institute; www.pdionline.org.
169. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); www.plasa.org.
170. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
171. RFCI - Resilient Floor Covering Institute; www.rfci.com.
172. RIS - Redwood Inspection Service; www.redwoodinspection.com.
173. SAE - SAE International; www.sae.org.
174. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
175. SDI - Steel Deck Institute; www.sdi.org.
176. SDI - Steel Door Institute; www.steeldoor.org.
177. SEFA - Scientific Equipment and Furniture Association (The); www.sefalabs.com.
178. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
179. SIA - Security Industry Association; www.siaonline.org.
180. SJI - Steel Joist Institute; www.steeljoist.org.
181. SMA - Screen Manufacturers Association; www.smainfo.org.
182. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
183. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
184. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.
185. SPIB - Southern Pine Inspection Bureau; www.spib.org.
186. SPRI - Single Ply Roofing Industry; www.spri.org.
187. SRCC - Solar Rating & Certification Corporation; www.solar-rating.org.
188. SSINA - Specialty Steel Industry of North America; www.ssina.com.
189. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
190. STI - Steel Tank Institute; www.steeltank.com.
191. SWI - Steel Window Institute; www.steelwindows.com.
192. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
193. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
194. TCNA - Tile Council of North America, Inc.; www.tileusa.com.
195. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.tema.org.
196. TIA - Telecommunications Industry Association (The); (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.

197. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
198. TMS - The Masonry Society; www.masonrysociety.org.
199. TPI - Truss Plate Institute; www.tpinst.org.
200. TPI - Turfgrass Producers International; www.turfgrasssod.org.
201. TRI - Tile Roofing Institute; www.tileroofing.org.
202. UL - Underwriters Laboratories Inc.; www.ul.com.
203. UL LLC - UL LLC; www.ul.com.
204. UNI - Uni-Bell PVC Pipe Association; www.uni-bell.org.
205. USAV - USA Volleyball; www.usavolleyball.org.
206. USGBC - U.S. Green Building Council; www.usgbc.org.
207. USITT - United States Institute for Theatre Technology, Inc.; www.usitt.org.
208. WA - Wallcoverings Association; www.wallcoverings.org.
209. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
210. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
211. WDMA - Window & Door Manufacturers Association; www.wdma.com.
212. WI - Woodwork Institute; www.wicnet.org.
213. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.
214. WWPA - Western Wood Products Association; www.wwpa.org.

B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
   1. DIN - Deutsches Institut fur Normung e.V.; www.din.de.
   2. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
   3. ICC - International Code Council; www.iccsafe.org.
   4. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.

C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.
   1. COE - Army Corps of Engineers; www.usace.army.mil.
   2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
   3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
   4. DOD - Department of Defense; www.quicksearch.dla.mil.
   5. DOE - Department of Energy; www.energy.gov.
   6. EPA - Environmental Protection Agency; www.epa.gov.
   7. FAA - Federal Aviation Administration; www.faa.gov.
   8. FG - Federal Government Publications; www.gpo.gov/fdsys.
   9. GSA - General Services Administration; www.gsa.gov.

10. HUD - Department of Housing and Urban Development; www.hud.gov.
11. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
12. OSHA - Occupational Safety & Health Administration; www.osha.gov.
13. SD - Department of State; www.state.gov.
14. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
15. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
16. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.
17. USDOJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
18. USP - U.S. Pharmacopeial Convention; www.usp.org.
19. USPS - United States Postal Service; www.usps.com.

D. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.govinfo.gov.
2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.
3. DSCC - Defense Supply Center Columbus; (See FS).
4. FED-STD - Federal Standard; (See FS).
5. FS - Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.
    a. Available from Defense Standardization Program; www.dsp.dla.mil.
    b. Available from General Services Administration; www.gsa.gov.
    c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org.
6. MILSPEC - Military Specification and Standards; (See DOD).
7. USAB - United States Access Board; www.access-board.gov.
8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 5000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Temporary Controls: Barriers, enclosures, and fencing.
B. Security requirements.
C. Waste removal facilities and services.

1.02 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.03 FENCING

A. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.04 SECURITY

A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
B. Coordinate with Owner's security program.

1.05 WASTE REMOVAL

A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
B. Provide containers with lids. Remove trash from site periodically.
C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 7000 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Examination, preparation, and general installation procedures.
B. Cutting and patching.
C. Surveying for laying out the work.
D. Cleaning and protection.
E. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

1.02 RELATED REQUIREMENTS

A. Section 01 1000 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
B. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
C. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.
D. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties, and bonds.
E. Section 02 4116 - Structure Demolition: Demolition of whole structurers and parts thereof; site utility demol

1.03 REFERENCE STANDARDS

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
    1. On request, submit documentation verifying accuracy of survey work.
    2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
    3. Submit surveys and survey logs for the project record.
C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
    1. Structural integrity of any element of Project.
    2. Integrity of weather exposed or moisture resistant element.
    3. Efficiency, maintenance, or safety of any operational element.
    4. Visual qualities of sight exposed elements.
    5. Work of Owner or separate Contractor.

1.05 QUALIFICATIONS

A. For demolition work, employ a firm specializing in the type of work required.

B. For surveying work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to ongoing construction activities,

C. For field engineering, employ a professional engineer of the discipline required for specific service on Project, licensed in the State in which the Project is located. Employ only individual(s) trained and experienced in establishing and maintaining horizontal and vertical control points necessary for laying out construction work on project of similar size, scope and/or complexity.

D. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.06 PROJECT CONDITIONS

A. Use of explosives is not permitted.

B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

D. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

E. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.

F. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.

1. Minimize amount of bare soil exposed at one time.
2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

G. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.

H. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.07 COORDINATION

A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
B. Notify affected utility companies and comply with their requirements.
C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
D. Coordinate space requirements, supports, and installation of electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
F. Coordinate completion and clean-up of work of separate sections.
G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 MATERAILS

A. Comply with requirements specified in other Sections.
B. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

2.02 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.

B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.

C. Examine and verify specific conditions described in individual specification sections.

D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.

E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 LAYING OUT THE WORK

A. Verify locations of survey control points prior to starting work.

B. Promptly notify Architect of any discrepancies discovered.

C. Contractor shall locate and protect survey control and reference points.

D. Control datum for survey is that established by Owner provided survey.

E. Protect survey control points prior to starting site work; preserve permanent reference points during construction.

F. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

G. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.

H. Utilize recognized engineering survey practices.

I. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:

1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
2. Building foundation, column locations, ground floor elevations.

J. Periodically verify layouts by same means.

K. Maintain a complete and accurate log of control and survey work as it progresses.

3.04 CUTTING AND PATCHING

A. Whenever possible, execute the work by methods that avoid cutting or patching.

B. Perform whatever cutting and patching is necessary to:

1. Complete the work.
2. Fit products together to integrate with other work.
3. Provide openings for penetration of mechanical, electrical, and other services.
4. Match work that has been cut to adjacent work.
5. Repair areas adjacent to cuts to required condition.
6. Repair new work damaged by subsequent work.
7. Remove samples of installed work for testing when requested.
8. Remove and replace defective and non-complying work.

C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.

D. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

E. Patching:

1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
2. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.05 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

B. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.06 FINAL CLEANING

A. Execute final cleaning prior to final project assessment.

B. Clean site; sweep paved areas, rake clean landscaped surfaces.

C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.07 CLOSEOUT PROCEDURES

A. Make submittals that are required by governing or other authorities.

B. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.

C. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.

D. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.

E. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.

F. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

END OF SECTION

SECTION 01 7800 - CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project record documents.

1.02 RELATED REQUIREMENTS

A. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.

B. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.

1.03 SUBMITTALS

A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:
   1. Drawings.
   2. Specifications.
   3. Addenda.
   4. Change Orders and other modifications to the Contract.

B. Ensure entries are complete and accurate, enabling future reference by Owner.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with construction progress.

E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
   1. Changes made by Addenda and modifications.

F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
   1. Field changes of dimension and detail.
   2. Details not on original Contract drawings.

END OF SECTION

SECTION 02 4116 - STRUCTURE DEMOLITION

PART 1 GENERAL

1.01 SUMMARY

A. The Work of this Section Includes:
   1. Demolition and removal of buildings or structures.
   2. Demolition and removal of site improvements.
   3. Removing below-grade construction.
   4. Disconnecting, capping or sealing, and removing site utilities.
   5. Salvaging items for reuse by Owner.

B. Related Requirements:
   1. Section 01 1000 "Summary" for use of the premises and phasing requirements.

1.02 DEFINITIONS

A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged.

B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner as indicated. Include fasteners or brackets needed for reattachment elsewhere.

1.03 REFERENCE STANDARDS

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

1.04 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
   1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.05 COORDINATION

A. Arrange demolition schedule so as not to interfere with Owner's on-site operations.

1.06 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.
   1. Inspect and discuss condition of construction to be demolished.
   2. Review structural load limitations of existing structures.
   3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.

4. Review and finalize protection requirements.
5. Review procedures for noise control and dust control.
6. Review procedures for protection of adjacent buildings.
7. Review storage, protection, and accounting for items to be salvaged and returned to Owner.

1.07 INFORMATIONAL SUBMITTALS

A. Qualification Statements: For refrigerant recovery technician.

B. Predemolition Photographs or Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by salvage and demolition operations.

C. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed in accordance with EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.08 CLOSEOUT SUBMITTALS

A. Inventory: Submit a list of items that have been removed and salvaged.

1.09 QUALITY ASSURANCE

A. Refrigerant Recovery Technician Qualifications: Universal certified by an EPA-approved certification program.

B. Specialty Demolition Contractor Qualifications: A competent person licensed by the authority having jurisdiction,who has training, knowledge, or experience in the use of each type of blasting method used and in the field of transporting, storing, handling, and using explosives; and has a working knowledge of state and local laws and regulations pertaining to explosives.

1. Note: Explosives should not be used for this project.

1.10 FIELD CONDITIONS

A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.

B. Hazardous Materials:

1. It is not expected that hazardous materials will be encountered in the Work.

Hazardous materials will be removed by Owner before start of the Work with the exception of asbestos containing materials for dampproofing located on a portion of the foundation. this material is to be removed and dispoved of properly by the contractor completely or with the assistance of the owner provided environmental consultant.

a. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

C. On-site sale of removed items or materials is not permitted.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

2.02 SOIL MATERIALS

A. See Geotech Report and Civil Drawings.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting demolition operations.

B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.

C. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.

D. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

E. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video, measured drawings.

1. Inventory and record the condition of items to be removed and salvaged. Photograph or video conditions that might be misconstrued as damage caused by removal.
2. Photograph or video existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by demolition operations or removal of items for salvage.

3.02 PREPARATION

A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.

B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of demolition.

C. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. Comply with requirements in Section 015000 "Temporary Facilities and Controls."

1. Provide temporary security fencing around the site prior to demolition activities commencing and maintain the fencing for the duration of the project.
2. Protect adjacent buildings and facilities from damage due to demolition activities.
3. Protect existing site improvements, appurtenances, and landscaping to remain.
4. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
5. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
6. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
7. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
8. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.

D. Existing Utilities to Be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.
   1. Owner will arrange to shut off utilities when requested by Contractor.
   2. Arrange to shut off utilities with utility companies.
   3. If disconnection of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
   4. Cut off pipe or conduit a minimum of 24 inches below grade at or outside the building or structure to be demolished and cap, valve, or plug and seal remaining portion of pipe or conduit after bypassingin accordance with requirements of authorities having jurisdiction for utilities identfied on the Civil plans, follow requirements lists on the Civil plans.
   5. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing by authorities having jurisdiction.

E. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment in accordance with 40 CFR 82 and regulations of authorities having jurisdiction.

3.03 DEMOLITION, GENERAL

A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
   1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
   2. Maintain fire watch during and for at least 12 hours after flame-cutting operations.
   3. Maintain adequate ventilation when using cutting torches.

4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.
2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

C. Explosives: Use of explosives is not permitted.

3.04 DEMOLITION BY MECHANICAL MEANS

A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.

B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.

C. Below-Grade Construction:

1. Demolish foundation systems and other below-grade construction.
    a. Remove below-grade construction, including basements, foundation systems, and footings, completely.

D. Existing Utilities:

1. Demolish and remove existing utilities and below-grade utility structures.

3.05 SITE RESTORATION

A. Below-Grade Areas:

1. Rough grade below-grade areas ready for further excavation or new construction.

B. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades. See Civil and Landscape plans.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Do not burn demolished materials.

3.07 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
   1. Clean roadways of debris caused by debris transport.

END OF SECTION