ANCHORAGE SCHOOL DISTRICT

Purchasing Department
4919 Van Buren Street
Anchorage, AK 99517-3137

REQUEST FOR PROPOSAL

THIS IS NOT AN ORDER

Show the following on the outside of the sealed proposal envelope: **RFP 2025-609 DESIGN SERVICES ALPENGLOW ELEMENTARY SCHOOL ROOF REPLACEMENT AND SEISMIC UPGRADES**	ISSUED DATE: **NOVEMBER 13, 2024**	DUE: **PRIOR TO 10:00 A.M., LOCAL TIME** DATE: **DECEMBER 6, 2024**

The Anchorage School District (referred to as the "District" or the "ASD") invites sealed proposals from qualified persons/firms to PROVIDE DESIGN SERVICES FOR ROOF REPLACEMENT AND SEISMIC UPGRADES AT ALPENGLOW ELEMENTARY SCHOOL to the District in accordance with the following documents that are a part of this RFP 2025-609:

Cover Page	This Notice/Cover Page	Page(s) 1 – 2
Section I	Instructions to Offerors	Page(s) 3 – 13
Section II	Evaluation of Proposals	Page(s) 14 – 15
Section III	Proposal Format	Page(s) 16 – 17
Section IV	Specifications and Scope of Services	Page(s) 18 – 22
Attachment A	Proposal Transmittal Form	1 Page(s)
Attachment B	Pre-Audit Statement	1 Page(s)
Attachment C	Sample Formal Professional Services Agreement (FPSA) revised 4-29-2024	58 Page(s)
Attachment D	B3000 – Roofing Standards	14 Page(s)
Attachment E	ASCE 41 - Tier 1 Seismic Evaluation	40 Pages(s)
Attachment F	Recommended Structural Improvements with Re-Roof Preliminary Report	22 Page(s)

AVAILABILITY OF RFP: This Request for Proposals (.pdf) is available electronically at the District's Purchasing website: http://asdk12.org/depts/purchasing/

A copy of the current plan holder's list can be viewed at:
http://apps.asdk12.org/depts/purchasing/meeting/Plan_Holders/2025/609.xlsx

SUBMISSION OF PROPOSALS: Proposals must be submitted to the Anchorage School District Purchasing Department, 4919 Van Buren Street, Anchorage, Alaska 99517 prior to the time specified above. Proposals received after that time will not be considered and will be returned. FAXED or ELECTRONIC proposals are not acceptable. Proposals must be submitted in a SEALED package with the outside of the package clearly marked with Offeror's name, address, and phone number, and as follows:

REQUEST FOR PROPOSALS RFP 2025-609
DESIGN SERVICES ALPENGLOW ELEMENTARY SCHOOL ROOF REPLACEMENT AND SEISMIC UPGRADES
DUE: Prior to 10:00 a.m., Local Time
DATE: December 6, 2024

ON-SITE VISIT: **An on-site visit will be held at 3:00 p.m., Local Time, November 20, 2024,** at Alpenglow Elementary School, 19201 Driftwood Bay Dr., Eagle River, AK 99577. Prospective proposers are encouraged to meet the ASD Project Manager at the School's main office entrance and walk through the proposed area of design for this RFP.

PRE-PROPOSAL CONFERENCE: **A pre-proposal conference will be held at 11:00 a.m., Local Time, November 21, 2024**, in the conference room of the Anchorage School District Purchasing Department, 4919 Van Buren Street, Anchorage, Alaska to discuss any matter concerned with this RFP. Prospective Offerors are encouraged to participate by teleconference by calling (907) 742-6750. The line will be available approximately 5 minutes prior to the conference start time.

The Anchorage School District is committed to providing reasonable accommodations, according to applicable state and federal laws, to all individuals with a qualifying disability. If you require a reasonable accommodation in order to participate in this or any other district process, please contact the Anchorage School District's Compliance/Equal Employment Opportunity Office (907) 742-4132.

Estimated amount of proposed contract: $100,000 to $500,000

END OF COVER PAGE

A. GENERAL REQUIREMENTS

This solicitation is a REQUEST FOR PROPOSALS ("RFP") governed by applicable Anchorage School Board Policies, including Section 3311 of such Policies. Anchorage School Board Policies are available at
https://www.boardpolicyonline.com/?b=anchorage

Offerors should read this RFP carefully and review all instructions contained herein. Incomplete or incorrect proposals may be rejected as not conforming to the essential requirements of the RFP. Proposals submitted on other than the prescribed forms contained in this RFP will be rejected. Offerors may copy the forms contained in the RFP for use in their proposals, but substitute forms or formats are unacceptable. Electronic copies of the forms which offerors must submit as part of any proposal, if any—if not provided with this RFP—may be obtained by contacting the Anchorage School District Purchasing Department. Forms shall not be altered except to supply requested offeror information.

B. INTENT OF SPECIFICATIONS

The Anchorage School District desires to enter into a contract with an offeror whose primary business is to provide professional design services and to complete the contract in accordance with all of its terms and conditions and in compliance with all applicable laws. The scope of work is considered performance oriented and it is the intent of the District to rely on the experience and expertise of the offeror to fully appraise itself of the work required to fulfill the terms of the contract resulting from the RFP.

C. EXAMINATION OF CONTRACT DOCUMENTS

Offerors should read this Request for Proposals carefully and review all instructions contained herein. The submission of a proposal shall constitute acknowledgement that the offeror has thoroughly examined and is familiar with the solicitation documents.

D. CONDITIONS OF THE WORK

Each offeror must acquaint itself thoroughly as to the character and nature of the services to be provided to fulfill the requirements of the resulting contract. Each offeror must complete a careful examination of the existing systems, infrastructure, geographical features, and prevailing weather conditions, as applicable, and must inform itself fully as to the difficulties to be encountered in the performance of the work, the availability of a qualified work force and other conditions related to providing the required services. No claim of ignorance of conditions that exist or hereafter may exist, or difficulties that may be encountered in the execution of the work, as a result of failures to make necessary investigations and examinations, will be accepted as an excuse for any failure or omission on the part of a successful offeror(s) to fulfill all of the requirements of the contract documents and to complete the work for the consideration set forth therein, or as the basis for any claim whatsoever.

E. QUESTIONS; METHOD FOR CLARIFICATION

Any offeror in doubt as to the true meaning of any part of this RFP may submit to the District a written request for an interpretation thereof. Questions must be received by the District's Purchasing Department at least seven (7) days prior to the date set for the submission of proposals. If such date falls on a weekend or holiday, the deadline shall be the last business day before the weekend or holiday. Questions can be delivered as follows:

Fax: Anchorage School District Purchasing Department @ 907-243-6293
Attn: Shannon Powers, Sr. Purchasing Agent

Reference: RFP 2025-609 DESIGN SERVICES ALPENGLOW ELEMENTARY SCHOOL ROOF REPLACEMENT AND SEISMIC UPGRADES

E-mail: purchasing@asdk12.org PREFERRED METHOD
Attn: Shannon Powers, Sr. Purchasing Agent
Reference: RFP 2025-609 DESIGN SERVICES ALPENGLOW ELEMENTARY SCHOOL ROOF REPLACEMENT AND SEISMIC UPGRADES

Mail: Anchorage School District Purchasing Department
Attn: Shannon Powers, Sr. Purchasing Agent
4919 Van Buren Street
Anchorage Alaska 99517-3137
Reference: RFP 2025-609 DESIGN SERVICES ALPENGLOW ELEMENTARY SCHOOL ROOF REPLACEMENT AND SEISMIC UPGRADES

Two types of questions generally arise. One may be answered by directing the offeror to a specific section of the RFP. These questions may be answered by direct communication to the offeror submitting the question. Questions which in the opinion of the Purchasing Senior Director require a more detailed or complex reply, or require an answer that may affect responses to this RFP or may be prejudicial to other prospective offerors, will be answered by issuing an addendum to all RFP holders prior to the submittal opening.

F. ERRORS AND AMBIGUITIES

1. Offeror comments concerning discrepancies, defects, ambiguities or other errors in the RFP must be made in writing and received by the District's Purchasing Department at least seven (7) days prior to the date set for the submission of proposals. If such date falls on a weekend or holiday, the deadline shall be the last business day before the weekend or holiday. Comments can be delivered as set forth in Section E, above. Any clarifications, changes or corrections to the RFP will be made only by written notice or addendum issued by the District.

2. If an offeror fails to notify the District of a discrepancy, defect, ambiguity or other error in the RFP, the offeror's proposal shall be submitted at the offeror's own risk and if a contract is awarded as a result of such proposal, the offeror shall not be entitled to additional compensation or other consideration by reason of the discrepancy, defect, ambiguity or other error, or its later correction or clarification. Protests based on any error or omission, or on the content of the solicitation, will be disallowed if the fault has not been brought to the attention of the District, in writing, at least five (5) days prior to the date set for submission of proposals. If such date falls on a weekend or holiday, the deadline shall be the last business day before the weekend or holiday.

G. ADDENDA

Addenda may be issued when changes, clarifications, or amendments to this RFP are deemed necessary by the District for any reason. If an addendum is issued, the District will make reasonable efforts to ensure that each prospective offeror receives the addendum in a timely fashion. However, the risk of non-receipt of any addendum lies solely with prospective offerors. Offerors should contact the District at the addresses set forth in Section E, above, to ascertain if any addenda have been issued. Offerors must acknowledge receipt of each addendum issued in the space provided on the appropriate addendum form and submit such signed addendum with the proposal. No oral change or interpretation of this RFP shall be relied upon by prospective offerors or shall be binding on the District whether issued at a pre-proposal conference or otherwise.

H. SUBMISSION OF PROPOSALS

1. All proposals, addenda, and forms must be manually signed. One (1) original and five (5) copies of the proposal, for a total of six (6).

2. Proposals delivered by telefax, facsimile or by electronic means are not acceptable and will not be considered.

3. Signed and sealed Proposals must be at the District Purchasing Department on or before the time and date stated on the face page of this RFP. Offerors are solely responsible for ensuring that the offeror's proposal package is received by the District's Purchasing Department by the deadline.

4. Late proposals will not be considered and will be returned to the offeror unopened.

5. Photographs may be included with a proposal as appropriate or as desired by the offeror. Photographs will not be returned to an offeror.

6. Offerors may submit only one proposal for evaluation.

7. No responsibility will attach to any officer or agent of the District for the premature opening of, or the failure to open, a proposal not properly addressed and identified.

I. ALASKA BUSINESS LICENSE

Offerors must hold a valid Alaska business license and any necessary applicable professional licenses required by Alaska Statute as a condition of award. Offerors should contact the State of Alaska, Department of Commerce, Community and Economic Development, Division of Occupational Licensing, for information regarding business licensing. Contact information, information regarding business licensing, and business licenses, are available at https://www.commerce.alaska.gov/web/cbpl/.

J. FIRM OFFER

Offers made in response to this RFP must be good and firm for a period of ninety (90) calendar days from the date specified for submittal of proposals.

K. WITHDRAWAL OF PROPOSALS

Proposals may be withdrawn on written request delivered to the District Purchasing Director (fax is acceptable) prior to the time specified for submittal. Proposals not withdrawn prior to the specified time may not be withdrawn for a period of ninety (90) calendar days after the time for receipt of proposals.

L. DISTRICT NOT RESPONSIBLE FOR PREPARATION COSTS

Each offeror understands and agrees that it submits its proposal at its own risk and expense and releases the District from any claim for damages or other liability arising out of the Request for Proposals and award process, including but not limited to: proposal preparation costs and costs associated with any challenge (administrative, judicial or otherwise (including attorney fees)) to the determination of the highest ranked proposal and/or award of contract and/or rejection of proposals, except as follows: in the event that a contract is awarded to one offeror, and it is determined after award of the contract that it should have been awarded to some other offeror, the only financial liability of the District, if any, to the aggrieved offeror shall be actual costs reasonably incurred by that offeror in the preparation and submittal of its proposal. No other obligation of any sort is created nor may liability, financial or otherwise, be asserted against the District, its Board, Board members, employees, agents or insurers to offer to award or award a contract. By submitting a proposal, each offeror agrees to be bound in this respect.

M. REJECTION OF PROPOSALS

1. Offerors must comply with all of the terms of this RFP, and all applicable local, state, and federal laws, codes and regulations. The District may reject any proposal that does not comply with all of the material and substantial terms, conditions, and performance requirements of this RFP and any proposal which contains information or material which cannot be verified or otherwise confirmed for purposes of determining responsiveness to the solicitation.

2. The District reserves the right to waive informalities and minor irregularities, and/or reject any and all proposals, and to not award the proposed contract, if in its best interest. “Informalities and minor irregularities” means matters of form rather than substance which are evident from the submittal, or are insignificant matters that have a negligible effect on price, quantity, quality, delivery, or contractual conditions and that can be waived or corrected without prejudice to other Offerors. These include items that:

    - Do not affect responsiveness;
    - Are merely a matter of form or format;
    - Do not change the relative standing or otherwise prejudice other offers;
    - Do not change the meaning or scope of the RFP;
    - Are trivial, negligible, or immaterial in nature;
    - Do not reflect a material change in the work, or;
    - Do not constitute a substantial reservation against a requirement or provision of the RFP.

N. SELECTION FOR AWARD

1. Selection for award will be accomplished in accordance with Anchorage School Board Policy Section 3311 and the terms and conditions of this solicitation. A recommendation for award, based upon the evaluation criteria specified in this RFP, will be made to the Anchorage School Board for approval, unless approval is not required under Board Policy Section 3311.

2. The District may award a contract on the basis of initial proposals received, without discussions. Therefore, each proposal should contain the offeror's best efforts from a technical standpoint.

3. For those awards requiring Board approval, the District’s Purchasing Department will make public in the Purchasing Department each Notice of Intent to Award ten (10) calendar days prior to the scheduled date for award by the Board. Offerors may, upon request to the Purchasing Department, review the proposal scoring summary prior to the scheduled Board award date.

4. Any contract awarded as a result of this solicitation will incorporate the contents of this RFP and the successful offeror's proposal, subject to the reservations set forth herein for provisions of a proposal that do not comply with material and substantial terms, conditions, and requirements of this RFP or that impermissibly restrict the rights of the District. The successful offeror(s) will be required to execute a written contract in the form included as part of this RFP and comply with its terms.

O. NEGOTIATIONS

After final evaluation, the District may negotiate with the offeror of the highest-ranking proposal. Negotiations, if held, shall be within the scope of the RFP and limited to those items which would not have an effect on the ranking of proposals. The District reserves the right to change terms and conditions during contract negotiations. If the highest-ranked offeror fails to provide necessary information for negotiations in a timely manner or fails to negotiate in good faith, or if the offeror

and the District, after a good faith effort, cannot come to terms, the District may terminate negotiations and commence negotiations with the offeror of the next highest-ranking proposal.

P. REQUIREMENTS FOR SUBMISSION OF COST/PRICING DATA

This project requires the submission of certified cost/pricing data. An audit, conducted by the offeror, of the selected offeror's cost accounting systems and business records may be required to ascertain if systems are adequate for School District review; and to investigate the accuracy of proposed labor rates and unit prices.

1. The selected firm shall prepare and submit the PRE-AUDIT STATEMENT as contained in Attachment B with their cost/price proposal. ASD reserves the right to review requested supporting documentation and/or institute a site visit.

2. The firm selected for negotiations shall be required to submit a detailed breakout for each task and all the direct costs included in the scope of work. The information shall include the estimated hours to perform each task and include the labor category necessary to complete the task.

3. A detailed price sheet of unburdened labor costs by labor category shall be submitted. However, if the offeror has been audited within the last 2 years by a government agency, or provided by an auditing firm, that has approved a fully loaded labor rate for all categories of labor included in the cost proposal, ASD will review such data for consideration.

4. If the offeror's Indirect Costs have not been previously audited by a government agency, ASD may, in its sole discretion, require an on-site audit of the offeror's financial records for the purposes of approving a project Indirect Cost Rate to apply to any resulting contract.

5. Provide a proposed fee or profit margin to apply to the project along with an explanation as to the appropriateness of the fee/profit as it relates to the project risks and deliverables.

Q. RESPONSIBLE OFFERORS

1. A contract will be awarded only to prospective offerors who are determined to be responsible.

2. In order to determine responsibility of a prospective offeror, the District may require offerors to supply additional information or documentation and may perform on-site pre-award surveys. Failure of an offeror to promptly cooperate or supply information in connection with a District inquiry with respect to responsibility may result in a determination of non-responsibility with respect to the offeror.

3. To be determined responsible, a prospective offeror must:

    a. Have adequate financial resources to perform the contract or the ability to obtain them;

    b. Be able to comply with the contract performance schedule taking into consideration all existing other business commitments;

    c. Have a satisfactory performance record;

    d. Have a satisfactory record of integrity and business ethics;

    e. Have the necessary organization personnel, experience, accounting and operational controls, and technical skills, or the ability to obtain them;

    f. Have the necessary equipment and facilities or the ability to obtain them; and

g. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.

R. AWARD OF CONTRACT

1. Award of Contract

   a. Selection of the successful offeror will be by a notice in writing signed by a duly authorized representative of the District and no other act of the District or its representative will constitute an acceptance of a proposal.

2. Execution of Contract

   a. The offeror whose proposal is accepted by the District shall execute the contract and furnish the required insurance within five (5) days after presentation of the contract for signature. Failure or neglect to provide the required insurance or to execute the contract within the time specified, or within such additional time as the District, in its sole discretion, may allow, shall constitute a breach of the agreement affecting the award. The damages to the District for such breach shall include loss due to delay and interference with the District's general operations improvements program, and increased administrative expense, and other items whose accurate amount would be difficult or impossible to compute.

   b. Upon receipt of the above-referenced contract executed by the offeror, and all required insurance certificates, the properly authorized District representatives will execute the contract. The Contract shall not be effective until it is executed by a properly authorized representative of the District.

S. AGGRIEVED OFFERORS

1. Protest

   a. An interested party may protest a solicitation or a proposed award of a contract.

      i. A protest as to the specifications and/or terms and conditions of a solicitation must be received by the Purchasing Senior Director at least five (5) calendar days prior to the due date of the bid or proposal; failure to protest as provided herein constitutes a waiver of any objection to the solicitation.

      ii. For construction projects and architectural/engineering design services, the protest of a proposed award of a contract must be received by the Purchasing Senior Director within ten (10) calendar days after issuance of the Notice of Intent to Award.

      iii. For goods or services, the protest of a proposed award of a contract must be received by the Purchasing Senior Director within seven (7) calendar days after issuance of the Notice of Intent to Award, except that for purchases under $100,000, the protest must be received within three (3) business days.

      iv. The protest must include the name of the person submitting the protest, the name of the bidder/proposer represented by that person, the specific action or bid/request for proposal contract award which is being protested, a detailed explanation of the reasons for the protest, and the relief requested.

      v. The aggrieved person must serve all other interested parties with its protest.

b. The Purchasing Senior Director shall stay the intended award of a contract unless the Purchasing Senior Director determines the award of the contract without further delay is necessary to protect the District's best interest.

c. The Purchasing Senior Director may, in his/her sole discretion, hold a hearing.

d. The rights and remedies granted by this section are not available for informal small purchases with an actual or potential value of less than twenty-five thousand dollars ($25,000).

e. Failure to protest as provided herein constitutes a waiver of any objection to the solicitation and contract award.

2. Appeal

a. A decision by the Purchasing Senior Director may be appealed to the Anchorage School Board.

b. Any appeal shall be filed with the Superintendent within five (5) days after the decision is received by the protester and must include the name of the person submitting the appeal, the name of the bidder/proposer represented by that person, and a detailed explanation of the basis for the appeal.

c. The aggrieved bidder/proposer must serve all other interested parties with its appeal.

d. The Superintendent may obtain an independent review of the appeal issues if the Superintendent determines such review will assist consideration of the appeal.

e. The independent review shall not be conducted by a District employee, but must be conducted by an experienced but disinterested third party from outside the District.

f. Failure to appeal to the Anchorage School Board as provided herein constitutes a waiver of any objections to the solicitation and the contract award.

3. Consideration of Appeal

a. The decision being appealed and the findings from the independent review, if any will be reported to the Board.

b. Upon consideration of the appeal and allowing interested parties an opportunity to address the issues on appeal, the Board may:

i. Award the contract as recommended, if applicable, indicating its reasons for rejecting the appeal.

ii. Grant the appeal, indicating its reasons for granting the appeal, and determine an appropriate remedy consistent with AR3311.1(c).1 of Board Policy. The Board may award the contract at that meeting to some other bidder/proposer if it finds that a delay in making the award would adversely affect the District.

iii. Stay any award of the contract to permit further consideration of the appeal, with action to be scheduled as soon as practicable, but in no event more than twenty (20) days after the stay as initiated.

iv. Reject all bids/proposals

v. Take such other action as appears appropriate and in the best interest of the District under the circumstances.

4. Frivolous Protests

a. Signature on Protest Constitutes Certificate

i. The signature of an attorney or party on a request for review, protest, motion, or other document constitutes a certificate by the signer that the signer has read the document, to the best of his/her knowledge, information, and belief formed after reasonable inquiry it is well grounded in fact and is warranted by existing law or a good faith argument for the extension, modification, or reversal of existing law, and that it is not interposed for an improper purpose, such as to harass, limit competition, or to cause unnecessary delay or needless increase in the cost of the procurement or of the litigation.

b. Sanctions for Violation

i. If a request for review, protest, pleading, motion, or other document is filed with the Purchasing Senior Director is signed in violation of Board Policy AR3311.1(c).1, the School Board may impose upon the person who signed it, a represented party, or both, an appropriate sanction, that may include an order to pay to the other party or parties the amount of the reasonable expenses incurred because of the filing of the protest, pleading, motion, or other paper, including a reasonable attorney's fee.

T. PUBLIC RECORDS/CONFIDENTIALITY

1. This RFP and the resulting proposals received, together with copies of all documents pertaining to the award of a contract, will be kept by the District's Purchasing Office and made a part of the record which will be open to public inspection after contract award. Proposers, upon request to the Purchasing Officer, may review the proposal scoring summary after issuance of the notice of intent to award has been issued, except to the extent permissibly restricted by the offeror.

2. Offerors are advised to consult School Board Policy Section 1340 and the Alaska Public Records Act, A.S. 40.25.100-40.25.295 to verify if any of their proposal information may qualify for exemption from public disclosure. Exemptions to public disclosure requirements are narrowly construed. As such, the District cannot exempt materials that are not of a truly proprietary nature under applicable law and policy, and cannot be held liable for the disclosure of such information, even if marked for restriction by an offeror.

3. If a proposal contains any information that an offeror reasonably believes is proprietary or confidential, and is subject to protection under applicable law, each such page of the proposal must be marked "Confidential" by the offeror and the offeror must explain the basis for its determination that the information is not subject to disclosure under applicable public records laws. Cost or price information may not be restricted and will be open to public inspection. Marking an entire proposal "confidential" is not acceptable and may result in disclosure of the entire proposal.

4. By submitting a proposal, the offeror agrees to release the District from any liability resulting from the District's disclosure of information not clearly marked "Confidential." The offeror also agrees to defend any action seeking release of information marked "Confidential" and to indemnify and hold the District, its Board, employees and agents, harmless from any judgments, damages and costs awarded against the District, its Board, employees or agents, in favor of a party requesting information submitted by an offeror. Additionally, the offeror understands and agrees that if a request is made under applicable public records laws, the

District will notify the offeror of such request but under no circumstance shall the District be required to commence or defend any action to prevent the disclosure of any information submitted by an offeror, including information the offeror believes to be confidential or proprietary.

U. EQUAL EMPLOYMENT OPPORTUNITY

1. The Contractor certifies that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, marital status, mental or physical disability, or change in marital status, in employment, provision of services or otherwise. The Contractor shall take affirmative action to ensure such non-discrimination, including but not limited to the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

2. The Contractor shall state, in all solicitations or advertisements for employees to work in the performance of this Agreement, that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex, marital status, mental or physical disability, or change in marital status.

3. The Contractor shall comply with the requirements of the Anchorage Municipal Code, Chapter 7.50.010-.120, as well as any procedures adopted by the District to implement the policies set forth therein.

4. The Contractor shall comply with any and all of the applicable laws and directives, and any regulations which may be applicable to the Project or this Agreement.

5. The Contractor shall include the provisions of this Article in every Subcontract and purchase order and shall require each Subcontractor to include these provisions in every sub-subcontract, so that these provisions will be binding upon each Subcontractor, sub-subcontractor and vendor providing services or goods to the Project.

6. The Contractor shall cooperate fully with the District's efforts which seek to deal with the problem of unlawful discrimination, and with all other District efforts to guarantee fair employment practices under this contract and promptly comply with all requests and directions from the Anchorage Equal Rights Commission and State Commission for Human Rights or any of its officers or agents relating to prevention of discriminatory employment practices.

V. NON-DISCRIMINATION

1. No Contractor on any District contract may illegally discriminate on the basis of sex, race, color, religion, gender identity, sexual orientation, national origin, ancestry, age, marital status, changes in marital status, pregnancy, parenthood, physical or mental disability, Vietnam era veteran status, genetic information, or good faith reporting to the board on a matter of public concern in employment, provision of services, or otherwise.

2. Any Contractor submitting a bid or proposal of one hundred thousand ($100,000) or more must certify that if awarded a contract on the basis of that bid or proposal, he/she as the contractor will not illegally discriminate against any member or applicant for employment because of sex, race, color, religion, gender identity, sexual orientation, national origin, ancestry, age, marital status, changes in marital status, pregnancy, parenthood, physical or mental disability, Vietnam era veteran status, genetic information, or good faith reporting to the board on a matter of public concern in employment, provision of services, or otherwise.

W. NOTICE OF COMPLIANCE

1. All successful Contractors shall ensure such non-discrimination.

2. All successful Contractors must agree to post in conspicuous places, available to employees and applicants for employment, notice setting forth the provisions of this non-discrimination section and this section shall be deemed to be a part of every contract entered into by the District under these policies.

X. CONFLICT OF INTEREST

1. The Contractor agrees to certify that Anchorage School District employees, School Board members, or a member of their household are not in conflict of interest with the contract and Board Policy as follows (AR3311.1(e).1 Disclosure and Waiver of Conflict of Interest):

   a. No Board member, employee, or a member of their household, shall acquire, directly or indirectly, an economic interest in a District or Municipal contract, or engage in business with the District or the municipality, unless the contract is competitively solicited and other requirements of Section 3311 of Board Policy and section 1.15 of the Anchorage Municipal Code are met.

   b. The following acts and circumstances shall not be deemed to be in conflict with the performance of official duties if, at the earliest opportunity after having acquired such knowledge, the Board member or employee files a disclosure pursuant to AR3311.1(e).1 or requests and obtains a waiver pursuant to Board Policy AR3311.1(e).2:

      1. Such person owns a sole proprietorship, or is a partner in a partnership, or is an officer, director, major shareholder (five percent (5%) or more of the outstanding shares) or has management control in a corporation that submits a bid, proposal or quotation to the District or attempts to enter or enters into a contract with the District;

      2. Such person has any significant (five percent (5%) or more) financial interest in any sale, lease or rental to the District of any service or property and such person has knowledge that the District intends to purchase, lease or rent the property or service;

      3. Such person wishes to sell or receive royalties on books or materials sold to the District for use in the school system for which the employee is the author;

      4. Such person is an employee who has been providing private services to a child who transfers to a new school or class or advances to a higher grade and the child becomes a student in the class being taught/aided by his/her provider.

2. Board Members, District employees, and their household and/or immediate family members are required to comply with Board Policies and the Municipal Ethics Code by disclosing conflicts of interest.

   a. When a board member, employee, or their household and/or immediate family member intends to do business with the District, the appropriate District and Municipal forms must be filed by the Board Member or District employee with the Municipal Clerk's Office and the Purchasing Department.

Note: *Notice of Intent To Respond To Public Solicitation* shall be filed with the Municipal Clerk's office in advance to allow a minimum of **7 calendar days to elapse between electronic publication by the clerk and the final date** for submitting a response to the solicitation. The form may be obtained from the Municipality of Anchorage website, www.muni.org.

District *Disclosure* and *Request for Waiver* forms and instructions may be obtained from the Conflict of Interest link on the Procurement Department page of the ASD website, www.asdk12.org.

b. The responsibility for complete and timely filing rests solely with the Board Member or District employee.

Y. SEX OFFENDER/CHILD KIDNAPPER REGISTRY

Anchorage School Board Policy 3515.5 prohibits a contractor whose employees or agents may have direct or incidental contact with District students from sending any employee or agent to district property who has been convicted of a sex offense under federal law or the law of any state and who is required to register as a sex offender under Alaska law or by court order, or who has been convicted of child kidnapping under federal law or the law of any state and who is required under Alaska law or court order to register on the Alaska Department of Public Safety Sex Offender/Child Kidnapper Central Registry. Board Policy 3515.5 requires contractors to certify in writing the contractor's knowledge of and compliance with Board Policy 3515.5. ***Prior to executing a contract*** for this project, the selected Contractor shall verify that no employee or agent who will be on district property is registered as a sex offender or child kidnapper in Alaska [Alaska Department of Public Safety "Sex Offender/Child Kidnapper Registry"] or in any other state. In addition, the contractor shall certify that, to its knowledge, no employee or agent is a convicted sex offender or child kidnapper. Certification will be required at time of award.

Z. CONTACT WITH SCHOOL STAFF AND AUTHORIZED SCHOOL COMMUNITY GROUPS

Offeror is not to contact site's school staff or authorized community groups for purposes of solicitation unless otherwise authorized by the Purchasing Senior Director.

AA. CONTRACT INDUCEMENTS

No payment, gratuity or offer of employment shall be made in connection with any contract, by or on behalf of the subcontractor to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

BB. STANDARD CONTRACT TERMS

In addition to carefully reading all of the information in the RFP, Offerors must carefully read and review the attached standard contract terms and conditions. The successful Offeror shall be required to enter into an agreement with the District which will be substantially similar to the sample.

END OF SECTION I

A. EVALUATION OF PROPOSALS

1. All proposals will be reviewed by the District's Purchasing Department to evaluate administrative responsiveness of proposals to determine if offerors have complied with the administrative proposal requirements and to determine if proposals meet the minimum mandatory criteria set forth below.

2. Proposals meeting minimum mandatory requirements then will be evaluated by an evaluation committee comprised of District employees or other persons deemed appropriate by the District using the Evaluation Criteria specified in this RFP. Evaluation of proposals in accordance with the evaluation criteria will result in a numerical score for each proposal. Each criterion has an assigned weight for this RFP which demonstrates its relative importance. Evaluation of proposals will be accomplished as follows:

   a. Each Evaluator will individually review and score each offeror's proposal on a scale of 0 to 1 for each of the Technical Evaluation Criteria.

      A rating of "0" indicates a proposal which is non-responsive and/or provides no quality or value to the District and a rating of "1.0" indicates a proposal which is completely responsive and/or provides significant quality and value to the District. Ratings within the range indicate the level at which the proposal is responsive and/or provides quality and value to the District.

   b. After completion of ratings by each Evaluator, the Selection Committee may discuss the proposal. Evaluators may then alter their ratings; however, any changes shall be based only on the proposal and the Evaluation Criteria.

   c. The chairperson will obtain the ratings for the Evaluation Criteria, which ratings will then be multiplied against the points available for each criterion. The sum of the weighted scores for each proposal will result in a total weighted score from each member of the evaluation committee. The total weighted scores of all Evaluators will be summed to determine the total weighted score for each proposal. The maximum score obtainable for any proposal is equal to the product of the maximum points for the evaluation criteria multiplied by the number of Evaluators.

   d. Based upon the results of the proposal scoring, the District may, in its discretion, conduct discussions with offerors whose proposals are determined to be reasonably susceptible to award. Such discussions, visits and presentations are for the purpose of ensuring full understanding of the requirements of the RFP and offeror proposals and may not result in any material or substantive change to proposals. Offerors selected by the Selection Committee for interviews may be permitted to submit final written, graphic and verbal presentation information for consideration by the Selection Committee in response to the above purposes. Only those members of the offeror's staff who will be in responsible charge and/or will carry out the actual tasks should participate in the interviews.

   e. Subsequent to the interviews, the Selection Committee will make a final rating based upon the original criterion supplemented by interview information for the purposes of determining the highest ranked proposer. The Selection Committee shall use the same procedure as specified for the initial proposal rankings. The final ranking may or may not be the same as the order of ranking after completion of the initial ranking.

   f. For purposes of this RFP, proposals that are "reasonably susceptible to award" means the three (3) highest scoring proposals, unless, in the sole discretion of the District's Purchasing Senior Director, one or more of the three highest scoring proposals did not achieve a score high enough to be within the competitive range and to remain under

consideration for award when ranked with other proposals or the District received one or more additional proposals that are within the competitive range of the three highest scoring proposals such that the additional proposal(s) may remain under consideration when ranked with the other proposals. This is not a strict mathematical formula and may not be challenged on that basis except in the case of obvious arithmetic errors.

3. The District reserves the right, at any time, to determine that a proposal is non-responsive and to request additional information to determine responsiveness.

4. All Offerors will be advised of the offeror selected for negotiation with a Notice of Intent to Negotiate. If contract negotiations are unsuccessful with offeror selected for negotiation, the School District may either cancel the solicitation or negotiate with other offerors in the order of ranking.

B. EVALUATION CRITERIA

Proposals will be scored using the criteria listed below to determine which proposal best meets the needs of the Anchorage School District. The criteria to be considered during the evaluation and their associated weights are as follows:

Item	Criteria	Points
1.	**PROJECT APPROACH**	25
2.	**METHODS**	20
3.	**MANAGEMENT**	10
4.	**FIRM'S EXPERIENCE**	20
5.	**PROPOSED PROJECT STAFF**	15
6.	**WORKLOAD AND RESOURCES**	10
	TOTAL POINTS POSSIBLE	**100**

END OF SECTION II

Each response must be identified and keyed to the applicable criterion and assembled in the order in which the criteria are listed in Section II, Part B, so the criterion to which information applies shall be plainly evident. Material not so identified or assembled may be discarded without evaluation. Each proposal shall be submitted on standard 8 1/2" x 11" bond paper bound on one side. Proposals should be prepared simply and economically, providing a straightforward, concise delineation of the capabilities proposed to satisfy the requirements of this RFP. In addition, small print or typeface that is difficult to read may affect scoring.

To achieve a uniform review process and obtain the maximum degree of comparability, it is required that the proposals be organized in the manner specified below. Proposals shall not exceed twenty-five (25) pages in length (excluding letter of transmittal, resumes (resumes shall not exceed two (2) pages in length), table of contents, attachments, or dividers. Information in excess of those allowed will not be evaluated or scored. One page shall be interpreted as one side of single lined, typed, 8 1/2" X 11", piece of paper.

To ensure that proposals are evaluated fairly and that comparisons between proposals are accurate, Offerors must submit proposals in the format outlined below. Failure to comply with these requirements may cause a proposal to be rejected as non-responsive and eliminated from further consideration.

A. PROPOSAL TRANSMITTAL FORM

Submit the completed Proposal Transmittal Form (Attachment A) as the first page of the proposal. The Proposal Transmittal Form must be signed by an authorized representative of the offeror.

B. PROPOSAL NARRATIVE

1. PROJECT APPROACH — Weight: 25

Restate the proposed Scope of Services, outlining the objectives and scope as perceived. Do not repeat the statement of services provided herewith, but elaborate on the tasks, conditions, deliverables or other specifics deemed significant and necessary to demonstrate a complete understanding of the technical and substantive issues to be addressed. Define any assumptions made in formulating response. If scope includes design services for a construction project, express any opinions regarding alternative design considerations that could impact construction costs.

2. METHODS — Weight: 20

Response must outline the methods for accomplishing the proposed contract. Consider what, when, where, how, and in what sequence the work will be done. Include proposed timeline with milestones. Identify the amount and type of work to be performed by any sub-consultants. Consider how each task may be carried out; what services or interaction may be required from/with the Contracting Agency. Suggest alternatives, if appropriate. Identify any distinct and substantive qualifications for undertaking the proposed contract, such as the availability of specialized equipment or unique approaches or concepts relevant to the required services, which the firms may use.

3. MANAGEMENT — Weight: 10

Response must describe the administrative and operational structures that will be used for performing the proposed contract. Address who will have overall responsibility for the contract and who will have direct responsibility for specific disciplines. Discuss the lines of authority. Use of a table or chart is preferred in your response. When applicable, include discussion of public participation process and coordination with State and Municipal agencies.

4. FIRM'S EXPERIENCE — Weight: 20

Discuss the offeror's background and qualifications to establish experience and performance as a team leader for professional services similar to those required by this project. Discuss the relevance of past projects (program, unique features, schedules, budgets, etc.) to this project. List at least three (3) references (contact persons and telephone numbers) for the firm.

5. PROPOSED PROJECT STAFF Weight: 15

Response must name proposed leader(s) for the following categories plus any other essential personnel who will be directly and routinely engaged in performing the work:

1 – Principal-in-Charge	3 – Project Manager
2 – Contract Manager	4 – Project Architect/Planner

Describe the work to be performed by the named Leader(s), and their qualifications in terms of educational and substantive experience directly related to the proposed services**.** Identify: employer, professional discipline and/or job classification, Alaskan registration number, and state of residency. A response prepared specifically for this proposal is required. Marketing resumes often include irrelevant information, which may detract from the evaluation of proposal. Lists of projects without relevant details are not useful. Focus on individuals' specific duties and responsibilities and how project experience is relevant to the proposed services.

6. WORKLOAD AND RESOURCES Weight: 10

Response must: (1) discuss both current and potential time commitments to all clients (i.e. not only the District) for the proposed Project Staff; and (2) demonstrate adequate support personnel, facilities and other resources to provide the services required throughout the project's term. Briefly address capabilities for providing additional services and/or services under an accelerated schedule. Address capacity to reassign personnel, equipment and facilities whenever the proposed contract would not require such capabilities or would be delayed.

END OF SECTION III

A. SCOPE OF WORK

1. The requirements of this project shall consist of providing complete design services necessary to support the roof replacement and seismic upgrades at the location(s) identified below.

    a. Alpenglow Elementary School, 19201 Driftwood Bay Dr., Eagle River, AK 99577

    This qualifications-based selection focuses on the Prime Consultant as the responsible and contractual leader of a team. The Offeror will only identify required disciplines in the proposal. Once selected and given a Notice of Intent to Negotiate by the School District, the Prime Consultant Offeror will proceed with a qualifications-based selection of Sub-consultants. The School District will consult with the Offeror, reviewing and commenting on proposed Sub-consultants as appropriate. The School District reserves the right to object to selection of Sub-consultants based on considerations of cost, performance, special qualifications, and/or known workload relative to resources.

    The Prime Consultant is the project design coordinator and document quality control authority. Prime Consultant will review and verify deliverables prior to submission to Owner. Incomplete or lacking deliverables may be rejected. Owner will review complete deliverables for compliance and acceptance.

2. Planned Project Scope of Work:

    a. Alpenglow Elementary School was originally constructed in 1995 and has an area of approximately 60,219 square ft. and has a BUR system. Provide professional design services following ASD guidelines and standards, all local and building code requirements, to incorporate seismic and structural upgrades into a full replacement of the roof system with a low slope system. The scope of work requires on-site verification and evaluation of existing conditions as well as the review of the additional information and recommendations provided in attachment D. This includes the Tier 1 Seismic Evaluation which identifies non-conforming structural and seismic deficiencies and provides recommendations to be addressed by the design. Attachment D also includes Recommended Structural Improvements with Re-Roof which also identifies elements to addressed by the design. Hazardous material may be present in the area of scope of work, evaluate and test for abatement requirements as part of the design scope of work. Account for and include design consideration for any mechanical and electrical penetrations, pipes, conduit, louvers, windows and equipment that may be affected by the roof replacement. Evaluate rooftop electrical and mechanical equipment for replacement. Scope will include new roof ladders, fall protection, pick points, and a new weather station.

B. SCOPE OF CONSULTANT SERVICES

For the purpose of this document, the phrase “Consultant(s)” refers to the person, partnership, corporation, joint venture, or other business entity with which the District contracts to provide the professional services required for this project.

Anticipated Scope of Consultant Services: For this project, the Consultant shall provide all professional services necessary to support the successful completion of this project. The Consultant’s services shall include, but are not limited, to the following:

1. Consultant Design Phases/Deliverable Requirements: The following design phases with corresponding design deliverables shall be required for this project. See “Deliverables Checklist” (Appendix B, FPSA) and referenced District Design Guidelines for additional information on submittal requirements.

a. Design Development Phase Submittal (65%)
b. Construction Document Phase Submittal (95%)
c. Bid Documents Submittal (100%)

2. Phase 1 Design Development

a. Develop Project Scope and Design; Prepare Construction Drawings and Specifications with cost estimates

i. Verification of the Planned Project Scope of Work: As part of the Schematic Design Phase work, the Consultant shall verify and update the Planned Project Scope of Work. Consider sequencing and phasing of the work around the school's schedule, and provide recommendations. Cursory review of the District's hazmat documentation will be necessary to ensure the project is viable and will remain within budget. The Consultant shall consult with the District Project Manager for any deviation from the Planned Project Scope of Work prior to completing the Schematic Submittal. Schematic Submittal shall reflect the final approved project scope of work. Value engineering and innovative design solutions are encouraged.

ii. By the 65% deliverable, the consultant shall have cleaned and scoped all of the storm drain piping. A report and corrections for any issues affecting storm drainage shall be included with the 65% design deliverable.

iii. Verification of the Construction Budget: The Consultant shall verify the project scope of work at each submittal with respect to required cost estimates at the 65%, and 95% submittal. Prior to all milestone submittals, the Consultant shall verify to the District Project Manager that the cost estimate was reviewed and is reflective of the design document submittal. Should the project cost estimate reflect a design (scope of work) that is over the District's budget (CCAP), the Consultant shall, at the direction of the District Project Manager, make changes to arrive at the optimum design and bidding strategy by one of the follow or combination of methods. In general, it is expected the Consultant shall develop appropriate project scope at, or slightly exceeding, the available construction budget.

a. Adjust the design (scope of work) and/or propose additive alternates in consultation with the District Project Manager at no additional cost to the District

b. Revise the cost estimate at no additional cost to the District

iv. Project Design Review: ASD milestone Project Design Reviews are organized by the ASD PM and executed using Bluebeam Revu (Bluebeam) sessions at Planning/15%, 65%, and 95% design phases. The use of Bluebeam allows for a collaborative, digital review for the Project; involving ASD Reviewers and Consultants, including the Consultant's cost estimator. ASD will provide all comments, written and noted, in the Bluebeam session and the Consultant shall assist the District by reviewing and responding in writing to all comments in the Bluebeam session; identifying and making written recommendations to the ASD Project Manager regarding the most critical design issues. The most critical path design issues will be summarized and discussed in a Post-Review Debrief (to be held at each design phase). The Project Manager will organize/invite Reviewers to the Post-Review Debrief. The Consultant shall act as the Meeting Facilitator of the Post-Review Debrief. The Post-Review Debrief is not meant to be a 'page-turn' review of design documents and comments, but a one-hour summarization of the most critical path items in design development and the team's intent/approach to resolve. Once the Post-Review Debrief is held, the PM will give Consultant notice to proceed to next design phase, pending any requested changes prior to NTP. The Project Manager will then verify that each comment and response has a Bluebeam ***status*** set and ***finish*** the Bluebeam session for ASD archives.

v. Bidding and Permitting: The Consultant shall assist the District during the bidding and permit review of the project. During this phase of work, the Consultant's services shall include providing assistance during Municipality of Anchorage plan review and construction permit application process [utilizing MOA electronic plans review protocols], attendance at pre-bid conference and pre-bid site visits, answering bidder's questions, and assisting the District in preparing necessary bid addendum. Provide all signed and stamped bid documents electronically on writable CD-ROM (drawings should be submitted in most current version of AutoCAD used by the Anchorage School District or as determined by ASD Project Manager and PDF versions).

3. Phase 2 Construction Administration & Closeout

   a. Perform Construction Administration Services

      i. The Consultant's services include attendance at the pre-construction conference and other scheduled meetings during construction.

      ii. Review of submittals; respond to Requests for Information (RFIs), Potential Change Orders (PCOs), DCVRs, Information Bulletins, inspections, reviews of contractor pay requests, and review of closeout documentation.

      iii. If part of the project, the consultant will participate in commissioning.

      iv. Provide as-built Record Drawings and "Roof Section Schedule" (in Excel) electronically on CD-ROM. ASD will provide an Excel template for the "Roof Section Schedule". Provide both CAD and independent PDF files. Drawings shall be prepared using current ASD approved AutoCAD version and clearly identified as record drawings.

4. Anticipated Required Consultant Service Disciplines: Anticipated disciplines required for this project shall include, but are not limited to:

   a. Architectural

   b. Structural Engineering

   c. Mechanical Engineering

   d. Electrical Engineering

   e. HAZMAT Consultant

   f. Cost Estimating

5. Additional Requirements:

   a. Reference Record Drawings: The Consultant shall research the District Plans Room records to identify important record drawings that may be issued with the Bid Documents as Reference Record Drawings or made available for viewing by the bidders at the District Plans Room. The Reference Record Drawings are intended to provide sufficient information to allow bidders to ascertain the physical conditions of the building including types of construction, building dimensions, etc. The Consultant shall prepare a Reference Record Drawing Cover Memo describing the reference record drawings. The cover memo shall include historical building and project information. If applicable, the Reference Record Drawing Cover Memo and the Reference Record Drawings shall be issued as part of the

Bid Documents.

b. Use of the Anchorage School District Design Guidelines: Unless otherwise directed, the Consultant's designs and submittals shall conform to the requirements of the Anchorage School District Design Guidelines. The Consultant is advised the Anchorage School District Design Guidelines will be periodically updated. The Consultant's services and design shall conform to revisions to the Design Guidelines as they occur throughout the project.

c. Use of the Anchorage School District Guide Specifications: Unless otherwise directed, the Consultant shall utilize the Anchorage School District Guide Specifications as the basis for the technical specifications for this project. The Consultant is advised the Anchorage School District Guide Specifications will be periodically updated. The Consultant's services and design shall conform to revisions to the Guide Specifications as they occur throughout the project.

d. Services related to Construction Submittals: For this project, the District will develop a Submittal Register and a Submittal Status Log based on the developed project specifications. The applicable specification section shall be based on a guide specification section to be provided by the District. During construction, the Consultant shall be responsible for communications, the management of the Construction submittals, Requests for Information, construction record documents and photographs, and other purposes as directed by the Project Manager for the District utilizing owner-provided construction management software, currently Procore Construction Management. The Consultant shall receive the submittals directly from the Construction Contractor. Upon completion of the review of the submittals, one copy of the submittal shall be retained by the Consultant. The Consultant shall return the remaining copies of the submittals directly to the Construction Contractor.

e. Extended District Review: The Consultant shall acknowledge that while review periods are scheduled during the design process, the District plan review resources may not be able to accommodate the schedule due to work load. In some cases, follow-up comments beyond the scheduled review period may be necessary. The Consultant is encouraged to be proactive in assisting the District in facilitating the design review process.

f. Use of Standard Anchorage School District Invoice Format: The Consultant shall utilize a standardized Anchorage School District Invoice Format. The format will be provided by the District to the consultants.

g. Technical Specifications Format: The Consultant shall utilize formatting standards for documenting technical specifications. The District will provide the standards format to the consultants.

h. MOA Building Safety Pre-Application Meeting: At a minimum, one design pre-application meeting with the Municipality Building Safety officials at 35% schematic design is required. The following disciplines are suggested to attend: architectural, structural, mechanical, electrical, fire, traffic and zoning. Designer has responsibility to determine final list of disciplines required based on scope of project.

C. PROJECT SCHEDULE

Based on the Tentative Project Schedule and Specific Project Schedule Requirements below, the Offeror shall develop a preliminary project schedule covering the period from Notice to Proceed (NTP) through Design Completion based on anticipated workload and resources and include it as part of the Offeror's proposal response to Part B, Article 2 Methods. Identify all submittal milestones including submittal dates, cost estimate submittal dates, and District review comments periods.

1. Tentative Project Schedule for Design Work:

Requirement		Anticipated Dates
RFP/Consultant Selection/Negotiation:		December 2024 - January 2025
Anticipated Contract Award/NTP:		February 2025
65%, 95% Documents:		April 2025 – July 2025
Final Construction Documents:		August 2025
Bid Period:		September 2025
Anticipated Construction Period:		May 2026 – August 2026
Record Documents:		September 2026

2. Specific Project Schedule Requirements:

   a. Allow 2 weeks after each submittal for review by the District.

D. INFORMATION TO BE PROVIDED BY THE DISTRICT

The following information is available for review and use by the consultants during design:

1. Alpenglow Elementary School is located at 19201 Driftwood Bay Dr., Eagle River, AK 99577

2. Historical As-Built/Project Documents/AHERA Documents – Existing documents are available at the District Capital Planning & Construction Department. Proposers can view existing documents by coordination with the project support section for access to the plans room. Proposer must coordinate a time in advance with Capital Planning & Construction (CP&C) project support staff at 907-348-5215.

E. ADDITIONAL INFORMATION

1. Attachment D B3000 – Roofing Standards
2. Attachment E ASCE 41- Tier 1 Seismic Evaluation
3. Attachment F Recommended Structural Improvements with Re-Roof Preliminary Report

END OF SECTION IV

Proposal Transmittal Form
Attachment A

THIS FORM MUST BE RETURNED WITH THE OFFEROR'S PROPOSAL

Addendum Number(s)/Date(s)_____ is/are hereby acknowledged.

FIRM'S NAME:_____

MAILING ADDRESS:_____

CITY/STATE/ZIP:_____

PHYSICAL BUSINESS ADDRESS:_____

CITY/STATE/ZIP:_____

CONTACT PERSON FOR THIS SOLICITATION:_____

FAX NO.:_____

TELEPHONE NO.:_____

CELL PHONE NO.:_____

ALASKA BUSINESS LICENSE NO.:_____

FEDERAL TAX ID NO.:_____

EMAIL ADDRESS: _____

CERTIFICATION

I certify that I am a duly authorized representative of the firm listed above and that the information and materials enclosed with this proposal accurately represent the capabilities of the firm to provide the services indicated in compliance with the requirements of the solicitation. I certify that no member of the School Board or District employee, or spouse or other member of his/her household, has or shall have any undisclosed interest in the firm or this proposal, as provided in the Instructions to Offerors ("Conflicts of Interest"). The School District is hereby authorized to request from any individual any pertinent information deemed necessary to verify information regarding the capacity of the firm and for purposes of determining responsiveness of the proposal or responsibility of the firm as a prospective contractor.

In compliance with the solicitation, the offeror agrees, if this offer is accepted within 90 calendar days from the date specified in the solicitation for receipt offers, to furnish any or all items on which prices are offered at the price set opposite each item, delivered at the designated places, within the times specified in the solicitation.

SIGNATURE: _____

PRINTED NAME AND TITLE: _____

DATE: _____

Pre-Audit Statement
Attachment B

CONFIDENTIAL WHEN COMPLETED

Evaluation of this statement may preclude the necessity for a comprehensive on-site audit of the Contractor's records. Entries may be handwritten, if legible.

1. Identify your fiscal year, including beginning and end dates _____

2. List your actual costs, by the following categories, for your most recent fiscal year. Cost terminology is attached.

   a. Direct Labor $ _____

   b. Attach a Trial Balance with grouping of accounts used to arrive at the following Indirect Cost amounts:

      Fringe Benefits $_____

      General & Administrative Expenses $_____

      Sum $_____

   c. Indirect Cost Rate (Sum of b/a) _____%

3. If your records have been audited with the last 2 years by a governmental agency, attach a copy of the Audit Report.

4. Attach copies of your most recent Internal and Audited Financial Statements.

5. Are your accounting methods for recording contract costs based on a job or project identified cost system?

   (___) Yes (___) No If your response is "No", attach an explanation of your cost accounting system

6. If you charge your projects based on unit rates (e.g. for computer time, laboratory tests, copies or equipment use, etc.) attach a list of such items and unit prices.

7. Do you offset revenue received from unit rate payments against the applicable Indirect Cost Accounts?

   (___) Yes (___) No

CERTIFICATION

I certify that I am a duly authorized representative of the Contractor and that information and materials enclosed within this statement accurately represent financial records of the company.

Signature _____ Date_____

Name and Title _____ Telephone No. _____

Company Name _____ Fax No. _____

Address _____ Email Address: _____

_____

_____

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

Contract No.:	
Requisition No.:	
RFP No.:	
Board Memo No.:	

PROJECT TITLE: _____

This contract consists of the following, which are hereby incorporated by reference as if in full text; consisting of the following documents in order of precedence:

1. This Formal Professional Services Agreement (Consisting of 52 pages)
2. Contractor Signed Attachment A, Proposal Transmittal Form Dated: XXX
3. Contractor's Technical Proposal Dated: XXX
4. Contractor's Negotiated Cost Proposal Dated: XXX
5. State of Alaska Sex Offender/Child Kidnapper Registry Certification(s)
6. Certificates of Insurance per Appendix D
7. Request for Proposal (RFP) XXXX-XXX Dated: XXX and all reference drawings and addenda

This agreement is between the Anchorage School District and designer (hereafter "Contractor"), effective on the last date executed by its parties.

CONTRACTOR

SIGNATURE: _____ _____ Date

NAME: _____

TITLE: _____

DISTRICT

SIGNATURE: _____ _____ Date

NAME: David Whiting

TITLE: Senior Director, Purchasing/Warehouse

In consideration of the terms, conditions and promises of Articles 1 through 6 in this document, the parties hereto agree:

ARTICLE 1
PURPOSE

1.1 The purpose of this agreement is to provide professional design services.

Insert Information

ARTICLE 2
COMPENSATION

2.1 The maximum amount payable under this agreement (see Appendix C) shall not exceed:

$ _____ Account Code(s): _____

_____

_____

ARTICLE 3
PERIOD OF PERFORMANCE

3.1 Contractor shall commence work under this agreement as authorized by written notice(s) to proceed at each phase and shall complete the work in accordance with any time schedule required by Appendix F. This agreement is of no force or effect until executed by the Contractor and the District and no services shall be undertaken or performed until a Notice to Proceed (NTP) is issued.

3.2 The period of performance under this agreement shall end upon the date of the District's final acceptance of the Project, or approval of the Contractor's final invoice pursuant to the Contractor's satisfactory completion of obligations under this Agreement, whichever is later.

ARTICLE 4
APPENDICES

4.1 The following appendices are attached to this document and incorporated herein by reference:

Appendix	Title
A	General Conditions
B	General Architectural/Engineering and Design & Construction Phase Services
Attachment A	Deliverables Checklist (Attachment A to Appendix B)
Attachment B	ASD Page Format Standard (Attachment B to Appendix B)
C	Basis of Compensation
D	Indemnification and Insurance (plus certificate of insurance)
E	Project Staffing and Subcontractors
F	Master Time Schedule

ARTICLE 5
DISTRICT

Project Manager Name: _____

ASD Office: Capital Planning & Construction

Street: 1301 Labar St.

City, State, Zip: Anchorage, Alaska, 99515

Fax No.: (907) 348-5227

Office No.:

Cell No.:

Email Address:

ARTICLE 6
CONTRACTOR

Company Name: AK Business License No.:

Principal Name: Federal Identification No.:

Street:

P.O. Box:

City, State, Zip:

Fax No.:

Office No.:

Cell No.:

Email Address:

TYPE OF FIRM (Check One)

Individual ☐

Partnership ☐

Joint Venture ☐

Corporation ☐ In State of: AK

Contract No:
Date Prepared:

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

INDEX

ARTICLE A1 Definitions

The following words and phrases where appearing with first letters capitalized in any appendix contained in this Agreement, shall have the following meanings:

A1.1 Additional Services. Services performed by the Contractor which are beyond the Scope of Services required by this Agreement prior to any Amendment thereto.

A1.2 Agreement. This professional services agreement which has been signed by both the Anchorage School District and the Contractor. The Agreement consists of the two-page contract document, including Articles 1 through 6 thereof, Appendices A through F which are incorporated therein by reference, and any Amendments thereto.

A1.3 Amendment. A written change to the Agreement which modifies the Contractor's Scope of Services, conditions of service, time for performance, or compensation, or any combination of the foregoing. To be effective, an Amendment must be signed by both the Anchorage School District and the Contractor, and may require approval by the Anchorage School Board.

A1.4 Anchorage School District/ASD/District. The designated managing agency of the Municipality of Anchorage (the owner of the Project), which is authorized to manage the school facility that is the subject of this Agreement. The term "Anchorage School District" includes all school board members, officers, employees, representatives, and agents of the Anchorage School District.

A1.5 Basic Services. Services performed by the Contractor which are within the Scope of Services required by this Agreement prior to any Amendment thereto.

A1.6 Bid Documents. The Construction Contract Documents, plus the instructions to bidders and bid forms.

A1.7 Claim. A request by the Contractor for additional compensation or time extension which has not or cannot be resolved through the usual Amendment procedure because the validity of the request is disputed by the Project Manager or the Anchorage School District.

A1.8 Commissioning. A methodical process intended to ensure that building systems perform in conformance with the intent for which they were designed. Such systems can include, but are not limited to: heating, ventilating, air conditioning, fire protection, electrical, security, data, communications, and control.

A1.9 Conformed Documents. Construction drawings and specifications revised to reflect changes issued by addenda prior to bid opening.

A1.10 Construction Contract. The contract between the Anchorage School District and the Construction Contractor for the construction of all or part of the Project, including, without limitation, the providing of labor, materials, and equipment to be incorporated into the Project, and including all change orders thereto. The Anchorage School District, in its discretion, may award more than one Construction Contract in relation to the Project.

A1.11 Construction Contract Award Price (CCAP). The amount budgeted by the Anchorage School District to cover the costs of construction of the Project. The CCAP includes the cost of all Construction Contracts required for the completion of the construction of the Project. The CCAP does not include the compensation of the Contractor or the cost of the land, site investigations, right-of-ways, furnishings and equipment, special inspections, agency plan review permit fees, or Anchorage School District administrative costs, all of which are the responsibility of the Anchorage School District unless otherwise stated herein.

A1.12 Construction Contract Documents. The Construction Contract form(s), general and supplementary conditions, general requirements, technical drawings and specifications for the Project, and any addenda thereto.

A1.13 Construction Contractor. The person, partnership, corporation, joint venture, or other type of business entity with which the Anchorage School District contracts in the Construction Contract to construct all or part of the Project.

A1.14 Contractor. The person, partnership, corporation, joint venture, or other type of business entity with which the Anchorage School District contracts to provide the professional services required by this Agreement. The term "Contractor" includes all officers, directors, employees, partners, joint venturers, consultants, Subcontractors, representatives, and agents of the Contractor.

A1.15 Days. Calendar days.

A1.16 Deliverable. A service product created by the Contractor and deliverable to the Anchorage School District under requirements of the Agreement.

A1.17 Design Adjustment. A modification to the Educational Specifications, CCAP, management plan, Master Schedule (Appendix F hereto), or previously approved design documents, which modification has no impact on the Contractor's time for performance or the compensation due the Contractor as provided by this Agreement. A Design Adjustment shall be made in writing by the Project Manager, the Anchorage School District, or the Anchorage School Board.

A1.18 Designer of Record. The Contractor and its subcontracted business entities who are professionally responsible for the Work Products produced under this Agreement.

A1.19 Educational Specifications. The detailed written summary of the requirements for the facility to which the Project relates, which sets forth the Anchorage School District's overall program and design objectives, constraints and criteria, including space requirements and relationships, quality levels, flexibility and expandability, special equipment and systems, and site requirements.

A1.20 Estimated Total Construction Cost. The Contractor's current estimated cost for all construction Work necessary to complete the Project in accordance with the Construction Contract Documents. The Estimated Total Construction Cost does not include the cost of land acquisition, site investigation, design, public artwork, Anchorage School District administration, or any furnishings and equipment, special inspections, permit fees, which is not included in the Construction Contract. The CCAP and the Estimated Total Construction Cost may not be the same amount.

A1.21 Information Bulletin. Written conveyance of information pertinent to the Project initiated by the Contractor or Anchorage School District and issued to the Construction Contractor.

A1.22 Master Time Schedule. A project-specific calendar indicating: Contractor's identified services and Work elements; their start, duration and end dates; their critical milestones (including action required by Anchorage School District and bid dates); and Deliverables.

A1.23 Notice to Proceed (NTP). Written authorization from the Project Manager to the Contractor to provide all, or specified portions of, the services required by this Agreement.

A1.24 Project. The school facility, or the portion of the school facility, which is to be designed by the Contractor in accordance with this Agreement and constructed by the Construction Contractor in accordance with the Construction Contract.

A1.25 Project Manager. The Anchorage School District's employee who has the direct responsibility for the Project. The Project Manager is the Anchorage School District's project representative and the Contractor's primary point of contact with the Anchorage School District.

A1.26 Record Drawings. Graphic representations of the executed Work prepared, in part, by the Construction Contractor from Conformed Documents to show significant changes in the Work made during the construction process and transferred to drawing media by the Contractor.

A1.27 Request for Information (RFI). Written request from the Construction Contractor to the Anchorage School District requesting information related to construction of the Project.

A1.28 Scope of Work/Scope of Services. The work to be performed under a contract, typically divided by tasks with noted deliverables and deadlines.

A1.29 Subcontract. An agreement between the Contractor and a Subcontractor by which the Subcontractor agrees to provide to the Anchorage School District a portion of the services required of the Contractor under the terms of this Agreement.

A1.30 Subcontractor. A person, partnership, corporation, joint venture, or other business entity with which the Contractor subcontracts to provide a portion of the services required of the Contractor under the terms of this Agreement.

A1.31 Technical Specifications and Design Standards. Guidelines established by the Anchorage School District to define performance quality of design elements, construction materials, systems and installations for application to facilities under Anchorage School District operational control. Such guidelines are working documents published periodically in the form of two separate documents: Design Standards and Technical Specifications.

A1.32 Work. All labor and materials provided by the Construction Contractor to construct the Project in accordance with the terms of the Construction Contract.

A1.33 Work Product. Without limitation, all documents, models, renderings, and other materials to be furnished by the Contractor to the Anchorage School District by or on behalf of the Contractor, or by any consultants, subcontractors, or others retained by the Contractor (hereafter "Subcontractors"), and all written information, reports, studies, object or source codes, flow charts, diagrams, specifications, and other tangible material which have been created by the Contractor in order to provide services pursuant to this Agreement.

ARTICLE A2 Information and Services from Others

A2.1 The Anchorage School District may, at its election or in response to a request from the Contractor, furnish information or services from other contractors. Contractor shall review such information and services for adequacy. If, in the Contractor's opinion, such information or services is inadequate, the Contractor must notify the Project Manager of the specific service or material deemed inadequate and the extent of the inadequacy prior to use in the performance of this Agreement. The Project Manager will then evaluate and resolve the matter in writing. Unless so notified by the Contractor, the Anchorage School District may assume the information or services provided are adequate.

ARTICLE A3 Occupational Safety and Health

A3.1 The Contractor and its Subcontractors shall observe and comply with (a) the Federal Occupational Safety and Health Act of 1970 and all regulations and standards promulgated thereunder, and (b) all State of Alaska occupational safety and health laws and regulations. The Contractor shall include a provision in each Subcontract requiring the Subcontractor to observe and comply with said laws and regulations.

ARTICLE A4 Equal Employment Opportunity

A4.1 The Contractor certifies that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, marital status, mental or physical handicap, or change in marital status, in employment, provision of services or otherwise. The Contractor shall take affirmative action to ensure such non-discrimination, including but not limited to the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

A4.2 The Contractor shall state, in all solicitations or advertisements for employees to Work in the performance of this Agreement, that all qualified applicants will receive consideration for

employment without regard to race, color, religion, national origin, ancestry, age, sex, marital status, mental or physical handicap, or change in marital status.

A4.3 The Contractor shall comply with the requirements of the Anchorage Municipal Code, Chapter 7.50.010-.120, as well as any procedures adopted by the Anchorage School District to implement the policies set forth therein.

A4.4 The Contractor shall comply with any and all of the following laws and directives, and any regulations promulgated thereunder, which may be applicable to the Project or this Agreement, all of which are incorporated herein by reference:

Title IV of the Federal Civil Rights Act of 1964;

Federal Executive Order 11625 (Equal Employment Opportunity);

Title 41, Code of Federal Regulations, Part 60 (Equal Employment Opportunity);

Title 49, Code of Federal Regulations, Part 21 (Discrimination);

Title 49, Code of Federal Regulations, Part 23 (Minority Business Enterprises);

Office of Management and Budget (OMB) Circular 102, Attachment O (Procurement Standards);

Alaska Statute (AS) 18.80.200-300 (Discrimination).

A4.5 The Contractor shall include the provisions of this Article in every Subcontract and purchase order, and shall require each Subcontractor to include these provisions in every sub-subcontract, so that these provisions will be binding upon each Subcontractor, sub-subcontractor and vendor providing services or goods to the Project.

ARTICLE A5 Payments to the Contractor

A5.1 Payments shall be based on Contractor's invoices which have been submitted in accordance with this Article and the provisions of Appendix C hereto, and which have been approved by the Anchorage School District. The sum of all payments shall not exceed the maximum allowable amount of compensation stated in Appendix C, or any Amendment thereto. All invoices shall be in a format provided by the Anchorage School District.

A5.2 The Anchorage School District will attempt with due diligence to obtain any approval of Contractor's invoices or payment to Contractor which may be required of a funding agency and to issue Notice(s) to Proceed in a timely manner. The Contractor shall not perform any services without a Notice to Proceed. The Contractor shall not be entitled to payment for services performed or any associated reimbursable costs incurred which are outside the Scope of Services and costs authorized by Appendix C, or any Amendment thereto.

A5.3 In the event that items on an invoice are disputed by the Anchorage School District, payment for those items will be withheld until the dispute is resolved. Payment for undisputed items will not be withheld, subject to the Anchorage School District's right of set-off or counterclaim.

A5.4 The Contractor shall submit a final invoice and all other documentation required by this Agreement to the Project Manager within ninety (90) Days after the final acceptance of services by the Anchorage School District. The Contractor is not entitled to payment of any invoice submitted after said ninety (90) Day period, unless the Anchorage School District has given prior written consent thereto.

A5.5 All payments due the Contractor will be made within thirty (30) Days of the Project Manager's approval of the invoice.

ARTICLE A6 Changes to the Agreement

A6.1 Changes in the Contractor's compensation may be made only by written Amendment, signed by both parties and, if required, approved by the Anchorage School Board. If a change is made in the Contractor's Scope of Services or conditions of service under this Agreement, and such change results in an increase or decrease in the Contractor's costs, an equitable adjustment to the Contractor's compensation shall be made and set forth in an Amendment. The Contractor shall not perform any Additional Services prior to receiving a Notice to Proceed, except as the Contractor may be requested under the provisions of Article A15 (Claims).

A6.1.1 From time to time throughout the course of Contractor's performance of this Agreement, the Project Manager may request the Contractor to make one or more Design Adjustments in relation to the Project. The making of any Design Adjustment is part of Basic Services and shall not entitle the Contractor to an Amendment. Neither the Contractor's time for performance nor the Contractor's compensation will be adjusted in relation to a Design Adjustment.

A6.2 Changes in the Contractor's time for performance, including any change in the period of performance stated in the Agreement or in the Master Time Schedule which is to be incorporated into this Agreement as an appendix, may be made only as follows: (a) If the change in the time for performance is associated with a change in the Contractor's compensation, the change must be made by the same Amendment which changes the Contractor's compensation, or (b) if the change in time for performance is not associated with a change in the Contractor's compensation, then such change may be set forth in a new Master Time Schedule appendix which is signed and dated by the parties, and then substituted for the original Master Time Schedule appendix, or its most recent substitute.

A6.3 The Contractor shall submit a written request for an Amendment to the Project Manager within thirty (30) Days after the beginning of the occurrence of any act or event of which Contractor becomes aware, or should have become aware, and in relation to which Contractor believes it is entitled to additional compensation and any associated time extension. Such acts or events may include but are not limited to the Anchorage School District requesting, either verbally or in writing, that the Contractor perform Additional Services which are not already covered by a fully executed Amendment. If the Project Manager deems an Amendment appropriate, he will negotiate the terms of an Amendment with the Contractor. Unless such written request for an Amendment is submitted in a timely manner, the Contractor shall be deemed to have acknowledged that the act or event does not entitle it to additional compensation or a time extension.

A6.4 The Contractor shall submit any request for modification of the Master Time Schedule to the Project Manager within a reasonable period of time after the beginning of the occurrence or event giving rise to the request for such modification.

ARTICLE A7 Audits and Records

A7.1 The Contractor shall maintain records and keep in safe condition all documents relating to performance, communications, correspondence and costs pertinent to this Agreement. The Anchorage School District's authorized representatives shall have the right to examine such records and documents, and Contractor's accounting procedures and practices.

A7.2 The Anchorage School District's authorized representatives shall have the right to examine all accounting books, records, data and other documents of both the Contractor and Contractor's first tier Subcontractors related to the negotiation, pricing and performance of this Agreement,

and any Amendment thereto, for the purpose of evaluating the accuracy, completeness and currency of the information submitted as part of or in relation to any invoice. Such right of examination shall extend to all documents necessary to permit the Anchorage School District to evaluate the information, computations and projections used to the extent deemed necessary by the Anchorage School District, in its sole discretion.

A7.3 The materials described in this Article shall be made available at the business office of the Contractor at all reasonable times for inspection, audit or duplication, for a minimum of seven (7) years from the date of final payment under this Agreement and for such longer period, if any, as may be required by an applicable statute.

A7.3.1 If this Agreement is completely or partially terminated, records relating to the services terminated shall be made available for a minimum of seven (7) years from the date of any resulting final settlement.

A7.4 If the Agreement is funded to any extent with federal or state monies, or both, the appropriate federal or state authorities may also examine the accounting books, records, data and the other documents of the Contractor and Contractor's first tier Subcontractors.

A7.5 The Contractor shall include the provisions of this Article in all first tier Subcontracts so as to be binding on all first tier Subcontractors.

A7.6 All documents which relate to an appeal under Article A15 (Claims), litigation or the settlement of a Claim arising out of the performance of this Agreement shall be made available to the Anchorage School District for inspection and copying until such appeal, litigation or Claim has been finally concluded. Such documents shall be made available to the Anchorage School District within thirty (30) Days of the Anchorage School District's request therefor.

ARTICLE A8 Inspections by Anchorage School District

A8.1 The Anchorage School District shall have the right to inspect, in the manner and at reasonable times it considers appropriate during the period of this Agreement, all facilities and activities of the Contractor as may be engaged in the performance of this Agreement.

ARTICLE A9 Termination or Suspension

A9.1 This Agreement may be terminated by either party upon ten (10) Days' written notice if the other party (a) fails substantially to perform in accordance with the terms of the Agreement through no fault of the party initiating the termination, and (b) fails to cure such failure to perform before the end of the ten-Day notice period, or if the cure cannot be completed within a ten (10) Day period, fails to take substantial steps toward effecting such cure. If the Anchorage School District terminates this Agreement because of Contractor's default (default termination), the Anchorage School District will not make any payment to Contractor beyond those payments already made, until after completion of the Project and after deduction of any damages which are incurred by the Anchorage School District as a result of the Contractor's default, or which are allowable as a set-off, or as the result of a counterclaim, cross-claim or cause of action. In no event shall Contractor be entitled to payment for the following: (a) unperformed services; (b) services which cannot be substantiated in whole or in part by the Contractor to the satisfaction of the Anchorage School District in its sole discretion; (c) services or Work Products which are unsatisfactory to the Anchorage School District in its sole discretion and are the result of Contractor's failure to perform in accordance with the terms of the Agreement; (d) direct non-salary costs which are incurred after Contractor's receipt of the notice of termination, or (e) markup for anticipated profit or indirect costs relating to unperformed services.

A9.1.1 If the Anchorage School District terminates this Agreement because of Contractor's default, the Anchorage School District may assume responsibility for the services to be provided hereunder and prosecute the same to completion by contract or otherwise, and the Contractor shall be liable to the Anchorage School District for any cost incurred by the Anchorage School District which exceeds the cost the Anchorage School District would have incurred had the Contractor fulfilled its obligations under the Agreement. Settlement of liability for such excess costs or for any delay in completion of the services required under this Agreement or construction of the Project which arises out of Contractor's default may constitute the basis of a set-off, counterclaim, cross-claim, or cause of action available to the Anchorage School District.

A9.2 The Anchorage School District may at any time terminate (convenience termination) or suspend this Agreement for its needs or convenience upon ten (10) Days' written notice to the Contractor. In the event of a convenience termination or a suspension of the Agreement for more than three (3) months, the Anchorage School District will compensate the Contractor for services performed and any expenditures incurred prior to the effective date of the written notice of termination or suspension. No fee, profit or other compensation for the uncompleted portion of the services will be paid, except for already incurred indirect costs which the Contractor can establish and for which the Anchorage School District would have compensated the Contractor over the life of this Agreement, but because of the termination or suspension would have to be absorbed by the Contractor without further compensation.

A9.3 If federal funds support this Agreement, settlement for default or convenience termination must be approved by the funding agency and shall conform with Title 41, Code of Federal Regulations, Subparts 1-8.604 or 1-8.203 and 1-8.213.

A9.4 In the event of termination or suspension of the Agreement for over three (3) months, the Contractor and its Subcontractors shall discontinue all services, or such portions of service as directed in the notice, and deliver to the Project Manager all Work Products, including all data, reproducibles, plans, specifications, reports, estimates, summaries, schedules, and other documents and data prepared or in the process of being prepared pursuant to this Agreement.

A9.5 The Contractor shall include the provisions of this Article in each Subcontract so as to be binding on each Subcontractor.

A9.6 The rights and remedies of the Anchorage School District as set forth in this Article A9 are not exclusive, and are in addition to any other rights and remedies the Anchorage School District may have at law or as provided elsewhere in this Agreement.

A9.7 Unless earlier terminated as provided in this Article, this Agreement shall remain in force for a period which may reasonably be required for the Basic Services and Additional Services hereunder. However, the provisions of the Agreement relating to professional responsibility, dispute resolution, professional liability coverage, indemnification, governing law, records and ownership of documents shall remain in effect after termination of the other provisions of the Agreement.

A9.8 The payment of any sums by the Anchorage School District under this Article A9 shall not constitute a waiver of any Claims for damages by the Anchorage School District against the Contractor.

ARTICLE A10 Inducement/Conflict of Interest

A10.1 The Contractor agrees that it will not engage on a full-time or part-time basis, during the period of this Agreement, any person or persons who are or have been employed by the Anchorage School District during the period of this Agreement or during the ninety (90) Days immediately

preceding the date of this Agreement, except such employee(s) who have been regularly retired or approved in writing by the Anchorage School District.

ARTICLE A11 Covenant Against Contingent Fees

A11.1 The Contractor shall comply with the Copeland "Anti-Kickback" Act (19 USC 874), and the U.S. Department of Labor Regulations promulgated thereunder (29 CFR, Part 3), both of which are incorporated herein by reference.

A11.2 The Contractor warrants that it has not employed or retained any organization or person, other than a bona fide employee, to solicit or secure this Agreement and that it has not paid or agreed to pay any organization or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Anchorage School District has the right to void this Agreement without liability or, in its discretion, to deduct from the allowable compensation the full amount of such commission, percentage, brokerage or contingent fee.

ARTICLE A12 Endorsement of Documents

A12.1 Endorsements (signatures) and professional seals, if applicable, must be included on all final drawings, specifications, and geotechnical reports prepared by the Contractor.

ARTICLE A13 Ownership of Work Products

A13.1 Ownership of Work Products produced under this Agreement, including items which have pre-existing copyrights, shall remain with the Contractor. The Anchorage School District shall have an unrestricted, irrevocable license to use the Work Products without infringing any copyrights, and without additional compensation to the Contractor.

A13.1.1 Unrestricted use shall include use: (1) for any additions, alterations, or other subsequent Work to the Project; (2) to demonstrate or reference conceptual arrangements, in whole or in part, for incorporation into any District project; and (3) reuse of a prototypical design on an Anchorage School District project.

A13.2 Should the Anchorage School District elect to reuse Work Products produced by the Contractor and its Subcontractors under this Agreement and owned by the Contractor on any other project, the Anchorage School District shall indemnify, hold harmless and defend the Contractor and its Subcontractors against any damages or liabilities arising from such reuse.

A13.2.1 When Work Products produced by the Contractor and its Subcontractors under this Agreement are reused by the Anchorage School District, the Contractor's and Subcontractors' signatures, professional seals and dates shall be removed. Such Work Products, which require professional signature and seal, will be signed, sealed and dated by the professional who is in direct supervisory control and responsible for the new project for which such Work Products are being reused.

A13.3 The Contractor shall include this provision in every Subcontract so as to be binding on every Subcontractor.

ARTICLE A14 Subcontractors, Successors and Assigns

A14.1 The Contractor shall provide to the Project Manager a list of all consultant firms with which the Contractor proposes to Subcontract, consistent with the District's qualifications-based Request for Proposals requirements, in order to provide a portion of the services required of the Contractor under this Agreement. The Contractor shall acquire the Project Manager's non-objection to any proposed Subcontractor prior to entering into a Subcontract. Upon request by the Project Manager, the Contractor shall provide additional information concerning the qualifications of any proposed Subcontractor.

A14.2 If Appendix E identifies a named individual in the employ of Contractor, or a named Subcontractor, or a named individual in the employ of a Subcontractor, or any combination of the foregoing, as providing professional services under this Agreement, then Contractor shall employ such individual or subcontract with such Subcontractor so that the named individual(s) or Subcontractor, or both, shall provide the designated services. Contractor shall immediately notify the Project Manager in writing of a proposed replacement of named individual(s) or Subcontractor, or both. The Anchorage School District reserves the right to object to the proposed replacement so named in accordance with Section A14.1.

A14.3 The Contractor shall not assign, delegate or transfer the whole or any part of this Agreement or any monies due or to become due hereunder, without the prior written consent of the Anchorage School District. Any assignment, delegation or transfer not in accordance with this provision shall be null and void and of no force or effect. This Agreement shall otherwise be binding upon and inure to the benefit of the successors and permitted assigns and delegates of the parties hereto.

A14.4 The Contractor binds itself, its partners, officers, directors, Subcontractors, executors, administrators, successors, assigns, and legal representatives to this Agreement and to the successors, assigns and legal representatives of the Anchorage School District with respect to all covenants of this Agreement. The Contractor's Agreement is incorporated by this reference herein in all subsequent contracts with Subcontractors and their Subcontractors. This language shall be made a part of all contracts between the Contractor and its Subcontractors.

A14.5 No payment, gratuity or offer of employment shall be made in connection with any Subcontract, by or on behalf of any Subcontractor to the Contractor, or by a sub-subcontractor to a higher tier subcontractor or any person associated therewith, as an inducement for the award of a Subcontract.

A14.6 The Contractor shall include provisions appropriate to effectuate the purposes of this Agreement in all sub-tier agreements. Where Contractor is required to perform certain services in this Agreement, and the parties agree that all or a portion of those services are to be performed by a Subcontractor, the Contractor shall require the Subcontractor in the Subcontract to perform those services for the benefit of the Anchorage School District. Nothing stated herein, however, shall relieve the Contractor of the responsibility of performing all of its responsibilities and obligations under this Agreement.

ARTICLE A15 Claims

A15.1 The Contractor shall notify the Project Manager in writing of the occurrence of any act or event of which Contractor becomes aware, or reasonably should have become aware, which may form the basis of a Claim within ten (10) Days of the occurrence of such act or event. If the matter cannot be resolved within seven (7) Days following the Project Manager's receipt of notification regarding the potential Claim, the Contractor shall, within the next fourteen (14) Days, submit a written "Notice of Claim" to the Project Manager in accordance with provision A15.1.2. The Anchorage School District will review and decide the Claim in accordance with provisions A15.1.3 through A15.1.6.

A15.1.1 If directed by the Project Manager, the Contractor shall proceed with the performance of this Agreement, including the performance of any disputed services, pending final resolution of any Claim or action arising under the Agreement.

A15.1.2 In any Notice of Claim, the Contractor shall set forth the following: (a) the provisions of the Agreement which apply to the Claim and under which the Claim is made, and (b) the specific relief requested, including any additional compensation claimed and the basis upon which it was calculated, and any additional time requested and the basis upon which it was calculated.

A15.1.3 In relation to a Notice of Claim in an amount of $25,000 or less, the Anchorage School District shall, if requested in writing by the Contractor, proceed with due diligence to attempt to issue a decision regarding the Claim within fifteen (15) Days of receipt of such a request. In relation to a Notice of Claim in an amount over $25,000, the Anchorage School District shall proceed with due diligence to attempt to issue a decision regarding the Claim; in any event if the Claim is not decided within a thirty (30) Day period, the Anchorage School District shall notify the Contractor of the date by when the decision will be made.

A15.1.4 In reviewing a Claim, the Anchorage School District may schedule a review hearing or request additional information from the Contractor in order to evaluate the Claim fully. The Contractor shall provide any additional information requested by the Anchorage School District within fifteen (15) Days of the receipt of the request for additional information. Failure by the Contractor to furnish such additional information shall constitute a waiver of the Claim.

A15.1.5 The Anchorage School District will deliver to the Contractor a final written decision regarding a Claim. Any Amendment arising out of a Claim shall be subject to the provisions of Article A6 (Changes to the Agreement) herein.

A15.1.6 If a Claim is not resolved in accordance with the procedures set forth in provisions A15.1.1 through A15.1.6 herein, the Contractor has no right to file an action against the Anchorage School District in a court of law, until the Claim is first subjected to non-binding mediation before a single mediator agreed upon by the parties. Such mediation shall be attended by a representative of the Contractor and a representative of the Anchorage School District, each of which has authority to enter into a full and final, binding settlement of the Claim, except where the final, binding settlement is subject to the Anchorage School District School Board's approval. Unless otherwise agreed in writing, all unresolved Claims of the Contractor shall be considered during a single mediation which shall occur prior to final payment by the Anchorage School District. The Anchorage School District and the Contractor shall share equally the costs of the mediator.

A15.2 Nothing stated herein shall be interpreted to limit the right of the Anchorage School District to seek any remedy it may have against the Contractor as a counterclaim raised during a mediation proceeding or as an action, counterclaim or cross-claim, at law or in equity, filed in a court of law.

ARTICLE A16 Extent of Agreement

A16.1 This Agreement, including any and all appendices, and any Amendments thereto, represents the entire and integrated Agreement between the Anchorage School District and the Contractor, and supersedes all prior negotiations, representations, or agreements, written or oral. This Agreement may be modified only by Amendment.

A16.2 Nothing contained in this Agreement may be deemed to create any contractual relationship between the Anchorage School District and any Subcontractor or material supplier; nor may anything contained in this Agreement be deemed to give any third party a claim or right of action against the Anchorage School District or the Contractor which does not otherwise exist without this Agreement. Nothing in this Agreement shall be construed as creating any personal liability on the part of any officer, School Board member, employee or representative of the Anchorage School District.

ARTICLE A17 Notices/Communications

A17.1 All notices required or permitted to be given under this Agreement shall be in writing and may be emailed, hand-delivered, mailed, delivered by overnight courier service, or transmitted by facsimile. If mailed, such notices shall be sent by certified mail, postage pre-paid, return receipt requested. The date on which such notice was given shall be deemed to be the date which is two (2) Days after the date of the mailing. The post-mark affixed to such notice by a U.S. Post Office shall be conclusively presumed to be the date of mailing for purposes of this provision. In the case of notices given by hand delivery or overnight courier, such notices shall be deemed to be given on the date of the actual receipt. If transmitted by email or facsimile, such notices shall be deemed to be given on the date of the actual receipt of a complete, email or legible facsimile transmission, except that if an email or facsimile transmission is received after business hours or on the weekend or holiday, then the notice shall be deemed to be given on the next business day following the receipt of the email or facsimile transmission.

A17.2 Notices to the Anchorage School District shall be sent to the individual identified in Article 5 of the Agreement as the Project Manager, at the email, address or the fax number indicated.

A17.3 Notices to the Contractor shall be sent to the individual identified in Article 6 of the Agreement as the Contractor's Principal, at the email, address or fax number indicated.

A17.4 Either party may change the address to which notices shall be sent by notice in writing to the other party.

A17.5 The Anchorage School District shall be entitled to rely on information provided by and statements made by the Contractor's Principal identified in Article 6 of the Agreement as binding the Contractor. The Contractor shall be entitled to rely on information provided by and statements made by the Project Manager identified in Article 5 of the Agreement, or other Anchorage School District officials identified in writing, as binding the Anchorage School District.

ARTICLE A18 Taxes

A18.1 The Contractor shall pay all federal, state and local taxes incurred by the Contractor as a result of performing services required by this Agreement. The Contractor shall include this provision in any Subcontract so as to be binding on any and all Subcontractors.

ARTICLE A19 Governing Laws

A19.1 This Agreement is governed by the laws of the State of Alaska, and any applicable federal and municipal laws and ordinances. Any legal proceedings will be held in Superior Court in Anchorage Alaska. The Contractor shall at all times observe and comply with all such laws and ordinances. If any term, covenant, or condition is found by a court of law to be unenforceable, the remaining terms, covenants, and conditions shall remain in full force and effect.

ARTICLE A20 Force Majeure Suspension

A20.1 The duties and obligations of the parties to this Agreement shall be suspended during such time as performance by either party is prevented or materially impeded by strikes, labor disturbances, riots, fire, governmental act, war, acts of God, or any other causes similar to the foregoing and beyond control of the parties hereto.

ARTICLE A21 Waiver

A21.1 No delay in exercising any right or remedy of the parties hereunder shall constitute a waiver thereof, and no waiver by the Anchorage School District or the Contractor of the breach of any term, covenant or condition of this Agreement shall be construed as a waiver of any preceding or succeeding breach of the same or any other term of this Agreement. No covenant, condition, right or remedy in this Agreement may be waived or modified orally, by course of conduct or previous acceptance unless such waiver or modification is specifically agreed to in a writing executed by the Anchorage School District and the Contractor.

ARTICLE A22 Interpretation

A22.1 Each party has had the opportunity for its attorney to review and comment upon this Agreement, and therefore the terms hereof shall not be interpreted against either party.

ARTICLE A23 Miscellaneous Provisions

A23.1 For the purpose of this Agreement, unless the context clearly indicates otherwise, the singular includes the plural, and the plural includes the singular.

A23.2 The titles of all Appendices, Articles and provisions contained in this Agreement are used only for purposes of convenience and ease of reference, and shall not be interpreted to affect the contents of any provision of this Agreement.

ARTICLE A24 Additional Provisions

A24.1 The following itemized Anchorage School District design guidelines and/or standards are in effect for this Agreement. Should all or portions of subsequently issued standards be applicable to the Project covered by this Agreement, such standards will be issued by Amendment.

Contract No:
Date Prepared:

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

INDEX

ARTICLE B1 Professional Responsibilities, Standard of Care, Representations

B1.1 The Contractor shall provide professional architectural/engineering services for the Project in accordance with the terms and conditions of this Agreement. The Contractor shall perform such services, as a professional consultant to the Anchorage School District, to carry out the activities of Project design and Construction Contract administration, and to provide the technical documents and construction observation that are necessary and desirable to complete the Project in a manner satisfactory to the Anchorage School District.

B1.2 The Contractor shall provide all services required in this Agreement using no less than the usual and customary skill, care and judgment of a professional architectural/engineering firm that is registered in the State of Alaska and is well experienced in providing such services as the design and construction of public school buildings located within the Anchorage School District.

B1.3 Contractor represents and agrees that (a) it is an experienced firm having the ability and skill (or that it will subcontract to obtain the services of qualified sub-consultant(s) acceptable to the Anchorage School District) that are necessary to perform the services required of it under this Agreement, including specifically, but without limitation, the design and construction of a project having the scope and complexity of the Project contemplated herein; (b) it has the capabilities and resources necessary to perform its obligations hereunder; (c) it is familiar with the current laws, rules and regulations applicable to the Project, including applicable municipal, state and federal building codes and sanitary and environmental laws, rules, regulations, and orders thereof.

B1.3.1 In the event the Contractor becomes aware of a change or pending change in codes, laws, rules or regulations which may affect the design or construction of the Project, the Contractor shall inform the Project Manager of the change or pending change and the possible impacts thereof on the Project.

B1.4 The Contractor represents and agrees that the drawings, specifications and other documents prepared by it or its Subcontractors pursuant to this Agreement shall be functional for the purposes intended, and that the Project, if constructed in accordance with such drawings,

specifications and other documents, will be structurally sound and a complete and properly functioning facility in accordance with the general design intent established by the Educational Specifications.

B1.5 The Contractor shall prepare drawings, specifications, and other documents necessary to complete the design of the Project and to meet applicable codes, laws, rules, regulations and professional standards in effect as of the date of design. The Contractor or its Subcontractors shall correct, at their own expense, any and all errors, omissions, ambiguities and conflicts in the drawings, specifications and other documents prepared by the Contractor.

B1.6 The Contractor covenants and agrees to perform the services described in this Agreement through appropriate, competent professionals who are Contractor's staff members or Subcontractors, or the staff members of Contractor's Subcontractors, and are professionally registered when required by State of Alaska statutes. Subcontractors may include, but are not limited to, architects, structural engineers, mechanical engineers, electrical engineers, landscape architects, civil engineers, cost estimators, and others as necessary.

B1.6.1 The Anchorage School District shall have the right to require the Contractor to exclude from providing services under this Agreement any Subcontractor, or any employee of Contractor or any of its Subcontractors, or any other person under the control of the Contractor, to whom the Anchorage School District has a reasonable objection. The Anchorage School District reserves the right to object to selection of Subcontractors based on considerations of cost, performance, special qualifications, and/or known work load relative to resources.

ARTICLE B2 Relationship of the Parties

B2.1 The Anchorage School District has no design responsibilities of any nature under this Agreement. Additionally, the District's issuance of Design Standards and Technical Specifications guidelines and/or the District's approval or denial of deviations from said Design Standards or Technical Specifications guidelines shall not create in the District design responsibilities or obligations under this Agreement. None of the activities of the Anchorage School District are intended to supplant or conflict with the design, construction cost estimating, contract administration, construction observation, or any other services and responsibilities of the Contractor that are required under this Agreement.

B2.1.1 The Contractor's architectural and engineering design services include, but are not limited to, cost and time estimating that are calculated to demonstrate that the Project can be constructed within the budget and time frame identified in this Agreement. Although the Project Manager may discuss or suggest changes to Contractor's cost and time estimates, such discussions or suggestions shall in no way relieve the Contractor of the responsibility of fulfilling its obligations and responsibilities therefor.

B2.2 The Contractor, including its agents, employees and Subcontractors, is an independent contractor of the Anchorage School District, and not an agent, officer or employee of the Anchorage School District. The Contractor shall carry out its responsibilities under this Agreement and conduct itself at all times as an independent contractor, except as the authority to act as an agent of the Anchorage School District in relation to certain tasks and events may be specifically granted by the Project Manager in writing from time to time. The Contractor shall not represent itself to any third party as other than an independent contractor of the Anchorage School District at any time, except in accordance with the foregoing written authority of the Project Manager.

B2.3 Any and all employees of the Contractor, while engaged in the performance of any services

required of the Contractor under this Agreement, shall be considered employees only of the Contractor and not of the Anchorage School District, and any and all claims that may or might arise under the Workers' Compensation Act on behalf of said employees while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the Contractor's employees while so engaged on any of the services to be rendered herein, shall be the sole obligation and responsibility of the Contractor.

B2.4 Communications by the Anchorage School District to the Contractor relating to services performed by the Contractor may be issued or made through the Project Manager. Formal communications and submittals of the Contractor to the Anchorage School District and the Construction Contractor shall be issued or made through the Project Manager, unless otherwise directed by the Project Manager or by this Agreement. The Project Manager shall have the authority to establish procedures consistent with this Agreement, to be followed by the Contractor, and to call periodic conferences to be attended by the Contractor and its Subcontractors throughout the term of this Agreement.

ARTICLE B3 Administrative Requirements

B3.1 The provisions contained in this Article B3 are administrative requirements of this Agreement.

B3.2 Cost Analysis and Control. Cost analysis and cost control are primary concerns of the Anchorage School District. Provisions B3.2.1 - B3.2.6.2 are included in this Agreement in order to facilitate and promote effective cost analysis and control in relation to the Project.

B3.2.1 The Contractor shall prepare and deliver Estimated Total Construction Costs (ETCC) to the Anchorage School District at periods designated by the Deliverables Checklist referenced in Article B4. The initial ETCC shall be reviewed by the Project Manager and revised to the extent necessary at each subsequent deliverable period at no additional cost to the Anchorage School District.

B3.2.2 The Contractor shall provide a Project design that reflects the program as defined in Contractor's original or amended scope of work. If the Estimated Total Construction Cost exceeds the budgeted Construction Contract Award Price (CCAP), the Contractor shall at no additional cost to the Anchorage School District designate an appropriate base bid scope of Work and one or more additive alternate bid scope(s) of Work, at its own expense. The ETCC for such scopes of Work shall approximate the CCAP.

B3.2.2.1 To the extent possible, and only when requested by and approved by the District, the Contractor shall provide additive alternates or redesign the basic bid; deductive alternates shall only be included with the approval of the Anchorage School District. Where Bid Documents require bid proposals for unit prices that exceed, or deduct from, base quantity allowances, such base allowances shall be based on specific quantity surveys and not factors.

B3.2.3 The Anchorage School District may, at its option, obtain an independent estimate of the total construction cost based on the Contractor's design. If, in the opinion of the Project Manager, such independent estimate varies significantly from the ETCC provided by the Contractor, then the Project Manager and the Contractor shall review the discrepancies. If the Project Manager concludes that changes in the Project design are required in order to keep construction costs within the CCAP, the Contractor shall modify the Construction Contract Documents accordingly at its own expense. Contractor's modification(s) shall be carried out in a reasonable time so as not to delay the scheduled completion and occupancy of the project by the Anchorage School District.

B3.2.4 Should the Contractor be required to redesign the Project for any reason, such redesign must be approved by the Anchorage School District.

B3.2.5 After opening bids, the Anchorage School District may exercise any option available to it, including without limitation the following:

B3.2.5.1 If the lowest responsive basic bid by a responsible bidder exceeds 100% of the CCAP, (a) increase the budgeted funds and award the Construction Contract(s), or (b) reduce the Project scope and require the Contractor to redesign the Project and modify the Bid Documents accordingly for rebid at Contractor's own expense.

B3.2.5.2 If the lowest responsive basic bid by a responsible bidder, plus all additive alternative bids, is less than 90% of the CCAP, and if the scope of the Project had previously been decreased or the quality of the materials used in the Project had previously been lessened from the Technical Specifications and Design Standards because the ETCC exceeded the CCAP, (a) award the Construction Contract(s), and (b) require the Contractor to redesign the Project and modify the Construction Contract Documents in order to return the Project to its previous scope, or the materials to their previous qualities, or both, or other mutually agreed upon adjustment. Contractor's modification(s) shall be carried out in a reasonable time so as not to delay the scheduled completion and occupancy of the project by the Anchorage School District. Such modification(s) will serve as the basis of a change order to the Construction Contract.

B3.2.6 If the Contractor is required by the Project Manager to redesign the Project and modify Bid Documents pursuant to provision B3.2.5.1, or to redesign the Project, modify the Construction Contract Documents and prepare a change order to the Construction Contract pursuant to provision B3.2.5.2, such redesign, modification and change order preparation shall be performed at Contractor's own expense, unless one or more of the following conditions exist:

B3.2.6.1 The required redesign, modification and preparation is made necessary as the result of a prior redesign or modification directed by the Project Manager following an independent estimate of total construction cost pursuant to provision B3.2.3.

B3.2.6.2 The required redesign and modification is the result of the lowest responsive bid by a responsible bidder being more than 100% of the CCAP, and (a) the Contractor notified the Project Manager in writing prior to completing the Construction Contract Documents that the CCAP would probably be insufficient for award of the basic bid and no action was taken by the Project Manager to resolve the matter, or (b) because the bid opening date was delayed, for reasons not the fault of the Contractor, more than ninety (90) days after the Project Manager's receipt of the ETCC submitted as part of Construction Document Services.

B3.3 Time for Performance, Delays Timely provision of a Master Time Schedule, as defined in Appendix A, is a material requirement of this Agreement. If such a schedule is not included in Appendix F herein, Contractor shall develop and deliver it prior to the first billing for design services to the Anchorage School District, but in no event later than thirty (30) days after award of contract to the Contractor. Contractor shall coordinate Master Time Schedule with Anchorage School District's anticipated date for occupancy of Project.

B3.3.1 The Contractor shall not deviate from the Master Time Schedule unless, in accordance with and under the conditions set forth in Article A6 ("Changes to the Agreement"), one of the following conditions is met: (a) an Amendment incorporating such change of schedule is negotiated and signed by both parties hereto, or (b) a modification to the Master Time Schedule is agreed upon and signed by both parties. Contractor shall accordingly modify and submit a revised Master Time Schedule prior to submission of any subsequent billing to the Anchorage School District.

B3.3.1.1 Should the Project Manager reasonably determine that the Contractor is behind schedule, and so notify the Contractor, the Contractor shall accelerate its efforts at its own expense, including using additional manpower or overtime, or both, to maintain the approved Master Time Schedule.

B3.3.2 The Contractor shall not be held liable for damages incurred by the Anchorage School District due to a failure by the Contractor to meet any deadline established by the Master Time Schedule, provided that such failure arises out of a cause(s) beyond the control and without the fault or negligence of the Contractor. Such causes may include but are not limited to: Acts of God or of the public enemy, acts of a governmental entity acting in its sovereign or proprietary capacity, acts of the Anchorage School District acting in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, and weather that is unusually severe for the location(s) in which the Contractor is to perform its services. In the event of any such delay, Contractor shall provide to the Project Manager a written request for time extension by Amendment or modification to the Master Time Schedule in accordance with Article A6 ("Changes to the Agreement"). Except as provided in this provision B3.3.2, the Anchorage School District shall have all other contractual rights and remedies available to it at law or in equity in the event of Contractor's failure to perform this Agreement in a timely manner.

B3.3.3 Contractor shall not be entitled to any damages for delay from the Anchorage School District, whether caused by the Anchorage School District, or the Construction Contractor or another third party. Contractor's sole remedy for delay is a reasonable time extension granted by the Project Manager in an Amendment or modification to the Master Time Schedule pursuant to Article A6 ("Changes to the Agreement").

B3.3.4 In the event of a suspension in service directed by, or as a result of, the Anchorage School District, upon resumption of services, if any, the Contractor shall be required to review, revise and deliver the Master Time Schedule. Contractor shall be compensated for same based on stipulated sum pursuant to Article A6 ("Changes to the Agreement").

B3.4 Conformance with ASD guidelines. The Anchorage School District's Technical Specifications and Design Standards are intended as guidelines. The Contractor shall review these guidelines. The Contractor's use of such guidelines without written notice of exception shall constitute Contractor's acceptance of the guidelines. If the Contractor proposes deviations from these guidelines, such deviations shall be justified to the Anchorage School District in writing. The Anchorage School District retains the right to accept or reject such deviations, the Contractor shall modify the Construction Contract Documents accordingly at its own expense. The Contractor shall incorporate and coordinate the referenced guidelines into the Project.

B3.5 Document Preparation and Submission Procedures. Contractor's compliance with the procedures and requirements set forth in provisions B3.5.1 - B3.5.9 concerning document preparation and submission is mandatory, except as may be specifically modified in writing by the Project Manager.

B3.5.1 All drawings and specifications submitted for review and approval shall be marked as "Schematic Development Review Set," Design Development Review Set," "Construction Document Review Set," or similar phrase, as appropriate. The original set used to duplicate the Bid Documents shall be marked and issue dated as directed by the Anchorage School District.

B3.5.1.1 Technical specifications shall be provided in the current C.S.I. format.

B3.5.1.2 Specifications shall be provided digitally in pdf and the current version of Microsoft Word used by the Anchorage School District.

B3.5.2 All Construction Contract Documents shall bear the Anchorage School District's Project number and title, and shall be signed or initialed by the Contractor to acknowledge that the submissions have been checked by the Contractor for accuracy, completeness and coordination.

B3.5.3 Electronic media drawing files shall be developed or usable in current version of AutoCAD used by the Anchorage School District, or as determined by the Project Manager in consultation with the Contractor.

B3.5.3.1 Fonts used in drawing data bases shall be standard AutoCAD fonts, or Contractor shall supply the Anchorage School District with a licensed copy of font files used.

B3.5.3.2 Contractor shall conform drawing production data classifications to the current version of the “United States National CAD Standard”, except as otherwise approved by the Project Manager for project-specific requirements. Information regarding this Standard is available at: http://www.nationalcadstandard.org.

B3.5.4 Contractor shall provide drawing files on writable CD-ROM disk(s), labeled with the Anchorage School District’s Project name and number, and drawing numbers, dates, and phase status.

B3.5.5 During design phases, Contractor shall provide digital progress drawings, as pdf, in sizes and quantities as agreed to by Project Manager and Contractor.

B3.5.6 Contractor shall provide one complete set of final reproducible drawings each for Bid Document issuance and, subsequently, for Conformed Documents digitally in sizes as agreed to by Project Manager and Contractor.

B3.5.7 At the completion of construction of the Work as provided by B5.17, the Contractor shall provide one complete set of Record Drawings electronically.

B3.5.8 The Contractor shall not delegate or transfer in any way through the Bid Documents any service required of it by this Agreement, unless such delegation or transfer is submitted prior to the Construction Document phase and approved in writing by the Project Manager. Any performance specifications which require design services by the Construction Contractor or one of its subcontractors, or by a third party, or which require instruction (such as from a manufacturer, supplier or installer) shall state that the Contractor must review and approve all such designs or instructions for conformance with design intent.

B3.5.9 "Brand Name”, "Sole Source”, or proprietary specifications shall not be used in the Bid

Documents except when directed by the Project Manager, or when justified by the Contractor and approved by the Project Manager. Basis shall be replacement inventory, compatibility with existing systems, spatial parameters, previous performance history, and/or Anchorage School District Technical Specifications and Design Standards. "Brand Name or Equal as approved by Architect or Engineer" specifications may be used in Bid Documents as a means to define the performance or other salient requirements of an item, if the specific features of the brand name establish the minimum essential characteristics required to satisfy its intended use and the same is clearly stated in the specifications. During construction, Contractor shall conform with Article B5.4.2 for substitution of specified products.

B3.6 Review, Comment. The District's review of drawings and specifications may generate comments directed to the Contractor which are designated by the following classifications and which require certain types of action by the Contractor as indicated below:

Class I comments pertain to real or potential code or regulation violations, and require the Contractor's response by means of modification or formal written approval or variance from the regulatory agency. Any such approval or variance from the regulatory agency shall be copied to the Project Manager.

Class II comments pertain to errors, omissions, matters of document coordination, or deviations from Anchorage School District's Technical Specifications and Design Standards, and require the Contractor's correction of the documents, unless justification satisfactory to the Project Manager is provided in writing by the Contractor.

Class III comments pertain to matters of design judgment and are offered in a positive manner with the intent of improving the design result. These comments are not directions for design changes, but are provided as suggestions for consideration by Contractor as the Contractor may deem appropriate. These comments do not require any revision of the documents by the Contractor. However, they do require response by the Contractor justifying action taken.

B3.7 Presentation, Approval, Acceptance. Notwithstanding presentation requirements of other regulatory agencies, the Contractor shall present Conceptual Design (when required) and subsequently Schematic Design documents to the Anchorage School Board at a regularly scheduled Board Meeting to obtain Board approval before proceeding with services for subsequent phase. At least three weeks prior to the anticipated Board meeting, the Contractor shall submit presentation drawings as defined by the attached Deliverables Checklist and shall notify the Project Manager that the Contractor will be ready to make the presentation to the School Board at the regularly scheduled meeting.

B3.7.1 Approval of the Contractor's design and document submissions by the Project Manager, the Anchorage School District, or the Anchorage School Board constitutes approval of the basic design concept and layout only, and does not relieve the Contractor of the responsibility for preparing a complete set of Construction Contract Documents in accordance with the terms of this Agreement.

B3.7.2 Acceptance by the Project Manager, the Anchorage School District, or the Anchorage School Board of the Contractor's design and document submissions is not an approval of any Contractor omissions, errors, conflicts, oversights or noncompliance with any applicable governmental laws or regulations. The Anchorage School District shall not be liable for failure to identify any such omissions, errors, conflicts, oversights, or noncompliance. All such responsibility belongs to the Contractor.

ARTICLE B4 Design Services

B4.1 The Contractor shall provide all the design services described within this Article B4 ("Design Services"). Design Services shall consist of Conceptual Design Services (when required), Schematic Design Services, Design Development Services, Construction Document Services and Bid Services described herein, except that any such service may be modified or deleted in Article B8 ("Additional Provisions"), or deleted by a notation in the left margin of Article B4 which is initialed by both parties.

B4.1.1 The Contractor shall provide Deliverables as indicated on the attached Deliverables Checklist (Attachment A to PSA Appendix B) as negotiated within the Scope of Services by the Contractor and Project Manager.

B4.1.1.1 Where indicated on the Deliverables Checklist, drawings showing preliminary master plan development, site plan layout, building plan layouts, preliminary building cross-sections, exterior elevations, and interior elevations of salient features shall be provided in both full size and 8-1/2 x 11" format (or as otherwise directed by Project Manager) for presentation to the Anchorage School Board.

B4.1.1.2 Where three-dimensional control coordinates are indicated on the Deliverables Checklist, Contractor shall provide same for all critical control coordinates (i.e., tangent points, property corners, curvature points, grade breaks, horizontal and vertical control monuments, inverts, flow lines, etc.) CADD drawings shall include all disciplines referenced to the same geometric base. Should the Municipality of Anchorage require that certain drawings reflect a different basis of control than that selected by the Contractor, appropriate equation(s) shall be provided by the Contractor allowing coordination on either data base(s).

B4.1.1.3 Where indicated on the Deliverables Checklist, the Contractor shall review, approve and submit to the Project Manager Estimated Total Construction Costs of the Project, based on historic area, volume or other unit costs, construction sequence and scheduling, economic tradeoffs, safety and maintenance requirements, and such other factors as may be appropriate.

B4.1.2 The Contractor shall serve as a member of the Municipality of Anchorage Art in Public Places program's Art Advisory Committee to determine specific sites for work(s) of art and the scale and type of artwork most appropriate for the Project.

B4.1.2.1 The Contractor shall work closely with artist(s) and artist's (artists') consultants approved by the Anchorage School District to identify and coordinate the structural, utility or other requirements which interface with Contractor's work for selected work(s) of art for inclusion in the Bid Documents.

B4.1.3 The Contractor shall prepare and submit all Deliverables necessary to obtain all preliminary reviews or approvals required: by governmental entities that have regulatory and jurisdictional power over the Project through applicable laws, statutes, regulations and codes; by privately-owned utility companies or other entities which may impose conditions on the Project; and by such other entities as may be identified by the Project Manager.

B4.1.4 As part of its risk management program, the Anchorage School District requires

submittal of Construction Documents to its property and casualty insurer ("Insurer") for review and comment. Upon receipt of Insurer's review comments, the District will evaluate issues raised and address with the Contractor. The Contractor shall become familiar with applicable Insurer standards and endeavor to comply with those standards.

B4.2 When required, Conceptual Master Plan Services shall consist of the preparation and presentation of Deliverables which illustrate and describe the general master planning scope, scale and relationship of program components based on Educational Specifications for approval by the Anchorage School District.

B4.3 Schematic Design Services shall consist of the preparation and presentation of Deliverables which illustrate and describe the general scope, scale and relationship of Project components based on the program, approved Master Time Schedule, and Construction Contract Award Price, for approval by the Anchorage School District.

B4.3.1 The Contractor shall review the Educational Specifications, Technical Specifications and Design Standards, and other pertinent documents furnished by the Anchorage School District to ascertain the requirements of the Project.

B4.3.2 The Contractor shall develop initial design concepts and options for the Project in close coordination with the Anchorage School District. The Contractor shall identify unusual structural, mechanical, electrical or other features that may impact costs or use, and shall develop the systems selected in sufficient detail to permit coordination among design elements.

B4.3.3 In order to inventory existing site conditions, the Contractor shall request a Project site visit and propose an itinerary. Following the Project Manager's written approval of the Contractor's request, the Contractor's principal, and other personnel as may be designated, shall visit the Project site.

B4.3.4 When the Construction Contract Documents are approximately thirty-five percent (35%) complete, the Contractor shall submit to the Project Manager one complete set of reproducible drawings or complete electronic submittal for review.

B4.4 Design Development Services shall be based on the approved Schematic Design, and shall consist of the preparation, for approval by the Anchorage School District, of Deliverables to fix and describe the size and character of the entire Project with regard to structural, mechanical and electrical systems, materials and such other essentials as may be appropriate. Design Development Services shall include a detailed expansion of the architectural design so that the Project's size, appearance, form, construction type, and engineering systems are developed. Major material selections, equipment items, and quality of finishes shall be identified.

B4.4.1 When the Construction Contract Documents are approximately sixty-five percent (65%) complete, the Contractor shall submit to the Project Manager one complete set of reproducible drawings or complete electronic submittal for review.

B4.5 Construction Document Services shall be based on the approved Design Development Deliverables, and shall consist of the preparation, for approval by the Anchorage School District, of Deliverables, setting forth in detail the requirements for construction of the entire Project. Deliverables shall establish the detailed quality levels and extent of materials and systems sufficient for both bidding and construction of the Work.

B4.5.1 The Contractor shall prepare and coordinate a complete set of Construction Contract Documents for the Project in accordance with the current Construction Specifications

Institute Manual of Practice, except as provided by the Anchorage School District and enumerated below.

B4.5.1.1 The Contractor shall prepare applicable technical specifications (Divisions 2-17), an index of drawings, and drawings for inclusion in the Construction Contract Documents. The Anchorage School District will provide Conditions of the Contract (Division 0), with the exception of the index of drawings, and will transmit an informational copy to Contractor. The Contractor and the Project Manager shall jointly prepare General Requirements (Division 1) in a coordinated effort. All documents and specifications are to be complementary and compatible.

B4.5.2 When the Construction Contract Documents are approximately ninety-five percent (95%) complete, the Contractor shall submit to the Project Manager one complete set of reproducible drawings or complete electronic submittal for review.

B4.5.3 The Contractor shall review, approve and submit to the Project Manager, when the Construction Contract Documents are ninety-five percent (95%) complete, an updated and revised Estimated Total Construction Cost, based on materials, systems and details of construction, and which considers changes in the cost of materials, labor and services discovered since submission of the previous Estimated Total Construction Cost; adjustments for anticipated changes in the bidding market relative to the Project; and such other factors as may be appropriate.

B4.6 Bid Services shall be based on the approved Construction Contract Documents, and shall consist of assisting in the preparation, for approval by the Anchorage School District, of Bid Documents for obtaining bids and awarding contract(s) for construction of the Project.

B4.6.1 Upon direction by the Project Manager, the Contractor shall prepare responses to bidders' questions or requests for clarification or interpretation of Bid Documents. The Contractor shall not respond directly to any bidder's question or request for clarification or interpretation. All questions and requests for clarifications or interpretations as to the meaning of the information in the Bid Documents must be in writing, with responses by the Contractor provided to the Anchorage School District and retained in the Contractor's records. The Contractor shall not respond to bidders' oral questions and requests for clarifications except in writing.

B4.6.2 The Contractor shall prepare and deliver electronically, as defined by Article B3.5, any addenda to the Bid Documents which may be necessary to clarify or supplement drawings, specifications, or instructions, or to provide notice of any change in bidding procedures. All addenda will be distributed by the Anchorage School District during the bidding period.

B4.6.3 As directed by the Project Manager, the Contractor shall participate in pre-bid conferences, the bid opening, the review and evaluation of bids, and the recommendation for award of the Construction Contract(s).

B4.6.4 Contractor shall provide Conformed Documents within 30 days of bid opening, unless the Anchorage School District approves an extension in writing, which extension shall not exceed 15 days. Conformed drawing items shall be identified by clouds referenced with revision numbers in triangles and corresponding revision dates in drawings' title blocks. Conformed technical specification items shall be italicized with footers referencing revision and date. Contractor shall submit Conformed Documents to applicable permitting agencies for their approval, and shall provide Project Manager both half-sized and full-sized pdf copies of Conformed Documents for issuance to

Construction Contractor.

B4.7 Permitting Services shall be provided as assistance to ASD and based on approved Construction Contract Documents submitted to the Municipality and/or others for permitting. Contractor shall review all building (or any other applicable) permit comments and respond/resolve all comments pertaining to Contractor's Scope of Work.

ARTICLE B5 Construction Phase Services

B5.1 Construction Phase Services shall consist of providing such Construction Contract administration services and construction observation services during the construction of the Project as are described in this Article B5. Construction Phase Services shall commence with the award of the Construction Contract and shall terminate with the Anchorage School District's final acceptance of the Project, or approval of the Contractor's final invoice pursuant to the Contractor's satisfactory completion of obligations under this Agreement, whichever is later.

B5.2 As directed by the Project Manager, the Contractor shall participate in pre-construction conferences with the successful bidder.

B5.3 The Contractor shall consult with the Project Manager regarding the acceptability of the supervisory personnel, subcontractors and suppliers proposed by the Construction Contractor for various portions of the Work.

B5.4 The Contractor shall review and approve or take other appropriate action on schedules, shop drawings, samples, schedules of values, and other submissions of the Construction Contractor(s), as well as the Work performed by the Construction Contractor(s), for conformance with the design concept of the Project and for compliance with the Construction Contract Documents.

B5.4.1 The Contractor shall provide a submittal register listing the submittals required in format provided by Project Manager. The Contractor shall review and return submittals to the Construction Contractor expeditiously, but no later than fourteen (14) Days from date of receipt, except when otherwise authorized by the Project Manager. The Contractor shall coordinate directly with the Construction Contractor to obtain all submittals required by the Construction Contract Documents, and shall promptly notify the Project Manager concerning any submittals, or lack of submittals, which may affect the Project. The Contractor's approval of submittals must be in writing to the Project Manager and copied to the Construction Contractor. Approvals must contain Contractor's recommendation regarding any credit due the Anchorage School District for an item substituted by the Construction Contractor.

B5.4.2 The Contractor shall submit to the Anchorage School District for acceptance all recommended approvals for substitutions of specified products proposed by the Construction Contractor.

B5.5 The Project Manager will establish with the Contractor procedures to be followed for the review and processing of all the Construction Contractor's shop drawings, catalog submissions, Project reports, test reports, maintenance manuals, and other necessary documentation, as well as the Construction Contractor's requests for change orders and applications for extensions of time.

B5.6 The Contractor shall render to the Project Manager with reasonable promptness, interpretations of the requirements of the Construction Contract Documents which are submitted by the Construction Contractor as Requests for Information (RFIs). The Contractor's interpretations shall be consistent with the intent of, and reasonably inferable from, the Construction Contract

Documents. The Contractor's decisions in matters relating to artistic effect shall be consistent with the intent of the Construction Contract Documents. The Contractor's decisions set forth in response to RFIs which impact cost and schedule shall be approved by the Project Manager prior to the Contractor transmitting them to the Construction Contractor. The Contractor shall coordinate with the Anchorage School District's logs of RFIs, Proposal Requests, and Change Orders using owner-provided construction management software.

B5.6.1 Should errors, omissions or conflicts in the drawings, specifications or other Construction Contract Documents be discovered which are due to the Contractor's fault, the Contractor shall prepare and submit to the Project Manager such amendments or supplementary documents and provide such consultation as may be required, for which the Contractor shall make no additional charge, but may be subject to claim, from the Anchorage School District.

B5.7 As directed by the Project Manager, the Contractor shall research, review, and recommend for approval or disapproval the Construction Contractor's responses to requests for proposals or requests for change orders to the Construction Contract, and participate in Change Order negotiations.

B5.8 The Contractor will have access to the Work at all reasonable times. All site visits, observations, and other on-site activities by the Contractor shall be coordinated through the Project Manager.

B5.9 The Contractor is not responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work. Contractor is not responsible for any failure by the Construction Contractor to carry out the Work in accordance with the Construction Contract Documents. Nothing stated herein absolves the Contractor from the responsibility of observing construction to ascertain conformance of the Work with the Construction Contract Documents, as required herein.

B5.10 The Contractor shall make periodic visits to the construction site to observe the Work, per the agreed upon scheduled, for conformance with the Construction Contract Documents. Such visits shall be timed to coincide with the Project Manager's construction progress meeting with the Construction Contractor. A representative from each engineering discipline shall make periodic visits to the construction site no less than once every two weeks during the course of Work applicable to that discipline. Contractor shall not be required to make extensive or full-time on-site observations to check the quality or quantity of the Work as part of Basic Services, but shall make as many observations as may be reasonably required to fulfill its obligations to the Anchorage School District hereunder. The Contractor and each representative from each engineering discipline shall prepare a written field report on each visit and observations of the Work made during each visit. Each field report shall be submitted via the Contractor to the Project Manager, in a form acceptable to the Project Manager, within two (2) working Days of the respective visit.

B5.10.1 In addition to the foregoing, each of the engineering disciplines may be required by the Project Manager to make extended visits or have full-time personnel at the job site during critical phases of the Work. Such extended visits or full-time observation at the job site shall be Additional Services when directed, by written authorization, by the Project Manager.

B5.11 On the basis of on-site observations, the Contractor shall take the appropriate steps to attempt to guard the Anchorage School District against defects and deficiencies in the Work of the Construction Contractor. If the Contractor observes any Work that does not conform to the Construction Contract Documents, the Contractor shall immediately make an oral report of all such observations to the Project Manager. The Contractor shall confirm the non-conformance in writing to the Project Manager within three (3) Days of such observation.

B5.12 Only the Project Manager shall have authority to condemn or reject Work when in the Project Manager's or the Contractor's opinion the Work does not conform to the Construction Contract Documents. Such condemnation or rejection will be by written notice delivered to the Construction Contractor. Whenever, in the Project Manager's or the Contractor's reasonable opinion, it is considered necessary or advisable to ensure the proper implementation of the intent of the Construction Contract Documents, the Project Manager shall have the authority to require special inspection or testing of any Work in accordance with the provisions of the Construction Contract Documents, whether or not such Work is fabricated, installed or completed.

B5.13 Based upon observations at the site and upon the Construction Contractor's applications for payment, the Contractor shall determine the amount it believes the Anchorage School District owes the Construction Contractor(s) pursuant to the terms of the Construction Contract, and shall within seven (7) Days after receipt of an application for payment from the Construction Contractor, submit to the Project Manager a signed certificate for payment in such amount.

B5.13.1 The Contractor's signing of a certificate of payment shall constitute a representation by the Contractor to the Anchorage School District, based upon the Contractor's observations at the site and the data comprising the application for payment, that the Work has progressed to the point indicated, that to the best of the Contractor's knowledge, information and belief, the quality of the Work appears to be in accordance with the Construction Contract Documents (subject to: an evaluation of the Work for conformance with the Construction Contract Documents upon Substantial Completion; the results of any subsequent tests required in accordance with the Construction Contract Documents; minor deviations from the Construction Contract Documents correctable prior to completion; and to any specific qualifications stated in the recommendation); and that the Construction Contractor is entitled to payment in the amount stated in the recommendation. When required by the State of Alaska Department of Education and Early Development, and at the Project Manager's direction, the Contractor will provide the Project Manager with written certification when the Construction Contract is 50% complete in a format provided by the Project Manager.

B5.13.2 By signing a certificate for payment to the Anchorage School District, the Contractor shall not be deemed to represent that it has made any examination to ascertain how and for what purpose the Construction Contractor has used the moneys paid on account of the Construction Contract.

B5.13.3 The Project Manager shall consult with the Contractor regarding the determination of the amount due the Construction Contractor, and shall approve or disapprove the certificate for payment.

B5.14 The Contractor shall, when directed by the Project Manager, research, review and make recommendations regarding any claim submitted by the Construction Contractor.

B5.15 The Contractor shall be responsible for obtaining governing agency approval of its designs. If any exceptions arise related to the design, the Contractor shall endeavor to resolve the exception with the governing agency and provide its design services to correct the situation at no additional cost to the Anchorage School District. The Contractor shall not be liable for costs of design services if the exceptions are subsequent contradictions to a governing agency's previous approval and/or if the exceptions appear to be unreasonable in the Project Manager's judgement.

B5.16 Upon direction by the Project Manager following notice by the Construction Contractor that the Work (or portions of the Work) are substantially complete, the Contractor shall inspect the Work (or portions of the Work) and prepare and submit to the Project Manager typed punch lists of the

Work which is not in conformance with the Construction Contract Documents. The Project Manager will transmit such punch lists to the Construction Contractor(s).

B5.17 Upon direction by the Project Manager, following notice by the Construction Contractor that the Work or portions of the Work are finally complete, the Contractor shall conduct final completion inspections. Upon correction of all punch list items and acceptance of all other close-out submittals and certificates of the Construction Contractor, the Contractor shall approve the Construction Contractor's application for final payment and submit the signed certificate of final payment to the Project Manager for review and approval.

B5.18 The Contractor shall review and approve for completeness, clarity and accuracy, As-builts provided by the Construction Contractor showing significant changes in the Work made during the construction process, based on neatly and clearly marked-up conformed contract drawings, prints, and other data furnished by the Construction Contractor(s), responses to RFI's, periodic site visits, and change orders which occurred during the Work. Contractor shall deliver to the Project Manager a reproducible set of the approved Record Drawings and such electronic copies as are required by provision B3.5.7 herein.

ARTICLE B6 Additional Services

B6.1 The Architect shall provide selected Additional Services described in this Article B6, or as may be modified or supplemented in Article B8, only when the basis for ascertaining the compensation for such services is included either in Appendix C hereto or by subsequently issued Addenda and the services are authorized by a Notice(s) to Proceed.

B6.2 Additional Services may include, but are not limited to, the following:

B6.2.1 Upon the completion of the Schematic Design Services, the remaining Design Services may be divided to facilitate the bidding of separate trade contracts or the release of phased construction activities. The Project Manager shall have the right to determine whether there will be early, late, or phased release of construction contracts to meet funding and other Project constraints.

B6.2.2 Performing geotechnical site investigations, surveys, and/or platting services.

B6.2.3 Performing on-site observations of the Work which require extended visits or full-time personnel at the job site.

B6.2.4 Performing a preliminary energy audit in a format approved by the Project Manager. If the preliminary energy audit discloses opportunities for energy conservation, the Contractor shall develop and submit to the Project Manager a proposal to perform a detailed energy audit to identify technical solutions and the projected economic benefit of those solutions.

B6.2.4.1 If the Anchorage School District accepts a proposal submitted in accordance with provision B6.2.4, an Amendment covering the performance of the detailed energy audit must be executed before the Contractor will be entitled to any compensation therefor.

B6.2.4.2 If a detailed energy audit identifies economical solutions to conserve energy, the Contractor and the Anchorage School District may execute an Amendment covering the preparation of the necessary design and the inclusion of such design requirements in the Bid Documents within the basic bid or as an additive alternative bid.

B6.2.5 Providing start-up Commissioning assistance, including on-site observations and review of test data regarding the original operation of any equipment, and the operation of building systems during the initial occupancy and subsequent periods until proper operations are established. Such assistance may include determining responsibility for corrective measures or procedures as may be needed. If Commissioning reveals deficiencies caused by the Contractor's design, Contractor shall provide design services to correct the deficiencies at no additional cost to the Anchorage School District.

B6.2.6 Providing warranty inspections, as required, through the scheduled completion of the warranty period specified in the construction contract.

B6.2.7 Preparing an environmental assessment of the Project: obtaining federal, state and local review which must be obtained in accordance with applicable laws and regulations, and revising as necessary.

B6.2.7.1 Preparing an environmental impact statement (EIS) for the Project; obtaining federal, state and local reviews which must be obtained in accordance with applicable laws and regulations; revising as necessary; preparing any necessary design requirements; and, including such design requirements in the Bid Documents within the basic bid or as an additive alternate bid.

B6.2.8 Preparing Educational Specifications which conform to Anchorage School District Design Standards and Department of Education and Early Development requirements.

B6.2.9 Preparing a Life Cycle Cost analysis and recommendations for materials and building systems to be considered as alternatives to those established by Anchorage School District Design Standards and Technical Specifications.

ARTICLE B7 Anchorage School District Responsibilities

B7.1 The Anchorage School District shall, as applicable, provide the Educational Specifications for the Project, unless this task is identified as an Additional Service to be undertaken by the Contractor.

B7.2 The Anchorage School District shall provide the Contractor with access to the land on which the Project is to be constructed and the Work of the Construction Contractor as may be required in order for the Contractor to perform its services required under the Agreement.

B7.3 The Anchorage School District shall review documents submitted by the Contractor and render decisions pertaining thereto with reasonable promptness.

B7.4 The Anchorage School District shall furnish information and responses to Contractor's requests for approvals with reasonable promptness.

B7.5 The Anchorage School District shall provide all notices and advertisements inviting bids.

B7.6 The Anchorage School District shall provide all standard construction contract forms for incorporation into the Bid Documents.

B7.7 The Anchorage School District shall duplicate and distribute Bid Documents.

B7.8 The Anchorage School District shall receive and open bids and provide tabulation of bids.

B7.9 The Anchorage School District shall pay directly, or through the Construction Contractor, for all

permits, licenses, approvals, easements, assessments, and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

B7.10 The Anchorage School District shall pay for such structural, mechanical, chemical and other laboratory tests, inspections and reports as are required by law and which are not required to be paid by Contractor in this Agreement.

B7.11 The Anchorage School District shall decide all claims and disputes involving the Construction Contractor and the Anchorage School District, following its review of any related facts and recommendations submitted by the Contractor.

B7.12 The Anchorage School District shall furnish such legal, accounting, and insurance counseling services as it may deem necessary to preserve its interests in the Project.

ARTICLE B8 Additional Provisions

B8.1 Specifications provided by the Contractor shall follow the District's standards shown in attachment B to FPSA Appendix B.

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

Schematic Phase		Design Development Phase		Construction Document Phase	
NARRATIVE* - Executive Summary for Review * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	**Outline project objectives and process				
	**Describe design concept				
	**Compare proposed program space to ASD Educational Specifications, tabulating required and proposed areas and teaching stations in format acceptable to District		Update and finalize tabulations		Finalized tabulations
	Provide regulatory summary, describing design requirements related to all applicable building and zoning/land use codes and regulations, including local amendments: such as Title 21 implications		Update and finalize regulatory summary		Finalized regulatory summary
	Describe thermal envelope, giving R-values for roof, walls, grade floors		Finalize thermal envelope design R-values		Finalized thermal envelope design R-values
	Define Energy Budget (EB) based on comparable existing facility		Compare and finalize proposed design to EB		Finalized proposed design to EB
	Discuss adequacy of Owner-furnished data and identify additional information required.		Discuss adequacy of Owner-furnished data and finalize additional information required.		Finalized required information
	Chart Master Time Schedule. Using Microsoft Project. Include tasks, responsibilities, and the following Milestones as applicable: a/e selection; contract negotiations; budget analysis; Ed Spec verification; programming/concept design; site analysis; schematic design; design development; construction documents; all cost estimates; all agency reviews; permitting; bidding; conformed documents; construction award; phasing; construction; commissioning; occupancy		Update Master Time Schedule with each invoice.		Update Master Time Schedule with each invoice. Provide estimates of construction durations for basic bid and major additive alternate Work. Provide basis of duration estimate(s).
	**Provide Estimated Total Construction Cost				

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Geotechnical report and recommendations		Geotechnical report and recommendations		Geotechnical report and recommendations
NARRATIVE* - Detailed Provisions for Review * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Relate proposed design to ASD Technical Specifications and Design Standards criteria, justifying any deviation.		Relate proposed design to ASD Technical Specifications and Design Standards criteria, justifying any deviation.		Relate proposed design to ASD Technical Specifications and Design Standards criteria, justifying any deviation.
	Utility services existing and required for both temporary and permanent construction.		Utility services existing and required for both temporary and permanent construction.		Utility services existing and required for both temporary and permanent construction.
	Research hazardous materials history, identifying any known hazardous materials, and identifying potential scope of work.		Investigate, assess, delineate and quantify materials. Propose abatement methods.		Detail hazardous material removal or abatement methods.
	Describe proposed exterior and interior architectural materials, assemblies, systems and finishes.		Submit manufacturers data, catalog cut sheets, and regulatory approvals or tests as required.		
	Structural considerations, including seismic analysis of existing buildings and proposed strengthening techniques, floor and roof structural framing live and dead loads analysis.		Structural analysis and calculations		Update Structural analysis and calculations
	Describe mechanical design parameters, referencing Energy Budget. Describe design parameters and project scope for the following systems: heating, ventilation, air conditioning (HVAC), fire sprinkler, plumbing, and controls. For renovation projects clearly indicate which systems will or will not be included in the scope of the project.		Mechanical engineering type of heating system, heat loss and gain load calculations; cut sheets of major heating, ventilation and plumbing components.		Update mechanical engineering loads, calculations and cut sheets of major components.
	Air flow diagram showing where the (existing and new) air is going in the building and relief/exhaust/static, etc information		Verify and update the Air flow diagram		Final narrative

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Describe water service, sewer service and storm drain system connections to coordinate with utility and site Civil Design.		Update narrative.		Finalize narrative.
	Describe roof rain leader systems and connections with storm water system (drywell if any)		Update roof rain leader systems and connections with storm water system (drywell if any) per reports and recommendations.		Update roof rain leader systems and connections with storm water system (drywell if any)
	Provide video footage and drain inspection report (and rain leader pressure jet cleaning report) for roof STORM WATER drainage system. Reports to define work performed and recommendations.		Update narrative per reports and recommendations.		Update
	Provide video footage and drain inspection report (and sewer piping pressure jet cleaning report) for SEWER drainage system. Reports to define work performed and recommendations.		Update narrative per reports and recommendations.		Update
	Describe plumbing systems. Describe HVAC systems. Define any special systems for project including but not limited to well systems, fire pumps, fuel oil systems (or alternate fuel), propane systems and compressed air..		Update plumbing systems. Update HVAC systems.		Update plumbing systems. Update HVAC systems.
	Define Energy Conservation Measures, including Life Cycle Cost analysis (see Article B6), renewable energy options.		Update ECM and LCC analysis.		Update ECM and LCC analysis.
	Describe proposed controls systems, and coordination with existing where applicable.		Outline controls system and coordination with existing where applicable. Including but not limited to, roof drainage system heat traced with automatic controls, roof access security.		Update controls system narrative.
	Describe fire protection plan and systems.		Fire protection design load requirements.		Update fire protection load requirements.

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Describe electrical design parameters, including, but not limited to: Lighting, power, fire alarm, telecom, intercom/clock, sound systems, access control, security, and video surveillance.		Revise narrative to match updated project requirements.		Final electrical narrative.
	Estimate new and or upgraded service size based on historical demand data from utility.		Electrical engineering load and lighting calculations and cut sheets of major components.		Update electrical engineering load and lighting calculations and cut sheets of major components.
	Define emergency and standby power requirements and systems.		Calculate emergency and standby power requirements.		Update emergency and standby power calculations.
	Define other utilities and services required.		Finalize calculations for other utilities and services.		Finalized calculations for other utilities and services. Estimate operating utility costs, including gas, electricity, water and sewer
	Describe fall protection plan and systems		Outline system and coordination with existing where applicable.		Update fall protection narrative
	Determine Special Systems, their level of performance and quality (see Narrative Note 1)				
	Describe quality control system's check list		Implement quality control checklist.		Update quality control checklist.
	Identify any existing overgrown landscaping that may affect building footprint and roof parapets,		Describe existing overgrown landscaping for the building footprint and roof parapets,		Update description.
			Color selections for all exterior and interior finishes and materials		Color selections for all exterior and interior finishes and materials
					Color board(s) for all interior and exterior finishes and materials

NARRATIVE NOTE: 1. Special Systems are computer and telecommunication systems including, but not limited to, telephone, intercom, clock, television, public address/ sound, media retrieval, theatrical lighting and sound, access control and security.

SPECIFICATIONS*

* = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings
** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase.
(a) = See FPSA Article B4.1.1.1

	Create Table of Contents showing Technical Sections to be included, identifying major materials and systems in CSI format		Draft Technical Specifications, identifying material and system selections for each Section (CSI format)		Final Technical Specifications in hard copy and electronic format.

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
			Review ASD standard specifications, such as door hardware, doors, windows, shades, carpet, etc and use/modify as needed for project requirements. Clearly show what changes are made to ASD standard specs and indicate why changes are recommended		Final Technical Specifications in hard copy and electronic format.
	On Table of Contents, identify all project elements having impact on ASD Divisions 0 and 1, such as demolition.		Review ASD Division 0; recommend edits to ASD Division 1 in collaboration with ASD PM.		Update edits to ASD Division 1, including Bid Form and bid strategies such as additive alternates, allowances, unit prices, etc.
			Identify testing requirements, special inspections, replacement stock, and systems requiring commissioning in ASD Division 1 – General Requirements		Update and detail.
			Draft submittal register.		Finalize submittal register.
PERFORMANCE SPECIFICATIONS AND DRAWINGS* - FIRE PROTECTION (MECHANICAL) * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Specifications: Include fire protection sections in table of contents.		Specifications: Define sprinkler design parameters including, but not limited to, wet or dry, density, conditions of freezing or excessive heat, Zones/Hazard classifications, FM global requirements and utility connections. Determine requirements for seismically bracing existing system.		Specifications: Define submittal requirements including, but not limited to, sprinkler legend, piping and head layout, pipe sizes, zone valve locations and details, riser diagram, monitoring system connections, main drains, and backflow prevention.
	Drawings: Fire protection legend.		Drawings: Fire protection legend, abbreviations and notes.		Drawings: Fire protection legend, abbreviations and notes.
	Drawings: Identify areas of wet or dry sprinkler work.		Drawings: Overall plan indicating areas of work, hazard zone and FM global requirements if applicable.		Final plans.
	Drawings: Identify water service/fire riser locations and fire pump if applicable.		Drawings: Water service entrance schematic with sprinkler riser and backflow prevention.		Final piping schematics.

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

Schematic Phase		Design Development Phase		Construction Document Phase	
DRAWINGS* - GENERAL					
* = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings					
** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase.					
(a) = See FPSA Article B4.1.1.1					
			Title sheet showing project title, project address, ASD project number, Design Team		Update
	General notes, abbreviations, drawing and material conventions, vicinity map, drawing index, and code classification information (including occupancies, construction types, allowable and actual areas, applicable codes, etc.). Scope of work descriptions		Update. Summary scope of work per each discipline, per base bid and alternates (if any), separately.		Update
	Seismic recovery scope of work includes structure and non-structure (Architectural, Mechanical, and Electrical) drawings per seismic assessment report requirements.		Seismic drawings as needed for demolition, repairs, patches, and replacements, such as (but not limited to) site, floor, ceiling, and roof plans, elevations, sections, and details to match all related different disciplines' scope below.		Update
DRAWINGS * - CIVIL					
* = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings					
** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase.					
(a) = See FPSA Article B4.1.1.1					
	Surveyed plat including, but not limited to, legal description, property lines, easements, buffers, rights-of-way		Update		Update
	Survey of existing conditions including, but not limited to, topography, hydrology, drainage, structures, roadways, vegetation, utilities, 3-dimensional control points		Update		Update
	Proposed building(s) and site improvements including, but not limited to, athletic fields, waste collection and recycle holding, loading docks, bicycle racks, playground		Dimensioned locations of building(s) and site improvements off 3-D control points		Construction limits and staging area(s); Detailed building(s) and site improvements.
	**Master plan phases locating future relocatable buildings				Construction phasing and coordination where applicable (See Article B6)

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
			Preliminary grading and drainage including, but not limited to, storm water control, footing and rain leaders.		Final grading and drainage referenced to 3-D control points.
	Identify roof rain leader drainage systems and connections to the site storm water drainage system		Provide site drawings showing rain leader downspouts, drainage system, and storm water control		Final drainage referenced to 3-D control points. Details, including, but not limited to: manholes and cleanouts
	Schematic proposed utility routes and access to existing utilities		Preliminary utility layouts, details and locates referenced to 3-D control points		Final utility layouts, details and locates referenced to 3-D control points
	Vehicular and pedestrian access including, but not limited to, parking, drop-offs, bus loading, service, and off-site access		Dimensioned vehicular and pedestrian access with traffic control plan and snow storage location		Detailed vehicular and pedestrian access and traffic control referenced to 3-D control points
	Identify any required off-site improvements		Dimensioned layout of off-site improvements		Detailed off-site improvements referenced to 3-D control points
	Identify ADA-compliant accessible route(s) and parking locations		Dimensioned layout of site ADA-compliant improvements, details		ADA-compliant signage and striping
					Excavations, compactions, shoring, underpinning and retaining walls.
			Exterior lighting plans showing design foot-candles, orientation and exposure control.		Exterior lighting details
DRAWINGS* - LANDSCAPING * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Topographic base plan showing major existing and proposed site amenities and landscaping (a)		Planting plans and schedules, playgrounds and athletic fields		Soil preparations, planting and site amenities details, irrigation requirements, and protection of existing vegetation
	Identify any existing overgrown landscaping that may affect building footprint, building fascia, roof and roof parapets.				
DRAWINGS* - HAZARDOUS MATERIALS ABATEMENT * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

Schematic Phase		Design Development Phase		Construction Document Phase	
			Floor (roof) plans showing locations and types of hazardous materials. Including but not limited to, hazmat scope, locations, quantities and removal or abatement methods and details.		Update plans and abatement measures not covered by technical specifications
			Quantify materials removal or abatement.		Update the quantify materials removal or abatement.
DRAWINGS* - ARCHITECTURAL * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	**Depictions of general building mass, its relationship to site, scale and appearance.				
	**Overall floor plans showing, as appropriate, existing to be removed and new construction, room locations and square footage; for renovations, show existing to remain and to be removed; (a)		Update. Reference enlarged plans, building sections, exterior elevations.		Update
	(Demo and New) Floor plans of typical rooms showing equipment and furnishings (a)		Update plans and enlarged typical rooms. Freeze furnishings layer. Reference vertical assemblies, wall opening types and designations, interior elevations, wall openings, equipment and casework, details.		Update
					Photographs of existing conditions showing work items
	Fire and code plans showing existing and new rated walls, paths of egress, occupant loads, separations, pertinent code classifications and designated ADA-accessible routes.		Update, showing all floor plans, including basements, mezzanines, and fan rooms.		Update. Reference typical ADA details.
			Detail vertical and horizontal assemblies showing fire ratings and approved test numbers (UL, FM, etc.)		
			Schedule finishes		Detail finishes

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
			Schedule openings (doors, windows, relites, louvers, hatches, etc.) and hardware.		Detail openings.
			Identify and adjust the existing door closer locations on HVAC renovations		Detail
			Schedule roof sections		Update details
			Schedule equipment and casework.		Detail
			(Demo and New) Reflected ceiling plans indicating changes in ceiling to floor (or re-roof related) elevations and materials. (Enlarged plans, as necessary)		Ceiling and soffit details
	Typical representative building cross sections (a)		Complete building sections, referencing wall sections		Update
	Typical floor and wall assemblies		Typical wall sections, wall assembly R-. values, and details		Update and complete wall sections
			Typical interior elevations		Update and complete interior elevations. Details.
	(Demo and New) Roof plans (overall plan and detailed plans, as necessary) depicting roof exterior elements and objects. Includes verification of electrical raceway below deck. (a)		Roof plans to include, but not be limited to, slope, drainage, curbs, parapets, hatches , ladders, monitors and skylights, all equipment, penetrations, expansion and seismic joints, fall protection locations		Roof details. Reference on plans.
	Typical roof assemblies		Roof assembly R-values, and details		Update and complete details
			Enlarged vertical circulation plans and sections including, but not limited to, stairs, ramps and elevators		Details
			Determine and schedule required room numbering based on new construction or renovation per ASD standards		Miscellaneous details.
					1% Art, where integrated with project's permanent construction (see Article B4)

DRAWINGS* - STRUCTURAL

* = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings
** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase.
(a) = See FPSA Article B4.1.1.1

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Establish design loads; structural design to meet the current codes		Structural legend and notes, including code requirements and design criteria, special inspection requirements.		Update
	(Demo and New) Foundation structural framing plans with reference grids, systems and materials. Locate shear walls. (overall plan, as necessary)		Dimensions. Member sizes. Reference structural enlarged plans, and sections.		Reference structural details and schedules
	(Demo and New) Floor structural framing plans with reference grids, systems and materials. Locate shear walls. (overall plan, as necessary)		Dimensions. Member sizes. Reference structural enlarged plans, and sections.		Reference structural details and schedules
	(Demo and New) Roof structural framing, wind load, snow load plans with reference grids, systems and materials. Locate shear walls. (overall plan, foundation plan, as necessary)		Dimensions. Member sizes. Reference structural enlarged plans, and sections.		Reference structural details and schedules
			Dimensioned foundation plans		Reference foundation details
			Structural sections		Reference structural details
			Typical structural details		Complete and update structural details
			Typical structural schedules		Update schedules
DRAWINGS* - PLUMBING * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Plumbing legend, symbols and abbreviations		General notes		Finalize legend, symbols, abbreviations and notes.
	Plumbing schedules to include list of new fixtures and equipment.		Plumbing schedules indicating basis of design plumbing fixtures and equipment.		Final plumbing schedules.
	Plumbing site plan to Identify roof rain leader connections with storm water system (drywell if any). Identify utility connections. Show meter locations.		Site plan coordinated with Civil indicating routing of sanitary sewer, domestic water, storm drain and gas piping within 5 feet of building. Site plan shall indicate cleanout locations and storm drain overflow locations,		Final site plan, coordinated with Civil site plan.

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Show slab demolition for underfloor piping in remodel projects.		Underfloor piping plans with slab demolition indicated in remodel areas coordinated with architectural and structural footing and foundation plans indicated. Detail references.		Final underfloor piping plans. Slab demolition in remodel areas shall be coordinated with architectural and structural slab demolition. Final detail references.
	(Demo and New) Subfloor and floor plumbing plans, locating header(s), pipe chases, fixtures, equipment and special plumbing systems including but not limited to well systems, fire pumps, fuel oil, or compressed gas systems (propane, natural gas, air). Identify roof rain leaders and connections with storm water system (drywell if any). Show preliminary routing and sizing of main piping.		Subfloor and floor, plans showing, but not limited to domestic and waste water, rain leaders and their drainage slopes, vents, drains, cleanouts, special systems, penetrations. Enlarged plumbing plans including but not limited to toilet rooms, kitchens and mechanical rooms. Pipe labeled and sized, fixtures and equipment tagged to match schedules. Detail references.		Final subfloor and floor plans and enlarged plans with all piping sized and labeled, cleanouts and trap primer locations and access identified. Final detail references.
	(Demo and New) Roof plan showing roof drains and overflow drains.		Roof plans showing, but not limited to, roof drains, overflow drains (heat trace, if any), vents, gas piping, penetrations and curbs. Detail references.		Final Roof Plan, coordinated with Architectural roof plan. Final pipe sizes and detail references.
			Piping schematics and details for plumbing equipment. Including but not limited to water heaters, plumbing fixture risers, trap primer, vents, meters, pipe supports		Final plumbing piping schematics and details.
DRAWINGS* - HVAC * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	HVAC legend, symbols and abbreviations		General notes.		Finalize legend, symbols, abbreviations and notes.
	HVAC schedules to include list of equipment, including but not limited to, boilers, pumps, tanks, heat exchangers, coils, air handling equipment, terminal heating and ventilation equipment, noise reduction equipment and refrigeration equipment.		HVAC schedules indicating basis of design equipment.		Final HVAC schedules.

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	(Demo and New) subfloor, floor and roof plans; Show locations of existing equipment, heating piping or ductwork that is scheduled to be demolished. Show locations of new equipment and preliminary routing and sizing of main heating piping and ductwork.		Subfloor, floor and roof plans with all heating piping, ductwork and mechanical equipment. Enlarged to-scale plans, sections and elevations for mechanical rooms and/or equipment. Piping and ductwork labeled and sized, equipment tagged to match schedules. Roof plans, including but not limited to, boiler venting, roof mounted equipment, exhaust/relief hoods, air intake locations. Coordinate with Architectural reflected ceiling plans. Identify Maintenance access points. Reference details.		Final subfloor, floor, roof and enlarged plans, sections and elevations with all equipment, piping and ductwork, and access points sized, tagged, labeled and coordinated with Architectural. Final reference details.
	(Demo and New) Show locations of air intake, mixing, relief and exhaust for ventilation systems. Identify gravity return air paths. Identify special occupancy zones		Air Intake, mixing, relief and exhaust locations coordinated with building exterior elevations and sections. Coordinate package units with building systems.		Final air intake, mixing, relief and exhaust locations.
	(Demo) Piping schematics for mechanical equipment.		New piping schematics and details for mechanical equipment. Identify installation details.		Final piping schematics and details. Equipment curbs coordinated with Architectural. Final installation details.
	One line flow diagrams depicting mode of operations		One line diagrams depicting operations of various design conditions, including, but not limited to, fluid flow rates, temperature and pressures, other balancing/control information, list of operational requirements and set-points.		Control diagrams coordinated with sequence of operations.
	Demolition Drawings: Show locations of existing control panels, thermostats and sensors that are scheduled to be demolished.		Control panels identified on plans coordinated with electrical for power and data connections. New control sensors and thermostat locations identified. Coordinate with ASD BAS Contractor		Final control panel locations. Final sensor/thermostat locations and identification for associated equipment/zone.
DRAWINGS* - LIGHTING * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Electrical legend		Update electrical legend		Complete electrical legend

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Schematic fixture schedule with general description of fixture types		Fixture schedule with all fixture types and part numbers defined.		Completed fixture schedule
	Demolition Drawings: Show locations of existing site, emergency and interior light fixtures, switches and control that are scheduled to remain or be demolished. Include roof plan as required.		Update demolition drawings and notes.		Complete demolition drawings and notes.
	Show all new lighting control field devices (switches, occupancy sensors, etc.) Include roof plan as required.		All lighting controls shown on drawings. Include roof plan as required.		Circuiting for all light fixtures and complete panel schedules.
			Lighting details showing pertinent wiring diagrams, control details, and/or installation details.		Final lighting details.
	Show site lighting plan with exterior fixtures and illumination levels required.		Site plan including, but not limited to, lighting fixtures (quantities and types), poles, emergency lighting, and light levels.		Complete site plan.
	Interior lighting plan showing fixture types, quantities and illumination level required per room/area. Show all new lighting control field devices (switches, occupancy sensors, etc.)		Floor plans including, but not limited to, lighting fixtures (quantities and types) and switching layouts, emergency lighting and light levels. All lighting controls shown on drawings. Lighting		Complete floor plan
DRAWINGS* - ELECTRICAL POWER DISTRIBUTION * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Electrical Legend		Update Electrical Legend		Complete Electrical Legend
	Power Demolition Drawings: Show locations of existing electrical equipment (panels, receptacles, etc.) that are scheduled to remain or be demolished.		Update demolition drawings and notes. Verify existing panel(s), circuit(s), and schedule. Requiring opening the panel to verify circuits are available spares, instead of relying on the as-built schedule.		Complete demolition drawings and notes
			Power load calculations		Final load calculation.
			Fault current calculation		Final fault current calculation

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Electric vault location basic site electrical plan with utility transformer and service entrance equipment.		Update site plan		Complete site plan
	Show locations of new receptacles. Show locations of existing equipment requiring power.		Show all new equipment requiring power including, but not limited to, mechanical equipment, architectural equipment or owner provided equipment.		Final floor plans showing all equipment requiring power.
	Show locations of new main electrical distribution equipment and existing panels in work, including lighting.		Show all new and existing branch panels. Provide existing panel schedules. Provide blank panel schedules for all new and existing branch panels.		Circuiting for all equipment and complete panel schedules, including lighting.
	Identify and locate emergency or standby systems.		Emergency or standby load estimate		Complete emergency or standby wiring systems and final load
	Preliminary one-line diagrams, (demolition existing and new).		Revised one-line diagrams to include room numbers for panels and transformers.		Final one-line diagrams. Connection to FA, emergency or standby systems, security and HVAC. MCC details
	Locate and describe heat trace and control.		Basic details for installation including, but not limited to, heat trace control, grounding and trenching details		Complete details
DRAWINGS* - FIRE ALARM * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Connection to monitoring system		Device locations		Connection details including MCC, HVAC, elevators, door hardware, emergency or standby systems, BAS, and security.
	Fire alarm control panel location		Fire alarm panel, annunciator panel locations and proposed NAC booster/amplifier cabinets		All fire alarm control devices
	All initiating devices (pull stations and smoke detectors) All notification appliances (horn/strobes or speaker/strobes)		Update all initiating/notification device locations as design progresses. System needs calculations if more than 2 devices are added.		Final locations of all fire alarm field devices.

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Fire alarm code summary.				
DRAWINGS* - SPECIAL SYSTEMS (computer and telecommunication systems including, but not limited to, telephone, intercom, clock, television, public address/ sound, media retrieval, theatrical lighting and sound, access control and security) * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					
	Show locations of existing and new telecom rooms.		Layout of equipment in rooms. Indicate tie-in locations. Rack elevations, telecom backbone details. Note information for ventilation requirements.		Show backboard layout and connections, and ventilation
	Provide notes and plans for demolition coordination. Special systems demolition drawings.		Update special systems demolition drawings.		Final special systems demolition drawings.
	Show locations of existing and new head-end equipment for telephone, intercom, clock, television, public address/ sound, media retrieval, theatrical lighting and sound, access control and security. Locate and verify security sensor for roof access door or hatch.		Plans showing types and layouts of Special Systems, including backbone, cable trays and roof security. Identify equipment placement and device locations.		Detail connections
	Typical classroom layout for all special systems - show for one classroom.		Show device locations in all classrooms.		Final locations of all special systems devices
	All systems' device layout in all other rooms and areas.		Update all systems' device locations in all other rooms and areas including, but not limited to, corridors, MPR, gym and toilet.		Final all systems' device locations in all other rooms and areas.
	Preliminary one-line diagrams (demolition and new)		Full one-line diagrams for all special systems.		Final one-line diagrams for all special systems.
COST ESTIMATES* * = Each successive phase includes items from the previous phase; transfer technical and design data and keynotes from Narrative to DD and CD Drawings ** = When Conceptual Master Plan Design is required, provide and update at Schematic Design phase. (a) = See FPSA Article B4.1.1.1					

Deliverables Checklist
Attachment A to FPSA Appendix B

Instructions: 1. Please indicate Scope of Services by marking an "X" where included as part of the project.
2. Please DO NOT DELETE the non-used Scope of Services, use the strikethrough effect instead of deleting them.
3. Add and edit the project Scope of Services as needed.

School/Building Name Insert
Date Prepared Insert

	Schematic Phase		Design Development Phase		Construction Document Phase
	Provide Estimated Total Construction Cost		Provide Estimated Total Construction Cost, including bid strategies such as additive alternates, allowances, unit prices, etc. at 65% CD completion.		Provide Estimated Total Construction Cost, including bid strategies such as additive alternates, allowances, unit prices, etc. at 95% CD completion.
BID AND POST-BID SERVICES: CONSTRUCTION DOCUMENTS (Drawings and Specifications)					
	Bid Phase		**Post-Bid/Pre-Construction Period**		**Construction Phase**
	Addenda, including attached drawings and specifications		Conformed Construction Documents (see sections B3.5 and B5.5)		Supplementary Drawings in hardcopy and electronic format
POST-CONSTRUCTION SERVICE: (Drawings, Specifications and Reports)					
					Post-Construction Phase
					Project Record Documents – Includes record drawings, specifications and related documents. See Specification Section 01720 "Project Record Documents" for requirements. Provide "Roof Section Schedule" in PDF and digital format.
					Provide the Hazmat Response Action Report base on the AHERA manuals requirements.

Layout Margins
Normal:
Top: 1"
Bottom: 1"
Right:
Left: 1"

Section Name
Font – Arial, size 10, ALL CAPS, Centered, No Bolding

SECTION NAME
Division XX
Section XX XX XX

SECTION NAME

Header:
No Text Box or Table

Header/Footer Tab Tool Bar: Different Odd & Even Pages and/or Different First Page should not be selected
Right align
Font –Arial, size 10
Section Name, ALL CAPS,
Header from top setting: 0.5"
Insert one return after Section Number

PART 1. GENERAL

1.01 SECTION TITLE

A. Sentence case.

1. Sentence
2. Sentence

B. Sentence

1.02 SECTION TITLE

END OF SECTION

Body Text
Font – Arial, size 10
Alignment: Justify

Paragraph Settings:
Before: 0 pt
After: 0 pt
Line Spacing: Single

Insert 1 blank line after PART and between sub-paragraphs (except 1., 2., 3., and a., b., c.

Indents: 1/2 inch ***except*** PART titles

Each bullet or numbered sub-paragraph should be indented 1/2 inch

Indent PART Titles at 1 inch

END OF SECTION
Font – Arial, size 10 ALL CAPS, Centered

Two (2) spaces above END OF SECTION

Footer:
No Text Box or Table
No blank lines before or after Footer.

Footer Font – Arial, Size 9

Footer from Bottom: 0.5"

Abbreviate Elementary School, Middle School and High School in Footer only (ES, MS, HS)

In the Footer, set a Right Tab Stop at 6.5" for Section/Page Number. This will be on the same line as the Project Name.

After you type in the Section and Section Number insert a "space, dash, space," and Page number (Page X of Y, no Bolding) from the Header/Footer Tool Bar.

Basis of Compensation
Appendix C

Contract No: Date Prepared:

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

C1.1 Payments will be made based on invoices that are approved by the Anchorage School District and any applicable funding agency. To acquire approval of an invoice, the Contractor must submit the invoice in accordance with Article A5 of this Agreement and the following indicated (by checked box) schedule, which schedule is set forth in its entirety in the FPSA C Price Schedule pages 3 and 4. Regardless of the payment schedule agreed upon by the parties, payment shall be limited to the maximum allowable amount(s) stated herein. Provisions for audit are contained in Article A7 of this Agreement.

C2.1 The Contractor shall not be paid any markup of costs under this Agreement, except as allowed by provision C10.1 for the following:

C3.1 The Contractor has no right to any payment in excess of the maximum amount payable as stated in this Appendix, unless an Amendment providing for such increased payment has been executed by both parties and approved (if required) by the Anchorage School Board.

C4.1 Final payment to the Contractor may be withheld until the Contractor submits a fully-executed release of all claims under this Agreement, on a form(s) prescribed by the Anchorage School District.

C5.1 The Anchorage School District's List of Standard Definitions of Terms and Allowances for Costs is contained in this FPSA C Basis of Compensation. Any word or phrase defined on pages 1-4 shall be interpreted to have the meaning stated therein whenever such word or phrase appears in Appendix C and regardless whether such word or phrase is capitalized as it appears in the list of definitions.

LIST OF STANDARD DEFINITIONS OF TERMS AND ALLOWANCES FOR COSTS

C6.1 Cost Objective - A function, organizational subdivision, contract or work unit for which cost data are accumulated.

C7.1 Markup - A percentage of incurred expenses for specified direct costs which may be used as a basis of compensation for specified indirect costs (e.g., payroll benefits or overhead), or profit, or

both.

C8.1 Direct Cost - A specific cost identified with a single cost objective. Direct costs are segregated into two categories: direct salary costs and direct non-salary costs.

C8.2 Direct Salary Costs - The sum of actual compensation paid to all employees regardless of job classification when such employees are directly engaged in services necessary to fulfill the terms of this Agreement.

C8.2.1 The rates of pay for assignable productive time of principals and salaried personnel shall be commensurate with that which would be paid a hired professional with the qualifications necessary to perform the tasks assigned.

C8.2.2 Overtime costs, if approved by the Project Manager, are direct salary costs.

C8.3 Non-Direct Salary Costs – All items of expense directly incurred by, or attributable to, a specific project, assignment or task, such as:

C8.3.1 Fees paid for securing approval of regulatory authorities having jurisdiction over the Project. (Such fees may be paid directly by the Anchorage School District if requested by the Contractor, in which event no markup will be paid);

C8.3.2 Communications;

C8.3.3 Duplication of reports, drawings and specifications. Also included are duplication costs for revised submittals that were required by the Anchorage School District's changes in scope of the Project. (Duplication costs relating to revised submittals necessitated by Contractor's inadequacies are excluded);

C8.3.4 If specifically identified in this Agreement or, if authorized in writing by the Project Manager, actual costs of the following items: Subcontracts; transportation (economy rates/air-coach); per diem (Anchorage School District schedule and rates); incidental travel expenses, computer use at specified rates; equipment use at specified rates; specific materials and supplies; and other direct non-salary costs.

C9.1 Indirect Costs - Costs not directly identified with a single cost objective, but identified with two or more cost objectives. Indirect costs consist of expenses which, because of their incurrence for common or joint cost objectives must be prorated (allocated) to jobs or contracts using a specified markup based on incurred direct costs. Generally, indirect costs are segregated into two categories: payroll benefits and overhead.

C9.2 Payroll Benefits may include costs of items such as: vacation time and authorized leave; group and workers' compensation insurance; deferred compensation/retirement plans; social security and unemployment taxes; and group medical plan and life insurance premiums.

C9.2.1 Any markup for payroll benefits shall be derived as follows: The sum of actual and allowable costs for payroll burden during a base period (usually a fiscal year) divided by the sum of direct salary costs during the same period, expressed as a percentage.

C9.3 Overhead may include the following general and administrative (G&A) items, if they are not included in direct costs: general office administrative and supervisory wages; travel, food, lodging; communications; duplication costs; computer costs; business insurance premiums not billed to clients; office supplies; rent, heat, power, light, janitorial services; upkeep and depreciation of office equipment; rentals of equipment; and recruiting expenses.

C9.3.1 The following costs are generally not included as overhead: interest and other financial costs; bad debts; contributions and donations; fines and penalties; losses on other contracts; entertainment; contingencies; dividends; and income taxes.

C9.3.2 In determining individual items of cost which may be included as overhead, the following factors are considered:

Allocability - Cost is chargeable to one or more cost objectives, and it benefits the Agreement and is necessary to the overall operation of the business;

Reasonableness - Cost does not exceed that which would be incurred by an ordinarily prudent person in the conduct of competitive business;

Standards promulgated by the Federal Cost Accounting Standards Board; and

If this Agreement is supported by federal funds, Title 41, Parts 1-15, Code of Federal Regulations (CFR). (If a military funding agency, the Defense Acquisition Regulations [DAR] supersede the CFR.)

C9.3.3 Any markup for overhead shall be derived as follows: The sums of actual and allowable indirect costs during a base period (usually a fiscal year), divided by the sum of direct salary costs during the same period, expressed as a percentage.

C9.4 Compensation for indirect costs may be based upon separate markups for payroll benefits and overhead, or upon one markup which includes both factors. Markup(s), if used under the terms of this Agreement, may be subject to audit verification in accordance with Appendix A, Article A7.

C10.1 Negotiated Markup for Specific Cost Objective, or Profit, or Both - A negotiated markup is a markup other than a markup for indirect costs in accordance with provision C9.2.1 or C9.3.3. Most, if not all, costs incurred for administration and management of Subcontracts and other direct non-salary costs are generally compensated as part of the payment received for direct salary costs or markups for indirect costs. Therefore, compensation based on a negotiated markup will not be allowed under this Agreement, unless the specific expenses or profit represented by such markup are fully identified and the School District is satisfied, in its sole discretion, that compensation for such expenses or profit has not been included within compensation for direct salary or indirect costs.

PRICE SCHEDULE

C.11.1 Contractor will be paid by the method(s) checked below and at the fixed rates specified for personnel time or other unit of measurement. Such rates include all profit and costs, except for any direct non-salary costs allowed by provision C14.1, which may be payable in addition to fixed rate costs. Payments shall not exceed allowances as may be stated below. (NOTE: Schedules attached to this appendix shall list actual unit prices and/or billing rates which include all costs, and are not subject to markup for indirect costs or profit. Any conditions of such schedules which conflict with the Anchorage School District's standard conditions as contained herein shall be void.)

MAXIMUM ALLOWANCE FOR PHASE, TASK OR WORK PRODUCT	$
MAXIMUM ALLOWANCE FOR TIME AND MATERIALS	$
MAXIMUM ALLOWANCE FOR DIRECT NON-SALARY COSTS	$
MAXIMUM AMOUNT PAYABLE	$

C12.1 ☐ Progress Payments for Phase/Tasks/Work Products Completed

Progress payments will be made based on approved invoices which shall segregate costs for each phase, task or work product listed below or in attached schedules. The sum of payments for each phase, task or work product shall not exceed an amount equal to the fixed price multiplied by the percentage (as determined by the Anchorage School District) of the phase, task or work product completed, plus the sum of any reimbursements for direct non-salary costs.

PHASE/TASK/WORK PRODUCT	DATE TO BE COMPLETED	FIXED PRICE
SUBTOTAL-FIXED PRICES:		
ALLOWANCE FOR DIRECT NON-SALARY COSTS:		
MAXIMUM AMOUNT PAYABLE:		

C.13.1 ☐ Time and Materials Not to Exceed

Progress payments, equal to the number(s) of hours expended by each named individual or job classification multiplied by the applicable hourly billing rates in attached schedules, will be made based on approved invoices which shall fully substantiate the number of hours expended.

C14.1 ☐ Direct Non-Salary Costs

Payments for direct non-salary costs are limited by provisions C8.3 and C8.3.1 - C8.3.4. Additionally, the Contractor is hereby authorized reimbursement for the specific items listed below at the rates specified below or in attached schedules, or if not specified, of actual costs. Other items may be authorized in accordance with provision C8.3.4. Payments, to include any applicable markup if specified in provision C2.1, will be made based on approved invoices which shall fully substantiate costs.

Contract No:
Date Prepared:

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

ARTICLE D1 Indemnification

D1.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless, the Anchorage School District and the Municipality of Anchorage (hereafter in this provision D1.1 collectively referred to as "Anchorage School District") from and against any and all actual or alleged claims, actions, demands, or liabilities, damages, financial losses, costs or expenses, including reasonable attorney's fees, arising out of one or more negligent acts or failures to act by the Contractor which relate to this Agreement. The Contractor shall not be required to indemnify or hold harmless the Anchorage School District against an actual or alleged claim, action, demand, liability, damages, financial loss, cost or expense arising out of the Independent Act or Failure to Act of the Anchorage School District. If there is a claim, action, demand, liability, damages, financial loss, cost or expense arising out of the joint act or failure to act of the Contractor and Independent Act or Failure to Act of the Anchorage School District, this indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. The term "Independent Act or Failure to Act" as used herein means an act or failure to act by the Anchorage School District other than the following: The selection of Contractor, the administration of the Agreement, the observation of the Contractor's services performed or work product produced under the Agreement; the review, approval or acceptance of the Contractor's services or work product; the observation of the Contractor's administration of the Construction Contract; or the observation of the Contractor's observation of the Construction Contractor's Work under the Construction Contract.

ARTICLE D2 Insurance

D2.1 The Contractor shall purchase at its own expense and maintain in force at all times for the duration of the Agreement, plus two years following the date of final payment, the policies of insurance identified in provisions D2.1.1 - D2.1.5. Where specific limits are identified below, the Contractor acknowledges that those limits are the minimum acceptable limits. If a policy contains higher limits and broader coverage, the Anchorage School District shall be entitled to the higher limits and broader coverage. Certificates of insurance must be furnished to the Anchorage School District and incorporated into the Agreement with copies attached to this Appendix D. All certificates must provide for a 30-day prior written notice to the Anchorage School District of cancellation or reduction in any limits of liability. Failure to furnish certificates of insurance or lapse of a policy is a material breach of this Agreement and grounds for termination of the Contractor's services, and may preclude other agreements between the Contractor and the Anchorage School District. The Contractor shall require and verify that all subcontractors meet the insurance requirements as stated in D2 Insurance.

D2.1.1 Workers' Compensation Insurance: For all employees of the Contractor engaged in providing services under this Agreement, Workers' Compensation Insurance as required by AS 23.30.045 or the statutes of other states in which Contractor's employees are working, or both. $1,000,000 Each Accident Limit/$1,000,000 Disease Policy Limit/ $1,000,000 Disease Each Employee. Contractor shall also provide Employer's Liability Insurance in an amount not less than $1,000,000. Where applicable, the Contractor shall provide the insurance coverage required by all federal law (e.g., U.S.L. & H. and Jones Acts/$1,000,000 Maritime Limit).

D2.1.2 Commercial General Liability Insurance: Such insurance shall cover all operations by, or on behalf of, the Contractor and provide insurance for bodily injury and property damage liability, including coverage for premises and operations products and completed operations, contractual liability, broad form property damage, and personal injury liability. The minimum limit of liability required is $1,000,000 per occurrence, $2,000,000 aggregate for bodily injury and property damage and $1,000,000 personal and advertising injury.

D2.1.3 Commercial Automobile Liability Insurance: Such insurance shall cover all owned, hired and non-owned, uninsured/underinsured, with coverage limits not less than $1,000,000 combined single limit for bodily injury and property damage per accident.

D2.1.4 Professional Liability Insurance: Covering all negligent errors or omissions which the Contractor, subcontractor or anyone directly or indirectly employed by them, make in the performance of this Agreement which result in financial loss to the Anchorage School District. The Contractor shall require provisions of this Article in all first tier Subcontracts of land surveyor, architectural, and civil, structural, mechanical, and electrical professional Subcontractors so as to be binding on all such first tier Subcontractors. Minimum limits required are per the following schedule:

Maximum Amount Of Agreement	Combined Per Claim & Annual Aggregate
$0 to $999,999	$1,000,000
$1,000,000 and Over	Negotiable
COVERAGE FOR THIS AGREEMENT:	**$X,XXX,XXX**

D2.1.5 Umbrella/Excess Liability Limits of $1,000,000 **(higher limits when required depending on size of contract size)** Occurrence $1,000,000 and $1,000,000 Aggregate over primary liability policies: Commercial General Liability, Commercial Auto and Employers Liability

D2.1.6 General Insurance Requirements: Certificates of Insurance must include the following statements:

A. All policies, except Professional Liability and Workers' Compensation, have been endorsed to add the Anchorage School District and the Municipality of Anchorage as Additional Insureds, Commercial General Liability to include products and completed operations. The Contractors/subcontractors insurance is Primary and Non-Contributory and Anchorage School District and Municipality of Anchorage polices are considered as excess.

B. All policies, except Professional Liability, have been endorsed to waive the insurer and insured's right of subrogation against the Anchorage School District and Municipality of Anchorage.

C. Provide the Contracting Officer, Anchorage School District, with at least thirty (30) days written notice of any material change, cancellation or non-renewal of the policy(s) during the Contract period. Certificate of Liability Insurance shall be current ACORD 25-S form, referencing Anchorage School District project number and "description", and name Certificate Holder as:

Anchorage School District
Capital Planning & Construction
1301 Labar Street
Anchorage, AK 99515

ARTICLE D3 Modification of Insurance Requirements

D3.1 If the provisions of Article D2 are modified for this Agreement, written justification and approval by the Anchorage School District, Capital Planning & Construction and written approval by the Contractor are required in the spaces indicated below. Check the appropriate box below and complete the following, if applicable.

MODIFICATION NOT APPLICABLE:	X
MODIFICATION APPROVED:	

IDENTIFY AND JUSTIFY MODIFICATIONS.

Continue on Additional Sheets as necessary and attach to this Appendix D.

NOT APPLICABLE

MODIFICATION(S) APPROVED:

ANCHORAGE SCHOOL DISTRICT
CAPITAL PLANNING & CONSTRUCTION

NOT APPLICABLE, NO MODIFICATIONS _____
Signature ASD Representative Date

CONTRACTOR

NOT APPLICABLE, NO MODIFICATIONS _____
Signature, Contractor Date

Name: _____

Firm: _____

Title: _____

Project Staffing and Subcontractors
Appendix E

Contract No:
Date Prepared:

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

ARTICLE E1

E1.1 Contractor shall perform all professional services required under this Agreement through its own staff members, or through the Subcontractor(s) listed below in provision E1.3, or as may be allowed in accordance with Appendix A, Article A14.

E1.2 If one or more individual members of Contractor's staff are listed below, such staff member(s) shall perform or supervise the performance of services required hereunder in the position identified, and such staff member(s) shall not be replaced or substituted unless the Contractor receives written approval thereof from the Project Manager.

Staff Member	Position

E1.3 If one or more Subcontractors or individual staff members of a Subcontractor, or both, are listed below, such Subcontractor(s) or individual staff member(s) of the Subcontractor shall perform or supervise the performance of services required hereunder in the position identified, and such Subcontractor(s) or staff member(s) shall not be replaced or substituted unless the Contractor receives written approval thereof from the Project Manager.

Service/Engineering Discipline	% Total Services	Subcontractor	AK Business License No.

Staff Member	Position	Subcontractor

Master Time Schedule
Appendix F

Contract No:
Date Prepared:

ANCHORAGE SCHOOL DISTRICT

FORMAL PROFESSIONAL SERVICES AGREEMENT

F1.1 Time is of the essence of each and every provision of this Agreement for which a specific time period is set forth for the performance of any act, duty or obligation.

F2.1 The parties may modify this Master Time Schedule in accordance with and under the conditions set forth in Article A6 ("Changes to the Agreement").

F3.1 Attached or below is the time schedule, current as of the last date of signature by the parties, and according to which the Contractor has agreed to provide the specified services, as well as the critical dates by which certain identified tasks are to be performed.

CONTRACTOR:		**ANCHORAGE SCHOOL DISTRICT**	
By:	_____	By:	_____
Its:	Principal	Its:	Project Manager
Date:	_____	Date:	_____

Anchorage School District

Capital Planning & Construction
1301 Labar Street• Anchorage, AK 99515 • 907-348-5190 • www.asdk12.org/capitalplanning

Maintenance and Operations Acceptance of Roof Standards

I, Darin Hargraves, Senior Director of Maintenance & Operations (M&O) for the Anchorage School District (ASD), have shared the ASD Roof Standards with the appropriate maintenance groups for acceptance.

M&O does not have any objections, with these being the standard for design. M&O understands that these standards will be in place for at least the next three (3) years.

Darin Hargraves

Senior Director of Maintenance & Operations

06 / 15 / 2021

Date of Acceptance

1 STATEMENT OF PURPOSE

1.1 The purpose of Anchorage School District's Design Guidelines and Standards is to communicate to its professional architectural and engineering consultant's basic design requirements for its facilities.

2 BASIS OF DESIGNS

2.1 SCOPE: This section applies to the general requirements for the design and installation of roofing systems in coordination with other systems.

2.2 Ensure roof design complies with Municipality of Anchorage (MOA) and the State Department of Education and Early Development (DEED) requirements.

2.3 DESIGN CRITERIA:

2.3.1 Items of influence in roof design include, but are not limited to:

- Protection of building entries and exits, including loading docks and service entries
- Selection of roofing materials
- Building aesthetics
- Fire rating required of the roof surface
- Roof drainage system and stormwater management
- Roof structure loads (such as snow, wind, and seismic)
- Impact loads on adjacent lower roofs
- Potential snowdrift, seismic joints, and separation
- Potential hazardous materials
- Access for roofing & equipment maintenance
- Fall protection

2.3.2 The minimum planned life expectancy for membrane roofing systems including joints and flashings is 30 years; shingle roofing is 40 years; metal roofing is 50 years before major upgrade or replacement.

2.3.3 Roof assembly and covering classification: Class A fire rating is desired.

2.4 ROOFING SYSTEM DESCRIPTIONS

2.4.1 LOW SLOPE ROOFING SYSTEM

2.4.1.1 This roofing system is typically low-slope, fully adhered, or mechanically attached to the structural deck. The roof assembly consists of:

- Single-ply, fully adhered membrane EPDM (Ethylene propylene diene monomer) is preferred. Single-ply TPO (Thermoplastic Polyolefin) and Multi-ply BUR (Built-up Roof) requires approval from Capital Planning & Construction (CP&C).
- Cover board (high-density, noncombustible, water-resistant, gypsum roof board or mineral fiberboard) or high-density Polyiso cover board.
- Tapered rigid insulation (per new designed roof slope)
- Flat rigid insulation
- Air barrier/vapor retarder

- Baseboard - fire separation board
- Structural deck

2.4.2 SLOPED ROOFING SYSTEM (Warm Roof)

2.4.2.1 This roofing system is typically 4:12 slope or greater and mechanically attached to the structural deck. The roof assembly consists of:

- Water shedding membrane (asphalt shingles, or metal roofing)
- Waterproofing (self-adhering underlayment) adhered to cover board
- Cover board - Plywood
- Flat rigid insulation
- Air barrier/vapor retarder
- Baseboard - fire separation board
- Structural deck

2.4.3 SLOPED ROOFING SYSTEM (Ventilated Cold Roof)

2.4.3.1 This roofing system is typically 4:12 slope or greater and mechanically attached to the structural deck. The roof assembly consists of:

- Water shedding membrane (asphalt shingles or metal roofing)
- Waterproofing (self-adhering underlayment)
- Plywood sheathing
- Air space per code
- Fiberglass insulation under the air space typically in the lower part of the joist space.
- Vapor retarder at the bottom of joists
- Gypsum board

3 DESIGN REQUIREMENTS

3.1 GENERAL

Roofing systems require insulation above the heated interior space of the building. Complying with local energy codes required by the MOA and the State Department of Education and Early Development (DEED), whichever is more stringent.

3.1.1.1 Insulation shall be separated from the building's heated interior by a vapor retarder. See 4.1.2 INSULATION for additional roof insulation requirements.

3.1.2 The roofing system shall be designed to remain in place for wind loads required by the MOA.

3.1.3 Roofs that do not shed water, ice, and snow off eaves will require roof drains, overflow roof drains, and rain leaders.

3.1.4 Provide existing roof deck slope and height on the roof plan in lightweight texts or data.

3.2 LOW-SLOPED ROOFS

3.2.1 New low-slope roofs require 3/8 inch per foot minimum slope for the first 50% (30% for roof sections larger than 6,000 square feet per roof drain) of the total slope from drains; 1/4 inch per foot for the remainder slope, if feasible, dependent on parapet height, building profile, cost-effectiveness, and other project-specifics. Review the conceptual roof design with CP&C for approval at or before the 35% schematic design phase.

3.2.1.1 New low-slope roofs require a minimum 1/4 inch per foot slope at all roof and cricket valleys.

3.2.1.2 Typically roof drainage design should utilize 45-degree angles from drains where feasible.

3.2.2 Incorporating roof slope with structure in new buildings is often more cost-effective than achieving the required slope with tapered insulation on flat structure only. Avoid using structure to slope to bearing walls as this causes conflicts with roof drainage. Use tapered insulation as crickets between drains to avoid troughs where water can accumulate.

3.3 HIGH-SLOPED ROOFS

3.3.1 Snow and ice releases from metal roofs can be hazardous to the public and facility. Roof designs shall only allow potential releases to fall on lower roofs.

3.3.2 Provide self-adhering ice and water shield under asphalt shingle and metal roofs to provide continuous coverage over structural roof decking, including eaves and canopies.

3.4 SKYLIGHTS AND CLERESTORY WINDOWS

3.4.1 Generally, the use of roof skylights is not allowed and requires CP&C approval. Light tubes may be considered in coordination with Planning & Design. New clerestory windowsills shall be located at a minimum of 24 inches above the roof assembly intersection with the clerestory wall.

3.4.2 Existing roof replacement, provide a minimum 8 inches height from top of sills to top of roof assembly finish. Coordinate with mechanical to provide HVAC and fire protection for clerestory walls.

3.4.2.1 Some roofs have existing skylights that may contain artwork from the 1% for Art Program, verify with CP&C.

3.5 LANDSCAPING

3.5.1 Landscaping trees that can grow above the roof edge are not allowed within 30 feet of the roof edges.

3.6 ROOF ACCESS

3.6.1 All roof areas are to be accessible for maintenance. Provide OSHA compliant roof hatch or door access per every 50,000 square feet or, at a minimum, one roof hatch or access door per facility, including all existing and new construction.

3.6.2 Provide access to all roof areas via secured doors, roof hatches, or exterior wall/parapet mounted ladders from roof to roof. Small entry canopies may be exempted with approval from CP&C.

3.6.3 Roof access door sill shall be 8 inches minimum and 12 inches maximum to avoid installing a ladder rung or step down above adjacent roof surface.

3.6.4 Roof hatch curbs shall be 8 inches minimum and 12 inches maximum above the top of the roof assembly.

3.6.5 Avoid locating new roof access hatch and ladder on the pitched roof.

3.6.6 Provide a fully integrated connection to the security system for all roof hatches and access doors.

3.6.7 Provide locations of roof access points on the floor plan.

3.7 ROOF LADDER

3.7.1 Provide fixed ladder access to low-slope roofs with differentiating levels (from roof finish to top of parapet) 24 inches or greater in height. Provide roof access per IMC code. All fixed ladders, access, railing, and guards shall be OSHA compliant.

3.8 ROOF DRAINS

3.8.1 Roofs with drains and overflow drains should coordinate with existing rain leader piping, dry well, or storm drains to minimize backup conditions.

3.8.2 Roof drains (above interior spaces) should always be located above heated areas of the building. Use heat trace on roof drains as a last resort, coordinate with electrical.

3.8.3 Roof drains for low slope roofs shall be located no closer than 6 feet from the building perimeter. If unable, due to structural or other issues, drains may be located to no less than 30 inches with CP&C approval.

3.8.4 No retrofit drains allow for roof renewal projects.

3.8.5 Horizontal rain leaders are prohibited above structural roof decking.

3.8.6 CP&C prefers drains and overflow drains to be separated by roof slope. If not possible, the use of a common sump is acceptable.

3.8.6.1 Provide min: 3/8” slope or double the roof slope at drainage sump area. Avoid flat roofs within the sump area.

3.8.6.2 Provide minimum distance per roof sump slope or minimum 48 inches between roof drain and overflow drain.

3.8.6.3 Provide a minimum 2 inches overflow drain above the primary roof drain. Avoid using 2 inches overflow rings unless conditions do not allow.

3.8.7 When existing low slope roofs are constructed with roof drains and/or scuppers near roof edges, the scuppers and drains shall be replaced with drains and overflow drains.

3.8.7.1 Parapet scuppers and drainage to dry wells are not recommended for large roof areas in place of overflow drains and require CP&C approval.

3.8.7.2 Parapet scuppers are acceptable on small roof areas, such as canopy roofs. If scuppers are utilized for canopies, the stormwater shall be managed not to allow water on walking surfaces.

3.8.8 Drainage shall be through roof drains and rain leaders to existing storm drains. Use of additional or new dry wells for the existing facility requires approval from CP&C.

3.9 FALL PROTECTION

3.9.1 Fall protection must meet current OSHA 1910 Subpart D Walking Working Surfaces and ANSI/ASSE Z359 standards. Refer to ASD Fall Protection design options. Coordinate options with CP&C.

3.9.2 Design of fall protection systems shall be by a qualified consultant meeting the following minimum requirements:

3.9.2.1 The consulting firm shall be registered as a professional engineering firm and not a manufacturer, distributor, installer, or supplier of access systems, anchors, anchorages, or anchorage connectors.

3.9.2.2 The lead consultant(s) shall be a licensed professional engineer(s) and demonstrate an understanding of current industry best practices and applicable regulations and standards, including OSHA regulations and ANSI standards.

3.9.3 Minimum fall protection is required at, but not limited to, specific roof locations:

3.9.3.1 Provide high visible strips at minimum 6'-0” away from roof edges and higher-level roofs above 4 feet in height.

3.9.3.2 Fall protection anchor point:

3.9.3.2.1 Provide a fall protection anchor point or guardrail at the top of the ladder area where roof level at 6’-0” height and above, minimum 6’-0” away from the roof edge and 2’-0” offset on either side of the ladder.

3.9.3.2.2 If the above items do not apply, provide a minimum of one fall protection anchor point per facility roof. Design consultants and

ASD project manager should discuss the design with ASD Maintenance Department.

3.9.3.2.3 Provide an indicator flag 2'-0" above the top of the roof anchor point.

3.10 ROOF PENETRATION

3.10.1 Minimize roof penetration is the priority consideration. Coordinate with mechanical and electrical design for minimizing rooftop equipment and utility penetrations.

3.10.2 Plumbing vents through the roof (VTRs) shall have a vent opening 12 inches minimum above the roof assembly's finished top. All the sleeved connected height overlaps shall be made at or below roof assembly. Couplers shall not be visible above roof assembly.

3.10.3 Mechanical roof curbs shall extend a minimum of 12 inches above the top of the roof assembly.

3.10.4 The lowest point of curb mounted ventilation air intakes and curb mounted ventilation equipment air intakes shall be 24 inches minimum above the top of the roof assembly.

3.10.5 The lowest point of curb mounted ventilation air reliefs or exhausts and curb mounted ventilation equipment air reliefs, or exhausts shall be 18 inches minimum above top of the roof assembly. Applicable to clothes dryer exhausts and non-grease laden range hood exhaust.

3.10.6 The lowest point of ventilation air openings inside walls; intakes shall be located 30 inches minimum above top of the roof assembly. Relief or exhaust openings inside walls shall be located 24 inches minimum above the top of the roof assembly.

3.10.7 Roof Penetration Schedule is required when the total number of roof penetrations is ten and above.

3.10.8 Diversion cricket is required on the uphill side of all roof penetrations greater than 2'-0" wide.

3.10.9 Gas line key point supports should attach to the roof deck. The supports are not allowed to rest on the roofing assembly only.

3.11 ROOF PARAPET AND FLASHING

3.11.1 Typical metal flashings and copings shall be minimum of 10 feet in length; splices shall use a backer plate such that the coping will have a continuous drip line on both inside and outside face.

3.11.2 Parapet copings shall slope to inside, have face drip attached over a continuous hold-Down cleat, and be secured on the inside with coated steel screws with neoprene washers at 12 inches o.c. maximum. Coping faces over 6 inches high shall have color matching face screws at 12 inches o.c. maximum.

3.11.3 The sloped space beneath the parapet cap and seismic joint shall be supported by durable material such as beveled cedar or high-density foam.

3.11.4 New parapet height shall be a minimum of 8 inches (clearance) from the top of roof assembly to the top of the parapet.

3.11.5 Provide in-wall blocking parapet for mounting of ladders, weather-heads, electrical boxes, etc.

3.12 WALKING PADS

3.12.1 Exposed single-ply membranes shall have walking pads installed around the part of the rooftop mechanical units work area, at all ladder access landings, where shedding ice could damage the roof membrane.

3.13 ROOF SECTION NAMES:

3.13.1 Roof section naming shall meet ASD naming standards. When a project is full roof replacement or a new school.

3.13.2 FOR TYPICAL ROOF SECTIONS

3.13.2.1 Use capital letters only, and do not use numbers. Sample name: A, B, C… New roof construction starts in Plan Northwest and names the roof sections consecutively clockwise.

3.13.2.2 Use double capital letters only after 26 alphabets have been used. Sample name: AA, BB, CC.

3.13.2.3 If the same roof assembly separated by construction or expansion joints, or parapet at the same or similar level, add orientation letters. Sample name: AS, AE, AN, AW.

3.13.3 FOR DIFFERENT LEVEL ROOFS:

3.13.3.1 Such as canopy, or mechanical roofs, add the letter L or H at the adjacent roof. Sample name: AL, AH.

3.13.3.2 If one side of the roof edge has more than one canopies, add a number on the above 3.13.3.1 designated roof section name. Sample name: AL1, AH2.

3.13.4 FOR OVER STRUCTURAL FRAMING ROOFS:

3.13.4.1 Add a letter O on the base roof section name. Sample name: AO, BO

3.13.4.2 If one roof section has more than one over-structural framing roof, add a number on the above 3.13.4.1 designated roof section name.

3.14 ROOF SECTION SCHEDULE

3.14.1 Provide Roof Section Schedule for all re-roof design and construction projects. Refer to the Sample of ASD Roof Section Schedule.

3.14.2 The column of “Roof Above Room Names and Numbers” is a list that is required for major space names as bold texts. These room names are required below: **Main**

Entrance Lobby, Boiler Room, Fan Room, Electrical Room, Nurse Office, Main office, Library, MPR (Multiple Purposes Room), and **GYM** (Gymnasium).

3.14.3 ASD Sample of Roof Section Schedule is editable per individual re-roof conditions.

3.14.3.1 The column of “Roof System” indicates Roof System Classified (From top layer material down) - Sublayer primary material - Additional Notes.

3.14.3.2 The column “Year Replaced/Built” indicates the latest year of a roof assembly, and the year should be the project's substantial completion.

3.14.3.3 The columns left to right are based on the roof assembly information from top to down order. The material orders can be edited per the new roof assembly design.

3.15 ROOF FIRE SEPARATION

3.15.1 Provide roof fire separation on roof plan per codes if applicable.

3.16 ROOF ELEVATIONS

3.16.1 Provide existing structural deck elevations, such as x’-x” (E)

3.16.2 Provide new structural deck elevations.

3.16.3 Provide existing parapet wall heights, such as x’-x” (E)

3.16.4 Provide new parapet wall heights.

4 PRODUCTS, MATERIAL, AND EQUIPMENT

4.1 EXPOSED MEMBRANE ROOFING SYSTEM (LESS THAN or equal to 3:12 SLOPE)

4.1.1 MEMBRANE

4.1.1.1 Single-ply Elastomeric Roofing: minimum 60-mil reinforced or non-reinforced 90-Mil EPDM; preferred 90-mil EPDM for all exposed roofing area; 60-mil EPDM allowed for all non-exposed areas or auxiliary membrane roofing materials.

4.1.1.2 Membrane shall be fully adhered to cover board; cover board shall be fully adhered.

4.1.1.2.1 EPDM fully adhesive adhered to the cover board. The cover board shall be adhered to the insulation; mechanical fastening shall not include the cover board.

4.1.1.2.2 Mechanical fastening, when used, shall be either on the first layer of Insulation (adhering to subsequent layers) or the entire depth of insulation through the vapor barrier and roof deck.

4.1.1.2.3 Prior to adhering to the membrane, the cover board shall be cleared of all debris.

4.1.1.2.4 Provide material physical properties and technical data of design criteria for membrane in design specifications.

4.1.1.2.5 Field seams shall be sealed with seam tape and sealant.

4.1.1.3 The roof membrane should extend a minimum of 2 feet up from the roof exterior wall base and a minimum of 6 inches overlapped with the exterior wall membrane where feasible. See 3.11.4 above for parapet requirement.

4.1.1.4 A mechanical attachment plan for the specific project wind loads shall be submitted by the manufacturer supplying the roofing system warranty.

4.1.2 INSULATION

4.1.2.1 Provide material physical properties and technical data of design criteria for all types of insulation in design specifications.

4.1.2.2 The minimum R-Value per inch allowed in figuring the required rigid insulation thickness is:

- R=4.35@25 degree F per inch for 1 pound density, Type I, Expanded Polystyrene (EPS), requires CP&C approval.
- R=4.76@25 degree F per inch for 1.5 pound density, Type II, Expanded Polystyrene (EPS)

4.1.2.2.1 Polyisocyanurate (Polyiso) insulation value decreases R-value with cold temperatures. If specifying Polyiso, provide a higher R-value to accommodate a long-term decrease in R-value.

4.1.2.2.2 Polyiso insulation should be coated by glass fiber facer on both sides, and the paper facer is limited.

4.1.2.3 The manufacturer's recommended adhesive shall be required for EPS. The use of hot materials is not allowed.

4.1.2.4 Tapered roof insulation is applied only on top of flat stock insulation.

4.1.2.5 The existing snow-drift roof area where structure over framing is required provides R-value equal to the existing roof assembly.

4.1.2.6 New snow-drift roof area where structural over framing is required, provide minimum insulation R-value per local building and energy code requirements.

4.1.2.7 Provide minimum R-Value at roof drains per code. Indicate insulation thickness at each drain on the roof plan or roof section schedule.

4.2 SLOPED ROOFING SYSTEM (greater than 3:12)

4.2.1 ASPHALT SHINGLE ROOFING:

4.2.1.1 Shall be ANSI/ASTM D3018, Class A, SBS modified asphalt shingles surfaced with mineral granules w/glass fiber matt base.

4.3 METAL ROOFING

4.3.1 LENGTH

4.3.1.1 Up to 12 feet in length – Exposed fastener metal roofing should be avoided. Up to 30 feet in length – Concealed fastener metal roofing such as 24 gauge (minimum).

4.3.1.2 Up to 100 feet and higher in length – Requires metal roofing with concealed fasteners clips, which permits longitudinal thermal movement of metal roofing panels through non-abrasive sliding connection with clip bases. Steel metal roofing must be 24 gauge or aluminum, 0.040-inch thickness, a minimum, 16 inches wide metal panels.

4.3.1.3 Metal roofing panels shall be one continuous length with no lap joints.

4.3.2 Metal roofing shall have continuous ice & water shield underlayment.

4.3.3 See similar material requirements for metal roof assembly design.

4.4 MATERIALS:

4.4.1 Material locally obtained or supported is preferred.

4.5 FINISHES

4.5.1 Parapet copings, metal flashings, and metal roofing shall be a minimum 24-gauge galvanized metal pre-finished with polyvinylidene fluoride (PVF) baked-on finish a minimum of 1.0 mil dry film thickness. Copings shall be factory finish color on all exposed surfaces.

4.5.2 Exposed roof ladders and guardrail materials shall be steel. Steel use exterior zinc coating or with finish (color) coating (optional).

4.5.2.1 Avoid zinc spray metalizing coming into contact with mortar, brick, and CMU materials.

4.5.2.2 All gasket contact points shall be rubber or weather-resistant membrane.

4.6 ROOF WARRANTY SIGNAGE

4.6.1 Roof warranty signage is needed for roof replacement projects. The contractor must submit signage, and it should be reviewed and approved by design consultants and the ASD project manager. See signage design and installation details below:

4.6.2 Size: Minimum 8 ½ inches by 11 inches

4.6.3 Material: Typewritten photoengraved 0.032-inch thick aluminum card

4.6.4 Quantity: Provide roof signage for all roof access points. Each roof access should have one sign.

4.6.5 Content: Provide facility name and two types of warranty information below:

4.6.5.1 Roof installing contractor warranty information:

- Roof installing contractor name
- Roof warranty reference number (If applicable)
- Roof warranty contact information (phone number and email)
- Date of warranty expiration

4.6.5.2 Roof major materials manufacturer warranty information. Provide warranty information for each warranty manufacturer's warranty.

- Roof manufacturer name
- Roof warranty reference number
- Roof warranty contact information (phone number and email)
- Date of warranty expiration

4.6.6 Location: Signage board should be located:

4.6.6.1 Near the bottom of the ladder, where the ladder goes up to a roof hatch, install the signage on the wall in front or side of the ladder.

4.6.6.2 At the roof access door, install the signage on the door, and indicate on the new roof plan or door schedule.

5 QUALITY ASSURANCE

5.1 QUALITY ASSURANCE

5.1.1 Roofing Membrane Manufacturer:

5.1.1.1 A qualified manufacturer should be listed in FM Global RoofNav standards for the roofing system and have a minimum of 25 years of experience manufacturing adhered EPDM membrane roofing systems of similar size.

5.1.1.2 Obtain primary products of each type required from a single manufacturer to the greatest extent possible. Provide secondary materials only as recommended by the manufacturer of primary materials.

5.1.1.3 Perform work in accordance with the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual.

5.1.2 Roofing Contractor: Company specializing in the installation of roofing membranes and insulation certified by the membrane and insulation manufacturer with documented experience in applications of similar systems.

5.1.2.1 A qualified installer should have over 5 years of demonstrated experience installing products of the same type and scope as the manufacturer's product.

5.1.3 Roofing Contractor: Installer shall have written documentation from the membrane and insulation manufacturer stating they are a currently certified applicator in Alaska.

5.1.4 On-site Roofing Manufacturer's Representative: Manufacturer to provide a dedicated quality control representative for on-site inspection after construction. Document conditions and send reports to the Contractor and ASD Project Manager.

5.1.5 The rigid insulation manufacturer shall provide a current written certification by independent third-party quality control test or U. L. to verify insulation quality control.

5.1.6 Roof replacement project should be approved by FM Global – Commercial Property Insurance Plan Review per ASD Risk Management requirement.

5.2 WARRANTY

5.2.1 The contractor shall provide ASD a minimum 30-year total roofing system warranty (including but not limited to the roof assembly, roof edge, and parapet assembly) and manufacturer's roofing system and installation warranty that covers wind damage based on code requirements.

5.2.2 The contractor shall provide ASD with a 2-year Roofing Contractor's Warranty covering workmanship on all roofing system components. The roofing installer is responsible for damage to work covered by this warranty but is liable for consequential damages to the building or building contents resulting from leaks or faults or work defects.

5.2.3 Roofing Warranty should be included in the ASD Operation and Maintenance Manual.

- END -

Signature Certificate

Document Ref.: MRW8C-DRAUO-Y7JYP-UOWZY

Document signed by:

Verified E-mail:
hargraves_darin@asdk12.org

Darin Hargraves

IP: 68.96.133.212 | Date: 15 Jun 2021 15:19:18 UTC

Document completed by all parties on:
15 Jun 2021 15:19:18 UTC

Page 1 of 1

Signed with PandaDoc.com

PandaDoc is a document workflow and certified eSignature solution trusted by 25,000+ companies worldwide.

ReidMiddleton

CIVIL ENGINEERING
STRUCTURAL ENGINEERING
PLANNING
SURVEYING

Anchorage School District
Educating All Students for Success in Life

Alpenglow Elementary School

ASCE 41 – Tier 1 Seismic Evaluation

Project No. 402019.045.003
September 2019

WASHINGTON
728 134th Street SW
Suite 200
Everett, WA 98204
Phone: 425 741-3800
Fax: 425 741-3900

ALASKA
4300 B Street
Suite 302
Anchorage, AK 99503
Phone: 907 562-3439
Fax: 907 561-5319

Table of Contents

1.0 Introduction

1.1 Background

The Anchorage School District (ASD) engaged Reid Middleton to perform an American Society of Civil Engineers (ASCE) 41-13 Tier 1 Seismic Evaluation for Alpenglow Elementary School. The school will likely be reroofed in the near future. This evaluation serves as a guide for ASD to be aware of possible deficiencies in the selected areas and to plan for the strengthening of the identified areas during upcoming renovation projects.

Items have been flagged as “non-compliant” by the Tier 1 evaluation or by engineering judgement. No further analysis or more detailed Tier 3 evaluation was performed, nor were cost estimates of any retrofit concepts developed.

1.2 Building Description

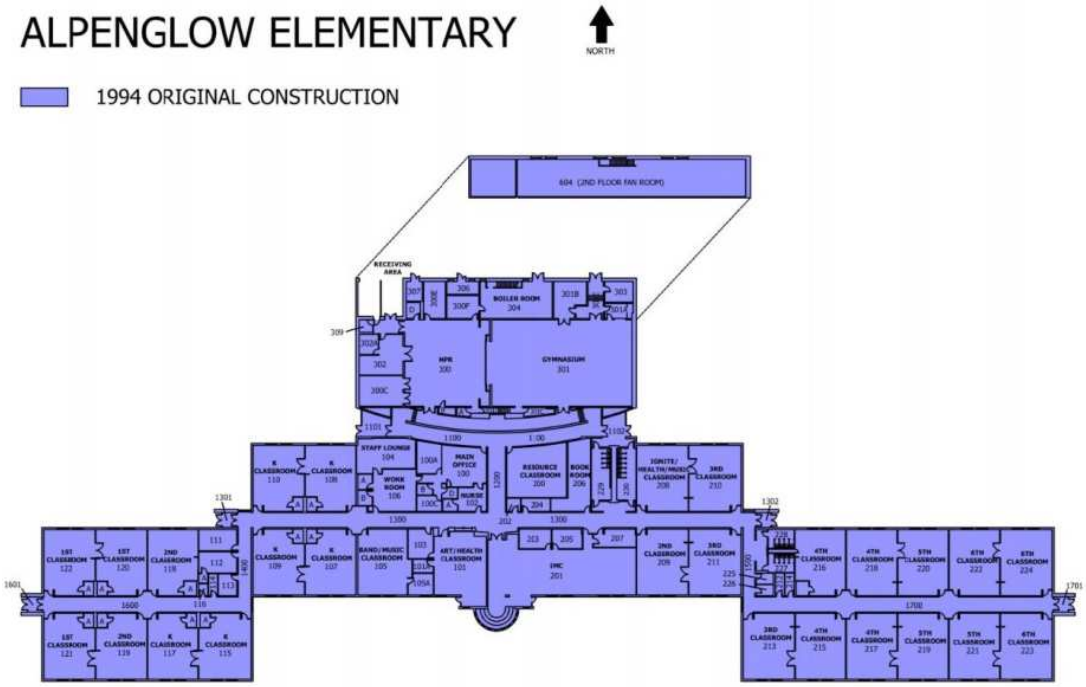


Figure 1: Building Configuration and Building Generations

Alpenglow Elementary School consists of one primarily ‘Y’-shaped volume. The entire school building was constructed in 1994 as one structure.

1.3 Original Design Criteria

The following table summarizes the original design criteria as indicated on the available record documents.

Building Section	Original Building Code	Roof Snow	Wind	Seismic
1994 Original Construction	1991 UBC	40 psf (plus drifting)	100 mph, Exp. B, q_s = 26.0 psf	Zone IV, V = 0.23W
Current Code	2012 IBC (ASCE 7-10) Risk Cat. III	40 psf min plus drifting I_s = 1.10	131 mph, Exp. B (LRFD), Q_z (ASD) = 0.6*23.7 psf = 14.2 psf	S_S= 1.500g, S_1= 0.688g SDC=D, I_e=1.25, R=2, V=0.63W (*Ordinary Reinforced Masonry Shear Walls*)

2.0 Methodology

2.1 ASCE 41

This study employs the methods contained in the American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) standard ASCE/SEI 41-13: *Seismic Evaluation and Rehabilitation of Existing Buildings*. This document contains nationally-accepted tools for undertaking the seismic evaluation and rehabilitation of buildings. The standard does not, however, explicitly determine if, or how, a specific rehabilitation project should take place; it only serves as a guide to determine expected levels of performance of the various building systems by using specific probabilities of seismic activity.

ASCE 41 prescribes escalating levels of evaluation called “Tiers.” The methodology begins with a quick review, but can become more thorough as deficiencies are discovered. Hence, the standard allows for rapid evaluation and is able to quickly focus on the actual problem areas.

- Tier 1 Checklists: Consists of a series of checklists with lists of statements that are marked as “compliant” or “non-compliant.” Some basic calculations are required, but the level of detail is broad in order to facilitate the rapid evaluation. Items flagged under a Tier 1 evaluation may or may not be actual deficiencies needing rehabilitation; they are simply items that require a more refined evaluation.
- Tier 3 Evaluation: This level of evaluation can be a full building evaluation or a more targeted evaluation of only the deficiencies identified from the Tier 1 evaluation. For a full building evaluation, a structural model of the current building is developed and then solved by

comparing forces and displacements against ASCE 41 limiting criteria. For a component-level evaluation, a more detailed analysis which focuses only on the flagged areas is provided ("deficiency-only"). The building is subjected to loads roughly equivalent to three-quarters of a new building.

- Tier 3 Retrofit: This is the final type of analysis for elements that were identified as deficient under the Tier 3 Evaluation. This analysis results in detailed reinforcement requirements for the deficient elements to ensure they meet the current building code seismic requirements.

Items have been flagged as non-conforming either by the Tier 1 evaluation or by professional engineering judgement. No further analysis or more detailed Tier 3 evaluation has been performed, nor were cost estimates of any retrofit concepts developed.

2.2 Terminology

To better understand the results of the evaluation, a brief description of structural systems and lateral force resisting systems is given.

A structure is an assemblage of many components that are interconnected to form a complete system. In the case of building structures, this includes roof and floor elements, beams, columns, braces, walls and foundations. Beams and columns are connected together to form a frame. The frame is unstable unless restrained against lateral movement (earthquake or winds). The roof or floor deck is connected to the supporting joists and forms a horizontal diaphragm. This diaphragm has tremendous stiffness in-plane. This stiffness generally holds columns' relative positions under lateral load and stabilizes each floor or roof level. A mechanism is still needed to maintain the position of each floor or roof diaphragm relative to the level above or below. Vertical bracing, shear walls or moment resisting frames form the mechanism and provide stiffness in the vertical plane. The frame or wall is anchored to footings, which transmits the force into the soil and prevents the building from overturning or sliding in the event of an earthquake or high-wind event.

Lateral Force Resisting Systems

Braced frames resist seismic load by in-plane axial compression and tension. Diagonal elements are added between building columns and work in combination with the columns to form truss-like frames. The axial stiffness of the brace prevents lateral motion and resists load.

Moment resisting frames resist seismic load through bending of the beam and column. The beam and column joints are connected in such a way that the connection is rigid relative to the attached beams and columns. As the frame sways under seismic or wind load, bending in the beams and columns resists this force and limits displacement. Since even a relatively small bracing member in a braced frame system has a much higher in-plane axial stiffness than a beam or column in bending, a moment frame will exhibit much higher lateral displacement than a braced frame.

Shear walls resist seismic load through in-plane shear stiffness and rotational stiffness of the rigid body. The rigidity of the wall resolves lateral load through in-plane shear and overturning. Shear wall systems typically exhibit the least deformation of any lateral force resisting system.

2.3 Performance Levels

Although analysis and rehabilitation can be linked to any probability (size) of earthquake and any rehabilitation objective, ASCE/SEI 41's Basic Performance Objective for Existing Buildings (BPOE) is Life Safety (LS) performance for structural components for Category I and II buildings. For Category III buildings, such as schools, the level of performance increases between Life Safety and Immediate Occupancy (IO) levels to a performance objective called Damage Control (DC). Other levels of performance can be evaluated depending on the rehabilitation objective.

The LS performance level is characterized as having sufficient seismic resistance to prevent structural collapse and injuries that could result in death. The building structure is expected to sustain moderate structural damage to the extent that it may not be functional after a seismic event (i.e. permanent drift, damage to partitions). After the seismic event, the building might not be economical to repair.

The DC performance level is characterized by minor damage to the building with small or no permanent deformation. Damage should be economical to repair. Minor personal injuries and some clean-up can be expected, but injuries and/or damage should be minimal. This performance level is intended to provide a structure with greater reliability of resisting collapse /damage than a typical building, but not to the extent required of an IO performance level.

The IO performance level is characterized by light structural damage, but the building is likely to remain fully operational. Minor personal injuries and some clean-up can be expected, but injuries and/or damage should be minimal. In brief, the building should retain its pre-earthquake condition.

New buildings are generally expected to have some level of damage resistance built in, but older buildings should not be expected to perform as well. The ASCE 41 standard recognizes it is not economically feasible to upgrade aging buildings to current design code levels. Therefore, performance objectives for a Tier 1 assessment are based on the BSE-1E seismic hazard level which corresponds to a probability of exceedance of 20% in 50 years or an earthquake with a mean return period of about 250 years.

In accordance with the "*Seismic Evaluation and Retrofit, Guides for Existing ASD Schools, 2014*," the ASD standard is to evaluate to the DC structural performance objective.

2.4 Non-Structural Evaluations

The Tier 1 non-structural checklist focuses on major elements of the building's non-structural components related to mechanical systems, electrical light fixtures, and certain architectural features. Seismic forces are related to an object's inertia; thus, the heavier the object, the more

seismic force it will generate. Heavy furnishings like file cabinets, computers, stored materials, supplies, and teaching aids can become significant seismic hazards that are not specifically identified in the provisions of ASCE 41-13. These non-structural deficiencies are typically the most hazardous to occupants in a major seismic event. Unbraced and unsecured items can fall and cause injury or block egress, not allowing occupants to escape. Small rooms and closets containing emergency supplies may become inaccessible if contents fall behind or in front of doors, effectively blocking access. Properly securing heavy items requires that, in addition to securing the cabinet or storage rack to the structure, the heavy item must also be secured to the storage system. Books must be secured to shelves so when the bookshelf moves with the structure in an earthquake, the books stay in the shelving unit. Similarly, overhead cabinets and file cabinets should be equipped with thumb latches or similar devices to prevent them from flying open during a seismic event.

The Position Retention (PR) performance level is characterized by minor cracks and damage, limited loss of water tightness on exterior elements, with doors and windows remaining operable.

In accordance with the "*Seismic Evaluation and Retrofit, Guides for Existing ASD Schools, 2014*," the ASD standard is to evaluate to the Position Retention (PR) non-structural performance objective.

2.5 Site Visit

On July 2, 2019, engineering staff from Reid Middleton performed a site visit to confirm the 'as-built' design documents and assess the current structural and non-structural condition of Alpenglow Elementary School. Any observed areas of structural distress, damage, or settlement are noted in the following report. No material testing or sampling was performed as part of this Tier 1 report.

2.6 As-Built Documentation

The seismic evaluation was based on this site visit and a review of the available 'as-built' information, including the following major structural sections/renovations of the building:

- 1994 Original Construction; New Eagle River Elementary School; Anchorage School District; Anchorage, AK; ECI/Hyer, Inc.; November 30, 1996

2.7 References

The following references are used throughout this report:

- ASCE/SEI 41-13: *Seismic Evaluation and Rehabilitation of Existing Buildings* (copyright 2014)
- Anchorage School District: *Seismic Evaluation and Retrofit, Guides for Existing ASD Schools,* 2014

2.8 Geotechnical Data

According to data from the U.S. Geological Survey (U.S.G.S.) and Reid Middleton's field observation, Alpenglow Elementary School is located on sedimentary rock and glacial deposits. The site is relatively flat, and there are no known faults or ruptures near the site. Therefore, the risk of liquefaction or other site instability during a seismic event is low.

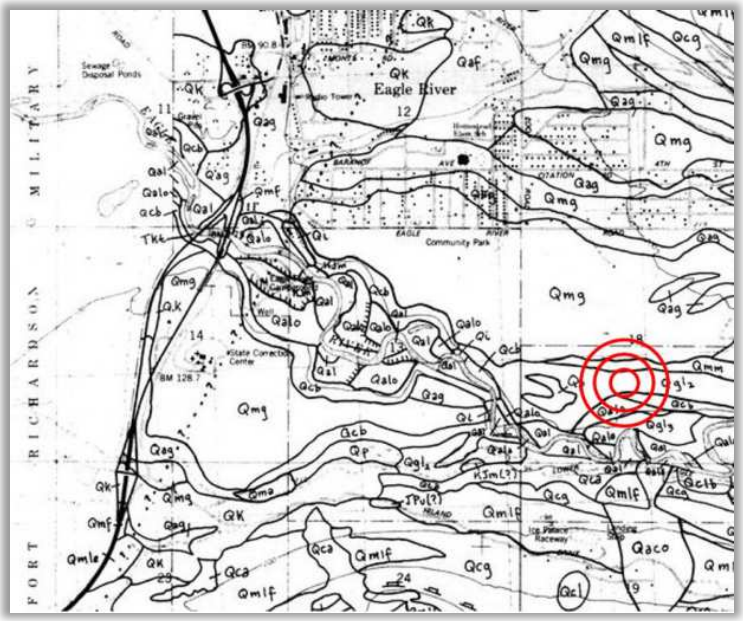


Figure 2: Eagle River Soil Types Map (U.S.G.S. Preliminary Geologic Map of the Middle Part of the Eagle River Valley, 1980)

3.0 Seismic Evaluation Results

Per ASCE 41-13 Table 2-1, footnote b, only the LS checklists are required for the DC performance objective. The *m*-factors have been adjusted to be half-way between the LS & IO levels in the attached calculations.

The LS checklists have been used throughout this Tier 1 evaluation.

3.1 Basic Configuration

A Basic Configuration Tier 1 checklist was completed and applies to all phases of construction that were evaluated and are included in Appendix C of this report.

- 16.1.2LS, "Life Safety Basic Configuration Checklist" (App C, pp C2-C3)

There are no non-compliant items in this checklist.

Recommendations

None.

3.2 1994 Original Construction

The foundation of Alpenglow Elementary School's 1994 Original Construction consists of 8" and 12" CMU stem walls upon 16"x9 ¼" concrete strip footings, founded 4'-1 ¼" below grade. Within the building's perimeter, CMU stem walls are supported by a 16"x9 ¼" strip footing, founded 2'-1¼" below finished floor. The floor is a 4" concrete slab-on-grade, reinforced with rebar. The walls consist of 8" and 12" CMU. The roof consists of steel open web joists, with 1-1/2"x18-gauge and 20-gauge metal decking.

- 16.15LS, "Life Safety Structural Checklist for Building Types RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms…" (App C, pp C4-C6)

There are no non-compliant items in this checklist.

Recommendations

None.

3.3 Non-Structural Evaluation

An exhaustive check of all non-structural components was not performed. Checks were limited to spot checks of various areas including above suspended ceilings and accessible mechanical spaces. Therefore, the following list is a summary of deficiencies based on the areas that were observed; however, there are likely other deficiencies within Alpenglow Elementary School that are not noted in this report.

The following Tier 1 checklist was completed for the non-structural items in the building and is included in Appendix C of this report.

- 16.17, "Nonstructural Checklist" (App C, pp C7-C17)

Life Safety System

Fire suppression piping does not have flexible couplings in Boiler Room 304.

Sprinkler head does not have appropriate ceiling clearance in Room 302A.

Hazardous Materials

Breakable containers that hold hazardous materials are unrestrained in the following locations:

- Room 304 (black metal drum)
- Room 306 (yellow plastic tank)

Hazardous material piping does not have flexible couplings in the following locations:

- Boiler Room 304

Ceilings

The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 are not supported by closure angles or channels not less than 2-in. wide throughout the building.

Acoustical tile or lay-in panel ceilings do not have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft^2 in Gymnasium 301.

Light Fixtures

Light fixtures do not have lens covers in the following locations:

- Room 214
- Room 212
- Room 202
- IMC Room 201 (15 recessed light fixtures)
- Room 112A
- Room 114
- Room 116
- Corridor 1200 (12 light fixtures)
- Room 300E
- Room 300F
- Boiler Room 304
- Room 604
- Room 300B
- Room 300A
- Room 301B
- Room 306
- Room 307

Contents and Furnishings

Contents more than 6-ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are not anchored to the structure, or to each other, in the following locations:

- Room 112 (1 wood shelf)
- Room 119A (1 plastic shelf)
- Room 104 (1 wood shelf)
- Room 300D (2 plastic shelves)
- Room 307 (1 metal shelf)

Equipment, sorted items, or other contents weighing more than 20-lb whose center of mass is more than 4-ft above the adjacent floor level are not braced or otherwise restrained in the following locations:

- Room 224 (cardboard boxes)
- Room 207 (miscellaneous storage)
- Room 105A (miscellaneous storage)
- Room 104 (cookware)
- Room 100D (cardboard box on shelf behind door could prevent door opening)
- Room 200 (cardboard boxes)
- Room 301B (gym equipment)

Piping

Fluid and gas piping do not have flexible couplings in the following locations:

- Boiler Room 304

Facade

Damage to the building's façade exists in the following locations:

- Room 306 (damaged concrete masonry unit at left base of door)

Appendix A - Relative Priority Ranking of Tier 1 Deficiencies

The following section contains Relative Priority Rankings of the Tier 1 Deficiencies as directed by Appendix B of the "*ASD Seismic Evaluation and Retrofit Guide for Existing ASD School, 2014"* for Life Safety and Non-Structural items.

Degree of Deficiency

The percent of nonconformance should be taken into consideration when prioritizing the deficiencies. Anything considered "code deficient" does not meet the requirements of the code or the checklists, but cannot be given a numerical value; these are given the highest rating. Use the following 6 point scale to rate the degree of deficiency.

0 – Elements loaded less than or equal to member capacity (<100%)
1 – Elements loaded less than 10% above member capacity (<110%)
2 – Elements loaded less than 20% above member capacity (<120%)
3 – Elements loaded less than 35% above member capacity (<135%)
4 – Elements loaded less than 50% above member capacity (<150%)
5 – Elements loaded greater than 50% of member capacity or deemed "Code Deficient"

Prevalence

It is important to recognize how much of the structure would be affected by the loss of this element. Prevalence allows the priority rating to include the amount of the structure that has the element problem described. Use the following five point scale to rate the prevalence of all deficient elements.

1 – Present in 0-10% of the building.
2 – Present in 10-25% of the building.
3 – Present in 25-50% of the building.
4 – Present in 50-80% of the building.
5 – Present in 80-100% of the building.

Degree of Threat

Allowing for engineering judgment, the degree of threat is for including what would happen should this member fail in the priority rating. The threat or hazard to structural integrity should this element fail should be rated on the following four point scale.

1 – The problem is not critical to structural integrity
2 – The problem will create minor problems nearby, but does not affect structural integrity.
3 – The problem will create problems nearby and will affect structural integrity.
4 – The problem will create major problems and affect structural integrity of many other members and the system.

Alpenglow Elementary School September **2019**

Relative Priority Rating of Tier 1 Deficiencies - Life-Safety Items

Ref Appendix B of ASD Seismic Evaluation & Retrofit Guide

Area	Checklist	Item	Deficiency	Prevalence	Threat	Priority Rating
No Non-Compliant Checklist Items						

Alpenglow Elementary School September **2019**

Relative Priority Rating of Tier 1 Deficiencies - Non-Structural Items

Ref Appendix B of ASD Seismic Evaluation & Retrofit Guide

Area	Checklist	Item	Deficiency	Prevalence	Threat	Priority Rating
Non-Structural - All Sections	16.17	24 - EDGE SUPPORT	5	5	4	100
Non-Structural - All Sections	16.17	53 - TALL NARROW CONTENTS	5	2	3	30
Non-Structural - All Sections	16.17	54 - FALL PRONE CONTENTS	5	2	3	30
Non-Structural - All Sections	16.17	5 - SPRINKLER CEILING CLEARANCE	5	1	4	20
Non-Structural - All Sections	16.17	8 - HAZARDOUS MATERIAL STORAGE	5	1	4	20
Non-Structural - All Sections	16.17	11 - FLEXIBLE COUPLINGS	5	1	4	20
Non-Structural - All Sections	16.17	28 - LENS COVERS	5	2	2	20
Non-Structural - All Sections	16.17	67 - FLEXIBLE COUPLINGS	5	1	4	20
Non-Structural - All Sections	16.17	2 - FLEXIBLE COUPLINGS	5	1	4	20
Non-Structural - All Sections	16.17	25 - SEISMIC JOINTS	5	1	2	10

Appendix B – Site Visit Photos

The following section contains photographs captured during Reid Middleton's site visit to Alpenglow Elementary School on Tuesday, July 2, 2019.

Figure B1. Unbraced Fall-Prone Overhead Cardboard Boxes, in Room 224

Figure B2. Light Fixture without Lens Cover, in Room 112A

Figure B3. Light Fixture without Lens Cover, in IMC 201

Figure B4. Unbraced Wood Shelf with Greater than 3-to-1 Aspect Ratio, in Room 104

Figure B5. Unbraced Fall-Prone Overhead Cookware, in Room 104

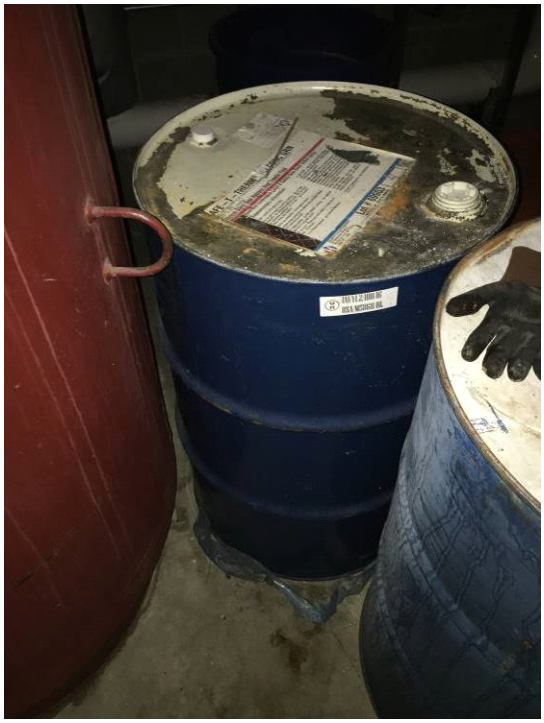


Figure B6. Unbraced Hazardous Fluid Storage Container, in Boiler Room 304

Figure B7. Unbraced Fluid Storage Container, in Room 306

Figure B8. Damaged Façade CMU, Adjacent to Room 306 Exterior Door

Figure B9. Sprinkler Head without Adequate Ceiling Clearance, in Room 302A

Appendix C - ASCE 41 Tier 1 Checklists

The following section contains the ASCE 41 Tier 1 Checklists.

Project: Alpenglow ES - Tier I Evaluation
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.1.2LS Life Safety Basic Configuration Checklist

ITEM								
	Low Seismicity							
	Building System							
	General							
1	C	NC	N/A	U	LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation.	Commentary A.2.1.1	Tier 2 5.4.1.1
	Site Specific Comments: *(1994 Original Construction record drawings)*							
2	C	NC	N/A	U	ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a and W2.	Commentary A.2.1.2	Tier 2 5.4.1.2
	Site Specific Comments:							
3	C	NC	N/A	U	MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure.	Commentary A.2.1.3	Tier 2 5.4.1.3
	Site Specific Comments:							
	Building Configuration							
4	C	NC	N/A	U	WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above.	Commentary A.2.2.2	Tier 2 5.4.2.1
	Site Specific Comments: *Seismic-force-resisting system in 2nd floor Fan Room 604 identical to floor below (1994 Original Construction record drawings, S1.4 and S1.6)*							
5	C	NC	N/A	U	SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above.	Commentary A.2.2.3	Tier 2 5.4.2.2
	Site Specific Comments: *Seismic-force-resisting system in 2nd floor Fan Room 604 identical to floor below (1994 Original Construction record drawings, S1.4 and S1.6)*							
6	C	NC	N/A	U	VERTICAL IRREGULARITIES: All vertical elements in the seismic -force-resisting system are continuous to the foundation.	Commentary A.2.2.4	Tier 2 5.4.2.3
	Site Specific Comments: *(1994 Original Construction record drawings)*							
7	C	NC	N/A	U	GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines.	Commentary A.2.2.5	Tier 2 5.4.2.4
	Site Specific Comments: *2nd Floor Fan Room 604 is considered a "penthouse", and, therefore, is not considered by this checklist item.*							

Project: Alpenglow ES - Tier I Evaluation
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.1.2LS Life Safety Basic Configuration Checklist

ITEM							
8	C	NC	N/A	U	MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered.	Commentary A.2.2.6	Tier 2 5.4.2.5
	Site Specific Comments: *2nd Floor Fan Room 604 is considered a "penthouse", and, therefore, is not considered by this checklist item.*						
9	C	NC	N/A	U	TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension.	Commentary A.2.2.7	Tier 2 5.4.2.6
	Site Specific Comments: *Building has flexible diaphragm (metal deck) (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						

Moderate Seismicity: Complete the following Items in Addition to the Items for Low Seismicity.
Geologic Site Hazards

10	C	NC	N/A	U	LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building.	Commentary A.6.1.1	Tier 2 5.4.3.1
	Site Specific Comments:						
11	C	NC	N/A	U	SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure.	Commentary A.6.1.2	Tier 2 5.4.3.1
	Site Specific Comments:						
12	C	NC	N/A	U	SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated.	Commentary A.6.1.3	Tier 2 5.4.3.1
	Site Specific Comments:						

High Seismicity: Complete the following Items in Addition to the Items for Low and Moderate Seismicity.
Foundation Configuration

13	C	NC	N/A	U	OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$.	Commentary A.6.2.1	Tier 2 5.4.3.3
	Site Specific Comments: *Base/Height = 2.91 > $0.6S_a$ = 0.557*						
14	C	NC	N/A	U	TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C.	Commentary A.6.2.2	Tier 2 5.4.3.4
	Site Specific Comments: *Footings restrained by soils (1994 Original Construction record drawings, 1/S2.0 and 2/S2.0)*						

Project: Alpenglow ES - Tier I Evaluation
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings

16.15LS Life Safety Structural Checklist for Building Types RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms and RM2: Reinforced Masonry Bearing Walls with Stiff Diaphragms

ITEM								
	Low and Moderate Seismicity Seismic-Force-Resisting System							
1	C	NC	N/A	U	REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2.	Commentary A.3.2.1.1	Tier 2 5.5.1.1
	Site Specific Comments: *(1994 Original Construction record drawings, S1.0, S1.1, S1.2)*						
2	C	NC	N/A	U	SHEAR STRESS CHECK: The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than 70lb/in^2.	Commentary A.3.2.4.1	Tier 2 5.5.3.1.1
	Site Specific Comments: *DCR = 0.16*						
3	C	NC	N/A	U	REINFORCING STEEL: The total vertical and horizontal reinforcing steel ratio in reinforced masonry walls is greater than 0.002 of the wall with the minimum of 0.0007 in either of the two directions; the spacing of reinforcing steel is less than 48 in., and all vertical bars extend to the top of the walls.	Commentary A.3.2.4.2	Tier 2 5.5.3.1.3
	Site Specific Comments: *Vert reinf = 0.0008 > 0.0007 <-- OK; Spacing @ 32" oc <-- OK* *Horizontal reinf = 0.0011 > 0.0007 <-- OK; Spacing @ 48" oc <-- OK* *Total reinf = 0.002 < 0.002 <-- OK* *1994 Original Construction record drawings do not indicate if vertical bars extend to top of the walls.*						
	Stiff Diaphragms - RM2 ONLY						
4	C	NC	N/A	U	TOPPING SLAB: Precast concrete diaphragm elements are interconnected by a continuous reinforced concrete topping slab.	Commentary A.4.5.1	Tier 2 5.6.4
	Site Specific Comments: *Building has flexible diaphragm (metal deck) (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
	Connections						
5	C	NC	N/A	U	WALL ANCHORAGE AT FLEXIBLE DIAPHRAGMS: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7.	Commentary A.5.1.1	Tier 2 5.7.1.1
	Site Specific Comments: *DCR = 0.07 (1994 Original Construction record drawings, 3/S2.1)*						
6	C	NC	N/A	U	WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers.	Commentary A.5.1.2	Tier 2 5.7.1.3
	Site Specific Comments:						
7	C	NC	N/A	U	TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls.	Commentary A.5.2.1	Tier 2 5.7.2
	Site Specific Comments: *(1994 Original Construction record drawings, 3/S2.1)*						

Project: Alpenglow ES - Tier I Evaluation
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings

16.15LS Life Safety Structural Checklist for Building Types RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms and RM2: Reinforced Masonry Bearing Walls with Stiff Diaphragms

ITEM								
8	C	NC	N/A	U	TOPPING SLAB TO WALLS OR FRAMES: Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled for transfer of forces into the shear wall or frame elements.	Commentary A.5.2.3	Tier 2 5.7.2
	Site Specific Comments:						
9	C	NC	N/A	U	FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation.	Commentary A.5.3.5	Tier 2 5.7.3.4
	Site Specific Comments: *(1994 Original Construction record drawings, 1/S2.0, 2/S2.0)*						
10	C	NC	N/A	U	GIRDER-COLUMN CONNECTION: There is a positive connection using plates, connection hardware or straps between the girder and the column support.	Commentary A.5.4.1	Tier 2 5.7.4.1
	Site Specific Comments: *(1994 Original Construction record drawings, 2/S2.1, 6/S2.1)*						
	High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.						
	Stiff Diaphragms - RM2 ONLY						
11	C	NC	N/A	U	OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length.	Commentary A.4.1.4	Tier 2 5.6.1.3
	Site Specific Comments: *Building has flexible diaphragm (metal deck) (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
12	C	NC	N/A	U	OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long.	Commentary A.4.1.6	Tier 2 5.6.1.3
	Site Specific Comments: *Building has flexible diaphragm (metal deck) (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
	Flexible Diaphragms - RM1 ONLY						
13	C	NC	N/A	U	CROSS TIES: There are continuous cross ties between diaphragm chords.	Commentary A.4.1.2	Tier 2 5.6.1.2
	Site Specific Comments: *(1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
14	C	NC	N/A	U	OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length.	Commentary A.4.1.4	Tier 2 5.6.1.3
	Site Specific Comments: *No openings immediately adjacent to the shear walls (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
15	C	NC	N/A	U	OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long.	Commentary A.4.1.6	Tier 2 5.6.1.3
	Site Specific Comments: *No openings immediately adjacent to the shear walls (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
16	C	NC	N/A	U	STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered.	Commentary A.4.2.1	Tier 2 5.6.2
	Site Specific Comments: *Building's diaphragm is metal deck (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						

Project: Alpenglow ES - Tier I Evaluation
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings

16.15LS Life Safety Structural Checklist for Building Types RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms and RM2: Reinforced Masonry Bearing Walls with Stiff Diaphragms

ITEM								
17	C	NC	N/A	U	SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing.	Commentary A.4.2.2	Tier 2 5.6.2
	Site Specific Comments: *Building's diaphragm is metal deck (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
18	C	NC	N/A	U	DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1.	Commentary A.4.2.3	Tier 2 5.6.2
	Site Specific Comments: *Building's diaphragm is metal deck (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
19	C	NC	N/A	U	OTHER DIAPHRAGMS: The diaphragm does not consist of a system other than wood, metal deck, concrete, or horizontal bracing.	Commentary A.4.7.1	Tier 2 5.6.5
	Site Specific Comments: *Building's diaphragm is metal deck (1994 Original Construction record drawings, S1.4, S1.5, S1.6, and S1.7)*						
	Connections						
20	C	NC	N/A	U	STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. before engagement of the anchors.	Commentary A.5.1.4	Tier 2 5.7.1.2
	Site Specific Comments:						

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
	Life Safety System								
1	C	NC	N/A	U	LMH	LMH	FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13.	Commentary A.7.13.1	Tier 2 13.7.4
	Site Specific Comments:								
2	C	NC	N/A	U	LMH	LMH	FLEXIBLE COUPLINGS (straight pipe to pipe link): Fire suppression piping has flexible couplings in accordance with NFPA-13. 1. Pipes larger than 2.5" diameter shall be able to move differentially with individual sections of building 2. Within 24" of the top and bottom of risers (not required for risers < 3' tall, only one required for risers 3'-7' tall) 3. Within 12" above and 24" below the floor in multi-story buildings	Commentary A.7.13.2	Tier 2 13.7.4
	Site Specific Comments: *Non-compliant in Boiler Room 304*								
3	C	NC	N/A	U	LMH	LMH	EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced.	Commentary A.7.12.1	Tier 2 13.7.7
	Site Specific Comments:								
4	C	NC	N/A	U	LMH	LMH	STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints.	Commentary A.7.14.1	Tier 2 13.7.6
	Site Specific Comments:								
5	C	NC	N/A	U	MH	MH	SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. Note: A 3" diameter hole is required by NFPA 13. ASCE 7-10 13.5.6.2.2.a requires a 1" gap all around (5" diameter hole).	Commentary A.7.13.3	Tier 2 13.7.4
	Site Specific Comments: *Non-compliant in Room 302A*								
6	C	NC	N/A	U	N/A	LMH	EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced.	Commentary A.7.3.1	Tier 2 13.7.9
	Site Specific Comments:								
	Hazardous Materials								
7	C	NC	N/A	U	LMH	LMH	HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers.	Commentary A.7.12.2	Tier 2 13.7.1
	Site Specific Comments:								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
8	C	NC	N/A	U	LMH	LMH	HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material including gas cylinders, are restrained by latched doors, shelf lips, wires or other methods.	Commentary A.7.15.1	Tier 2 13.8.4
	Site Specific Comments: *Non-compliant in Boiler Room 304 (black metal drum), and Room 306 (yellow plastic tank)*								
9	C	NC	N/A	U	MH	MH	HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release.	Commentary A.7.13.4	Tier 2 13.7.3, 13.7.5
	Site Specific Comments:								
10	C	NC	N/A	U	MH	MH	SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks.	Commentary A.7.13.3	Tier 2 13.7.3, 13.7.5
	Site Specific Comments:								
11	C	NC	N/A	U	LMH	LMH	FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings.	Commentary A.7.15.4	Tier 2 13.7.3, 13.7.5
	Site Specific Comments: *Non-compliant in Boiler Room 304*								
12	C	NC	N/A	U	MH	MH	PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements.	Commentary A.7.13.6	Tier 2 13.7.3, 13.7.5, 13.7.6
	Site Specific Comments: *No seismic joints exist in Alpenglow Elementary School*								
	Partitions								
13	C	NC	N/A	U	LMH	LMH	UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity.	Commentary A.7.1.1	Tier 2 13.6.2
	Site Specific Comments:								
14	C	NC	N/A	U	LMH	LMH	HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system.	Commentary A.7.2.1	Tier 2 13.6.2
	Site Specific Comments:								
15	C	NC	N/A	U	MH	MH	DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005.	Commentary A.7.1.2	Tier 2 13.6.2
	Site Specific Comments:								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
16	C	NC	N/A	U	N/A	MH	LIGHT PARTITIONS SUPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system.	Commentary A.7.2.1	Tier 2 13.6.2
	Site Specific Comments:								
17	C	NC	N/A	U	N/A	MH	STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints.	Commentary A.7.1.3	Tier 2 13.6.2
	Site Specific Comments: *No seismic joints exist in Alpenglow Elementary School*								
18	C	NC	N/A	U	N/A	MH	TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft.	Commentary A.7.1.4	Tier 2 13.6.2
	Site Specific Comments:								
	Ceilings								
19	C	NC	N/A	U	MH	LMH	SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft^2 of area.	Commentary A.7.2.3	Tier 2 13.6.4
	Site Specific Comments:								
20	C	NC	N/A	U	MH	LMH	SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft^2 of area.	Commentary A.7.2.3	Tier 2 13.6.4
	Site Specific Comments: *The top side of suspended gypsum board ceilings were not able to be viewed*								
21	C	NC	N/A	U	N/A	MH	INTEGRATED (SUSPENDED ACOUSTIC TILE) CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft^2, and ceilings of smaller areas that are not surrounded by restraining partitions are laterally restrained at a spacing of no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression.	Commentary A.7.2.2	Tier 2 13.6.4
	Site Specific Comments:								
22	C	NC	N/A	U	N/A	MH	EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 have clearances from the enclosing wall or partition of at least the following: in Moderate seismicity, 1/2 in.; in High Seismicity, 3/4 in.	Commentary A.7.2.4	Tier 2 13.6.4
	Site Specific Comments:								
23	C	NC	N/A	U	N/A	MH	CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures.	Commentary A.7.2.5	Tier 2 13.6.4
	Site Specific Comments: *No seismic joints exist in Alpenglow Elementary School*								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings

16.17 Nonstructural Checklist

ITEM					LS	PR			
24	C	NC	N/A	U	N/A	H	EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 are supported by closure angles or channels not less than 2 in. wide.	Commentary A.7.2.6	Tier 2 13.6.4

Site Specific Comments: *Non-compliant in all areas of Alpenglow Elementary School with ceiling areas > 144 ft^2*

25	C	NC	N/A	U	N/A	H	SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft^2 and has a ratio of long-to-short dimension no more than 4-to-1.	Commentary A.7.2.7	Tier 2 13.6.4

Site Specific Comments: *Non-compliant in Gym 301 (ceiling area = 3444 ft^2 > 2500 ft^2)*

Light Fixtures

26	C	NC	N/A	U	MH	MH	INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture.	Commentary A.7.3.2	Tier 2 13.6.4, 13.7.9

Site Specific Comments:

27	C	NC	N/A	U	N/A	H	PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components.	Commentary A.7.3.3	Tier 2 13.7.9

Site Specific Comments:

28	C	NC	N/A	U	N/A	H	LENS COVERS: Lens covers on light fixtures are attached with safety devices.	Commentary A.7.3.4	Tier 2 13.7.9

Site Specific Comments: *Light fixtures do not have lens covers in Room 214, Room 212, Room 202, IMC Room 201 (15 recessed light fixtures), Room 112A, Room 114, Room 116, Corridor 1200 (12 light fixtures), Room 300E, Room 300F, Boiler Room 304, Room 604, Room 300B, Room 300A, Room 301B, Room 306, and Room 307*

Cladding and Glazing

29	C	NC	N/A	U	MH	MH	CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft^2 are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft.	Commentary A.7.4.1	Tier 2 13.6.1

Site Specific Comments:

30	C	NC	N/A	U	MH	MH	CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02.	Commentary A.7.4.3	Tier 2 13.6.1

Site Specific Comments:

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
31	C	NC	N/A	U	MH	MH	MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02.	Commentary A.7.4.4	Tier 2 13.6.1
	Site Specific Comments:								
32	C	NC	N/A	U	MH	MH	PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections.	Commentary A.7.4.5	Tier 2 13.6.1.4
	Site Specific Comments:								
33	C	NC	N/A	U	MH	MH	BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel.	Commentary A.7.4.6	Tier 2 13.6.1.4
	Site Specific Comments:								
34	C	NC	N/A	U	MH	MH	INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel.	Commentary A.7.4.7	Tier 2 13.6.1.4
	Site Specific Comments:								
35	C	NC	N/A	U	MH	MH	OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft^2 in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked.	Commentary A.7.4.8	Tier 2 13.6.1.5
	Site Specific Comments:						*Overhead glazing panels over Corridor 1100 are 14 ft^2 < 16 ft^2 (per 1994 Original Construction record drawings, A3.1)*		
	Masonry Veneer								
36	C	NC	N/A	U	LMH	LMH	TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft^2, and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.: for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in.	Commentary A.7.5.1	Tier 2 13.6.1.2
	Site Specific Comments:								
37	C	NC	N/A	U	LMH	LMH	SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor.	Commentary A.7.5.2	Tier 2 13.6.1.2
	Site Specific Comments:								
38	C	NC	N/A	U	LMH	LMH	WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing.	Commentary A.7.5.3	Tier 2 13.6.1.2
	Site Specific Comments:								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
39	C	NC	N/A	U	LMH	LMH	UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup.	Commentary A.7.7.2	Tier 2 13.6.1.1 13.6.1.2

Site Specific Comments:

40	C	NC	N/A	U	MH	MH	STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center.	Commentary A.7.6.1	Tier 2 13.6.1.1 13.6.1.2

Site Specific Comments:

41	C	NC	N/A	U	MH	MH	ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof.	Commentary A.7.7.1	Tier 2 13.6.1.1 13.6.1.2

Site Specific Comments:

42	C	NC	N/A	U	N/A	MH	WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing.	Commentary A.7.5.6	Tier 2 13.6.1.2

Site Specific Comments:

43	C	NC	N/A	U	N/A	MH	OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings.	Commentary A.7.6.2	Tier 2 13.6.1.1 13.6.1.2

Site Specific Comments:

Parapets, Cornices, Ornamentation, and Appendages

44	C	NC	N/A	U	LMH	LMH	URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5.	Commentary A.7.8.1	Tier 2 13.6.5

Site Specific Comments:

45	C	NC	N/A	U	LMH	LMH	CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft: for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft.	Commentary A.7.8.2	Tier 2 13.6.6

Site Specific Comments: *Canopies are field-verified to be continuously anchored to main structure*

46	C	NC	N/A	U	MH	LMH	CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement.	Commentary A.7.8.3	Tier 2 13.6.5

Site Specific Comments:

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
47	C	NC	N/A	U	MH	LMH	APPENDAGES: Cornices, parapets, signs and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items.	Commentary A.7.8.4	Tier 2 13.6.6

Site Specific Comments: *All appendages are field-verified to be continuously anchored to main structure*

Masonry Chimneys

48	C	NC	N/A	U	N/A	MH	URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney: for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney.	Commentary A.7.9.1	Tier 2 13.6.7

Site Specific Comments:

49	C	NC	N/A	U	N/A	MH	ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof.	Commentary A.7.9.2	Tier 2 13.6.7

Site Specific Comments:

Stairs

50	C	NC	N/A	U	N/A	MH	STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1.	Commentary A.7.10.2	Tier 2 13.6.8

Site Specific Comments:

51	C	NC	N/A	U	N/A	MH	STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs.	Commentary A.7.10.2	Tier 2 13.6.8

Site Specific Comments:

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
Contents and Furnishings									
52	C	NC	N/A	U	N/A	MH	INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15.	Commentary A.7.11.1	Tier 2 13.8.1
	Site Specific Comments:								
53	C	NC	N/A	U	N/A	MH	TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other.	Commentary A.7.44.2	Tier 2 13.8.2
	Site Specific Comments:						*Non-compliant in Room 112 (1 wood shelf), Room 119A (1 plastic shelf), Room 104 (1 wood shelf), Room 300D (2 plastic shelves), Room 307 (1 metal shelf)*		
54	C	NC	N/A	U	LMH	LMH	FALL PRONE CONTENTS: Equipment, sorted items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained.	Commentary A.7.11.3	Tier 2 13.8.2
	Site Specific Comments:						*Non-complaint in Room 224 (cardboard boxes), Room 207, (miscellaneous storage), Room 105A (miscellaneous storage), Room 104 (cookware), Room 100D (cardboard box on shelf behind door could prevent door opening, if fallen), Room 200 (cardboard boxes), Room 301B (gym equipment)*		
55	C	NC	N/A	U	LMH	LMH	ACCESS FLOORS: Access floors more than 9 in. high are braced.	Commentary A.7.11.4	Tier 2 13.8.3
	Site Specific Comments:								
56	C	NC	N/A	U	MH	LMH	EQUIPMENT ON ACCESS FLOORS: Equipment other than contents supported by access floor systems are anchored or braced to the structure independent of the access floor.	Commentary A.7.11.5	Tier 2 13.7.7 13.8.3
	Site Specific Comments:								
57	C	NC	N/A	U	MH	LMH	SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components.	Commentary A.7.11.6	Tier 2 13.8.2
	Site Specific Comments:								
Mechanical and Electrical Equipment									
58	C	NC	N/A	U	N/A	MH	FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced.	Commentary A.7.12.4	Tier 2 13.7.1 13.7.7
	Site Specific Comments:								
59	C	NC	N/A	U	N/A	MH	IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system.	Commentary A.7.12.5	Tier 2 13.7.1
	Site Specific Comments:								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
60	C	NC	N/A	U	LMH	LMH	TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls.	Commentary A.7.12.6	Tier 2 13.7.1 13.7.7
	Site Specific Comments:								
61	C	NC	N/A	U	LMH	LMH	MECHANICAL DOORS REQUIRED FOR EMERGENCY SERVICE EGRESS IN AN EMERGENCY SITUATION: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01.	Commentary A.7.12.7	Tier 2 13.6.9
	Site Specific Comments:								
62	C	NC	N/A	U	N/A	H	SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components.	Commentary A.7.12.8	Tier 2 13.7.1 13.7.7
	Site Specific Comments:								
63	C	NC	N/A	U	N/A	H	VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning.	Commentary A.7.12.9	Tier 2 13.7.1
	Site Specific Comments:								
64	C	NC	N/A	U	N/A	H	HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure.	Commentary A.7.12.10	Tier 2 13.7.1, 13.7.7
	Site Specific Comments:								
65	C	NC	N/A	U	N/A	H	ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure.	Commentary A.7.12.11	Tier 2 13.7.7
	Site Specific Comments:								
66	C	NC	N/A	U	N/A	H	CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections.	Commentary A.7.12.12	Tier 2 13.7.8
	Site Specific Comments:								
	Piping								
67	C	NC	N/A	U	N/A	H	FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings.	Commentary A.7.13.2	Tier 2 13.7.3 13.7.5
	Site Specific Comments: *Non-complaint in Boiler Room 304*								
68	C	NC	N/A	U	N/A	H	FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks.	Commentary A.7.13.4	Tier 2 13.7.3 13.7.5
	Site Specific Comments:								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.17 Nonstructural Checklist

ITEM					LS	PR			
69	C	NC	N/A	U	N/A	H	C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained.	Commentary A.7.13.5	Tier 2 13.7.3 13.7.5
	Site Specific Comments:								
70	C	NC	N/A	U	N/A	H	PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements.	Commentary A.7.13.6	Tier 2 13.7.3 13.7.5
	Site Specific Comments: *No seismic joints exist in Alpenglow Elementary School*								
	Ducts								
71	C	NC	N/A	U	N/A	H	DUCT BRACING: Rectangular ductwork larger than 6 ft^2 in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft.	Commentary A.7.14.2	Tier 2 13.7.6
	Site Specific Comments:								
72	C	NC	N/A	U	N/A	H	DUCT SUPPORT: Ducts are not supported by piping or electrical conduit.	Commentary A.7.14.3	Tier 2 13.7.6
	Site Specific Comments:								
73	C	NC	N/A	U	N/A	H	DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements.	Commentary A.7.14.5	Tier 2 13.7.6
	Site Specific Comments: *No seismic joints exist in Alpenglow Elementary School*								
	Elevators								
74	C	NC	N/A	U	N/A	H	RETAINER GUARDS: Sheaves and drums have cable retainer guards.	Commentary A.7.16.1	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
75	C	NC	N/A	U	N/A	H	RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight.	Commentary A.7.16.2	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
76	C	NC	N/A	U	N/A	H	ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored.	Commentary A.7.16.3	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								

Project: Alpenglow ES - Tier I Anaysis
Location: Entire Building
Completed by: Grant George (Reid Middleton) Date: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings

16.17 Nonstructural Checklist

ITEM					LS	PR			
77	C	NC	N/A	U	N/A	H	SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations.	Commentary A.7.16.4	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
78	C	NC	N/A	U	N/A	H	SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking.	Commentary A.7.16.5	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
79	C	NC	N/A	U	N/A	H	COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1.	Commentary A.7.16.6	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
80	C	NC	N/A	U	N/A	H	BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1.	Commentary A.7.16.7	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
81	C	NC	N/A	U	N/A	H	SPREADER BRACKET: Spreader brackets are not used to resist seismic forces.	Commentary A.7.16.8	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								
82	C	NC	N/A	U	N/A	H	GO-SLOW ELEVATORS: The building has a go-slow elevator system.	Commentary A.7.16.9	Tier 2 13.8.6
	Site Specific Comments: *Not applicable as Alpenglow Elementary School does not have an elevator*								

Appendix D - Supplemental Calculations

The following section contains supplemental calculations used to complete the ASCE 41 Tier 1 checklists.

PROJECT: Alpenglow ES - Tier I Analysis
LOCATION: Entire Building
COMPLETED BY: GG
CHECKED BY: DS
DATE: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.1.2LS Life Safety Basic Configuration Checklist
CALCULATIONS

ITEM

13 **OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$.**

C

$S_a = S_{X1} / T =$ 2.36 *(ASCE 41-13, Eqn 4-4)*

$S_{X1} =$ 0.575 *(ATC 'Hazards By Location' Map)*

$T = (C_t) \times (h_n)^{\beta} =$ 0.243 *(ASCE 41-13, Eqn 4-5)*

$C_t =$ 0.020 *(ASCE 41-13, Section 4.5.2.4)*

$h_n =$ 28.00 *(1994 Orig Dwgs, 3/A6.2)*

$\beta =$ 0.75 *(ASCE 41-13, Section 4.5.2.4)*

(Per ASCE 41-13, Section 4.5.2.3, "S_a shall not exceed S_{XS}")

$S_{XS} =$ 0.929 *(ATC 'Hazards By Location' Map)*

THEREFORE: $S_a =$ 0.929

$(0.6) \times S_a =$ 0.557

$(H)_{BLDG} =$ 28.00 ft *(1994 Orig Dwgs, 3/A6.2)*

$(L)_{BASE} =$ 81.50 ft *(1994 Orig Dwgs, A2.1, A2.2, A2.3)*

$(L)_{BASE} / (H)_{BLDG} =$ 2.91

2.91 > 0.557

C

PROJECT:	Alpengow ES - Tier I Analysis
LOCATION:	1994 Original Construction
COMPLETED BY:	GG
CHECKED BY:	DS
DATE:	7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.15LS RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms

CALCULATIONS

ITEM
2
C

SHEAR STRESS CHECK: The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than 70lb/in^2.

$(v_j)_{avg}$ = $(1/M_s) \times (V_j/A_w)$ = 11 psi *(ASCE 41-13, Eqn 4-9)*

M_s = 3.0 *(Damage Control Performance Level)* *(ASCE 41-13, Table 4-9)*

V_j = 1975928 lbs *(ASCE 41-13, Eqn 4-1)*

C = 1.0 *(2-Story, Flexible Diaphragm, RM1)* *(ASCE 41-13, Table 4-8)*

S_a = 0.929 *(ASCE 41-13, Eqn 4-4)*

$(W)_{TOTAL} = (W)_{ROOF} + (W)_{2ndFLOOR} + (W)_{WALLS}$ = 2126941 lbs

$(W)_{ROOF}$ = 1334000 lbs

DEAD = 15 psf

SNOW = 40 psf

A_{ROOF} = 58000 sq-ft *(1994 Orig Dwgs, Sheets S1.5, S1.6, S1.7)*

$(W)_{2NDFLOOR}$ = 135168 lbs

A_{FLOOR} = 2816 sq-ft *(1994 Orig Dwgs, Sheet A2.2)*

$(W_{UNIT})_{CONC\ FLOOR}$ = 48 psf *(2-1/2" Conc over 1-1/2" Metal Deck, per 1994 Orig Dwgs, S1.4)*

$(W)_{WALLS}$ = 657773 lbs

t_{WALLS} = 7.625 in = 0.64 ft *(8" CMU Typ., per 1994 Orig Dwgs, 2/S2.1)*

1st Level

L_{WALLS} = 2231 ft *(1994 Orig Dwgs, Sheets S1.0, S1.1, S1.2)*

$(H_{WALLS})_{TRIB}$ = 8.00 ft *(Based on Top of Wall Elev, 1994 Orig Dwgs, S1.7)*

$(W_{UNIT})_{CMU}$ = 58 pcf *(Vert Grout @ 32" O.C., per 1994 Orig Dwgs, Gen Notes, S0.1)*

2nd Level Fan Room

L_{WALLS} = 343 ft *(1994 Orig Dwgs, Sheet S1.4)*

$(H_{WALLS})_{TRIB}$ = 13.00 ft *(Based on Top of Parapet Elev, 3/A6.2; and Top of Framing Elev, 1994 Orig Dwgs, S1.7)*

$(W_{UNIT})_{CMU}$ = 58 pcf *(Vert Grout @ 32" O.C., per 1994 Orig Dwgs, General Notes, S0.1)*

A_W = 59841 sq-in

t_{WALLS} = 7.625 in *(8" CMU Typ., per 1994 Orig Dwgs, 2/S2.1)*

$(L_{WALLS})_{LIMITING}$ = 654 ft = 7848 in

$(L_{WALLS})_{N\text{-}S}$ = 654 ft *(1994 Orig Dwgs, Sheets S1.0, S1.1, S1.2)*

$(L_{WALLS})_{E\text{-}W}$ = 1577 ft *(1994 Orig Dwgs, Sheets S1.0, S1.1, S1.2)*

DCR = 0.16

C

PROJECT: Alpengow ES - Tier I Analysis
LOCATION: 1994 Original Construction
COMPLETED BY: GG
CHECKED BY: DS
DATE: 7/2/2019

ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings
16.15LS RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms

3 **C** **REINFORCING STEEL: The total vertical and horizontal reinforcing steel ratio in reinforced masonry walls is greater than 0.002 of the wall with the minimum of 0.0007 in either of the two directions; the spacing of reinforcing steel is less than 48 in., and all vertical bars extend to the top of the walls.**

$(\rho)_{VERT} = A_S / A_C$ = 0.0008 > 0.0007 **C**
A_S = 0.31 sq-in *(#5 Bar)* *(1994 Orig Dwgs, General Notes, S0.1)*
A_{CMU} = 372 sq-in
t_{WALLS} = 11.625 in *(12" CMU is limiting case)* *(1994 Orig Dwgs, 2/S2.0)*
S_{REBAR} = 32 in *(1994 Orig Dwgs, General Notes, S0.1)*

$(\rho)_{HORIZ} = A_S / A_C$ = 0.0011 > 0.0007 **C**
A_S = 0.62 sq-in *(2-#5 Bars)* *(1994 Orig Dwgs, General Notes, S0.1)*
A_{CMU} = 558 sq-in
t_{WALLS} = 11.625 in *(12" CMU is limiting case)* *(1994 Orig Dwgs, 2/S2.0)*
S_{REBAR} = 48 in *(1994 Orig Dwgs, General Notes, S0.1)*

$(\rho)_{VERT} + (\rho)_{HORIZ}$ = 0.002 < 0.002 **C**

5 **C** **WALL ANCHORAGE AT FLEXIBLE DIAPHRAGMS: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7.**

$T_C = \Psi \times S_{XS} \times w_p \times A_p$ = 822 lbs *(ASCE 41-13, Eqn 4-13)*
Ψ = 1.5 *(Damage Control Performance Level, ASCE 41-13, Sect 4.5.3.7)*
S_{XS} = 0.929 (ATC 'Hazards By Location' Map)
w_p = 37 pcf
t_{WALLS} = 7.625 in *(8" CMU Typ., per 1994 Orig Dwgs, 2/S2.1)*
$(W_{UNIT})_{CMU}$ = 58 pcf *(Vert Grout @ 32" O.C., per 1994 Orig Dwgs, Gen Notes, S0.1)*
A_p = 16 sq-ft
$(H_{WALLS})_{TRIB}$ = 8.00 ft *(Based on Top of Wall Elev, 1994 Orig Dwgs, S1.7)*
$(S)_{CONN}$ = 2.00 ft *(1994 Orig Dwgs, 3/S2.1)*

T_{CONN} = 12167 lbs *(MSJC Masonry Anchor Spreadsheet, attached)*

DCR = 0.07
C

Strength Design of Headed Anchor Bolts in Masonry

f'_m =	1500	psi	*(1994 Orig, "Gen Notes"/S0.1)*	Factored Tension:	**822 lbs**
d_b =	0.75	in	*(1994 Orig, 3/S2.1)*	Factored Shear:	**0 lbs**
F_y =	36000	psi			
l_b =	5.000	in	*(1994 Orig, 3/S2.1)*		

A_{pt} - hand =	78.5	in^2	A_b =	0.44	in^2
A_{pt} - calc =	78.5	in^2	Edge Dist:	24.0000	in
A_{pt} - min =	78.5	in^2	A_{pv} =	904.8	in^2

Φ = 1.0

ϕB_{anb} =	12167.33	lbs	ϕB_{vnb} =	140168	lbs
ϕB_{ans} =	15904.31	lbs	ϕB_{vnc} =	5327	lbs
Tensile Strength =	**12167 lbs**		ϕB_{vnb} =	24334.67	lbs
			ϕB_{vnb} =	9543	lbs
			Shear Strength =	**5327 lbs**	

Number of Bolts: 1
Interaction: 0.07

Alpenglow Elementary School

19201 Driftwood Bay Drive

Eagle River, Alaska 99577

Recommended Structural Improvements with Re-Roof

COFFMAN ENGINEERS

800 F Street Anchorage, Alaska 99501
(907) 276-6664
Coffman Project #202203-100

Contract No. C000386
Purchase Order No. P060321

PRELIMINARY REPORT – 7 December 2020

TABLE OF CONTENTS

Executive Summary

Alpenglow Elementary School, located in Eagle River, Alaska, was constructed in 1996. The Anchorage School District (ASD) is preparing to replace the roof, which has leaked occasionally in isolated areas over the last few years. The ASD asked Coffman Engineers (Coffman) to review the findings of an American Society of Civil Engineers (ASCE) 41-13 Tier 1 seismic evaluation and provide preliminary recommendations for improvements related to the roof structure. Coffman was also tasked with analyzing the existing structure at snow drift area(s) and, if necessary, providing recommendations for upgrading the structure to withstand current code snow drift loading. We understand that the ASD may opt to implement these Coffman-recommended structural improvements concurrently with the roof replacement, at a time when the roof assembly is demolished, and the roof structure is exposed.

There were no seismic deficiencies identified in the ASCE 41-13 Tier Evaluation, related to the roof structure, therefore no seismic upgrades are recommended in this report. Additionally, the existing roof structure was found to be adequate to resist snow drift loading, so no reinforcement is necessary. Additional roof related improvements were proposed during the site visit conducted by Coffman and ASD personnel and are summarized in the body of this report. A concept/planning level construction cost estimate has been provided for these proposed improvements.

Scope

Coffman was asked by ASD to review available record drawings and an ASCE 41-13 Tier 1 seismic evaluation report completed by Reid Middleton and provide preliminary recommendations for improvements related to the roof structure. The Reid Middleton report was published in September 2019. Only items which were marked Noncompliant (NC) by Reid Middleton in the 16.1.2LS and 16.15LS life safety checklists were investigated, as those are likely the only items which warrant seismic retrofit. Coffman was also asked to analyze the existing structure at snow drift area(s) and, if necessary, provide recommendations for upgrading the structure to withstand current code snow drift loading. Lastly, Coffman's scope included a concept/planning level construction estimate for the recommended improvements.

We understand that the ASD intends to include this report in their roof replacement Design-Build (D-B) Request for Proposal (RFP). As such, the D-B contractor's Architect-Engineer (A-E) team will be responsible for the final design of the improvements discussed in this report.

Site Visit

During the site visit conducted on November 5, 2020, three additional improvements were proposed: (1) removal of three smoke hatches on the Multipurpose room roof; (2) modifying the building's entire leading-edge parapet to comply with OSHA guardrail requirements; and (3) replacing the existing Multipurpose room and Gymnasium suspended ceiling tiles with lighter ceiling tiles.

1) Regarding the Multipurpose room smoke hatches: ASD indicated that hatches such as these have been removed at other schools during roof replacement projects when removal was permitted by code. ASD would like to similarly do away with the Alpenglow hatches if permissible by fire/life safety codes, mitigating the potential risk of them leaking in the future. As such, the successful D-B contractor's A-E team will need to conduct a study of the applicable Municipality of Anchorage building codes and amendments to see if removal of the existing smoke hatches is allowed based on current building occupancy. If removal is allowed by code, the D-B contractor's final design must account for hatch removal and patching of the roof structure. See Figure 1 for photos of the existing smoke hatches. See Appendix A for roof deck patching recommendations.

Figure 1 – Row of Smoke Hatches on Multipurpose Room Roof to be Removed

2) ASD mentioned that workers who access the roof and work adjacent to the parapet (which is less than 42 inches tall and therefore does not meet the OSHA requirements for a guardrail) must use fall protection devices. It was expressed to Coffman that raising or somehow widening the parapet in conjunction with the roof replacement project would be welcomed if the solution were economical. Increasing the parapet height would allow a higher snow drift to collect against it, meaning the roof structure would need to be analyzed for the increase snow drift load. The open-web-steel-joists, which were designed by the joist manufacturer, would need to be analyzed for the increased snow load. To provide an economical product, it is not uncommon for the original construction open-web-steel-joists to be designed with minimal residual capacity. So, the joists (which are fireproofed at Alpenglow) may need to be reinforced if the parapet height is raised. An increased parapet height also increases lateral load, which would need to be evaluated. Based on the cascading effects of modifying the existing parapet, the ASD may be better served by considering a less involved and costly fall protection option such as a non-penetrating guardrail system with weighted stanchions in lieu of permanently modifying the parapet. One example is the Accu-Fit Mobile Guardrail System (https://www.safetyrailcompany.com/accu-fit-guardrail/). It appears that a system like this would minimize project costs and meet ASD safety objectives. See Figure 2 for Accu-Fit example.

Figure 2 – Accu-Fit Mobile Guardrail System (Architectural Series) by Safety Rail Company

3) The interior acoustical ceiling tiles in the Multipurpose Room (B-14) and Gymnasium (B-15) are 24”x24”x1-1/2” thick Tectum tiles weighing approximately 10 pounds each. The ASD is interested in replacing the existing tiles with less heavy tiles, such as those is the Alpenglow classrooms. The ASD sees these heavy tiles as a safety risk, should they fall, in these rooms which have high occupancy during assemblies. The cost estimate assumes that the new panels will be the same length and width as the removed panels (24”x24”) and that the existing suspend ceiling grid may remain in place and be reused. This ceiling tile replacement need not be done by the same D-B contractor who does the roof replacement and related work, but can be if convenient for ASD project planning and funding.

Seismic Evaluation

Upon review of the Reid Middleton ASCE 41-13 Tier 1 seismic evaluation report, it was found that none of the 16.1.2LS or 16.15LS life safety checklist items were marked Noncompliant (NC). Consequently, we recommend no structural improvements be made in response to the findings of Reid Middleton’s ASCE 41-13 Tier 1 seismic evaluation. Please note that Reid Middleton did complete ASCE 41-13 nonstructural checklist 16.17 and found several noncompliant items. These deficiencies, however, apply to nonstructural items like interior piping/distribution systems, lighting, architectural suspended ceilings, and hazardous material storage. Since these items are nonstructural and need not be addressed concurrently with the planned roof replacement, they are outside of Coffman’s scope and not included in this report or construction cost estimate.

Snow Drift Evaluation

Alpenglow has few abrupt changes in roof elevation. The area most susceptible to collecting drifted snow is just south of gridline C (i.e. at the interface between the gymnasium/multipurpose room high roof to the lower roof over the center classroom area). The intersection of gridlines C and ~8.3 is where the structure has the lightest members, so this was the governing area for existing structure analysis (see Figure 3). The members were determined to be adequate to withstand snow drift loading; no structural upgrades are required. See Appendix B for calculations.

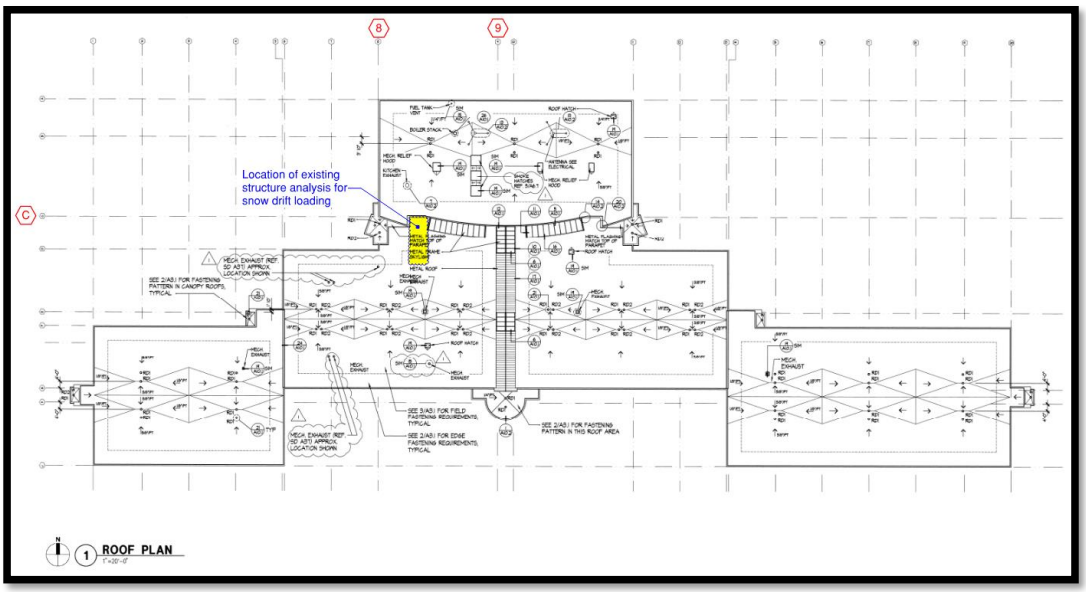


Figure 3 – Location of Existing Structure Analysis for Snow Drift Loading

Conclusion

After reviewing Reid Middleton's 41-13 Tier 1 seismic evaluation report, evaluating the existing structure for snow drift loads, and hearing the ASD's proposed additional improvements mentioned during the site visit, our recommendations are as follows:

1) Demolish the three existing Multipurpose room roof smoke hatches and associated roof curbs, and patch the metal deck.
2) Replace the Multipurpose room and Gymnasium ceiling tiles.

The concept/planning level construction cost estimate is for the two recommendations described above. The estimated total for this construction work is $58,535. The cost estimate is included in Appendix C.

Thank you for this opportunity to provide preliminary recommendations for improvements related to the upcoming roof replacement project. Please call if you have any questions.

Sincerely,

COFFMAN ENGINEERS, INC.

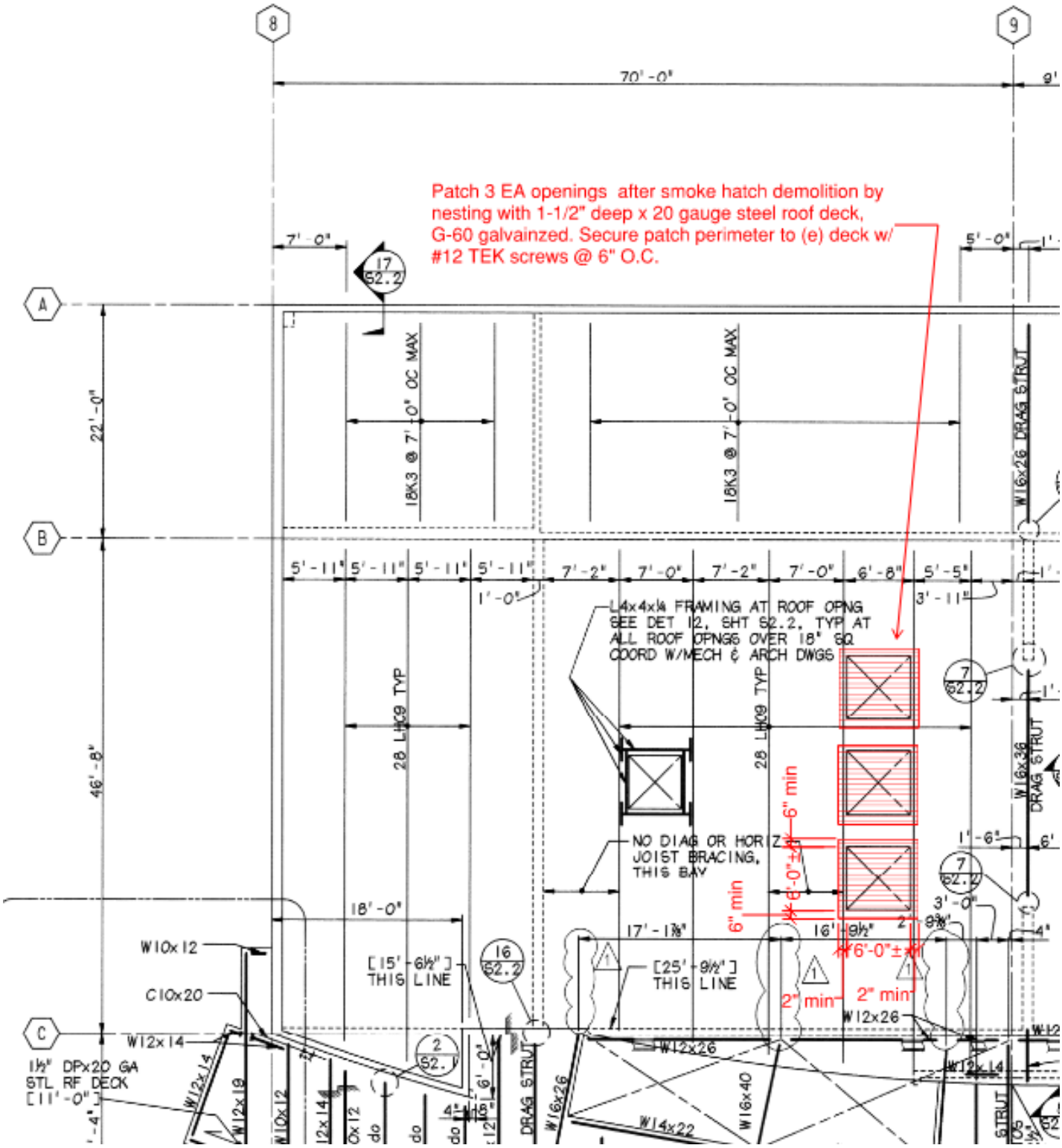
Aaron Morse, PE

Civil/Structural Engineer

cc: Matthew Stielstra, PE, SE

Appendix A

Recommended Multipurpose Room Roof Deck Patch



RECOMMENDED MULTIPURPOSE ROOM ROOF DECK PATCH

Appendix B

Snow Drift Loading and Existing Structure Analysis

Dead Load (reference 4/A3.1) *** Assume new roof assembly sim. ***

- 1½" x 20 ga metal deck (S1.6) — 2.3 psf
  - Andy Milner shop dwg: Verco HSB-36
- Gypsum sheating — 2.5 psf
  - Assume 5/8" GP Densdeck roof board
- Rigid Insulation — 1.2 psf
  - Assume 6" thick
  - Use 0.2 psf / inch thickness for polystyrene foam, ASCE 7-16 Table C3.1-1a
- Plywood sheating - assume 3/4" — 2.4 psf
  - Use 0.4 psf / 1/8" thickness, ASCE 7-16 Table C3.1-1a
- Roof membrane — 0.7 psf
  - Assume single ply, sheet (Table C3.1-1a)
- M+E collateral — 5 psf
- Architectural collateral - suspended ceiling allowance — 5 psf

$\Sigma = 18.7$ psf

$\Rightarrow$ Use $D = \boxed{20 \text{ psf}}$

COFFMAN ENGINEERS 800 F Street Anchorage, Alaska 99501 907.276.6664 www.coffman.com AECC249	project ASD Alpenglow Campbell Re-Roof	by DAM	sheet no.
	location Eagle River, AK	date 11/23/20	
	client Anchorage School District	checked MCS	job no. 202203.100
	Alpenglow Roof Dead Load	date 12/6/20	

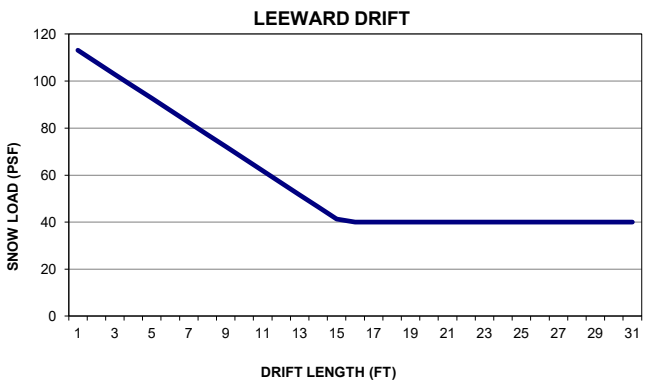
SNOW DRIFT DESCRIPTION / LOCATION

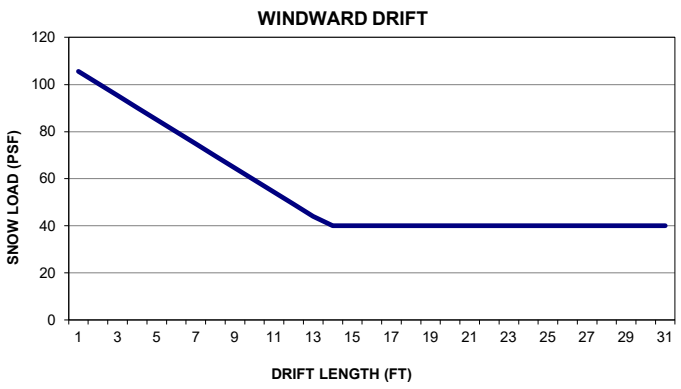
DRIFT ON AREA B ROOF SOUTH OF GRID C, EAST OF GRID 8, AND WEST OF 45 DEGREE SKYLIGHTS.

SNOW LOAD VALUES				ASCE 7-16 REFERENCE		
IMPORTANCE FACTOR	Is =	1.1		TABLE 1.5-2		
DESIGN FLAT ROOF SNOW LOAD	Pf =	40	PSF	EQ. 7.3-1	Pf = 0.7*Ce*Ct*I*Pg	40 psf is min. for MOA
SLOPED ROOF SNOW LOAD	Ps =	0	PSF	EQ. 7.4-1	Ps = Cs*Pf	
SNOW DENSITY	γ =	20.5	PCF	EQ. 7.7-1	γ = 0.13*Pg + 14 < 30pcf	
BALANCED SNOW HEIGHT	Hb =	1.95	FT	SECTION 7.7.1	Hb = Pf/γ or Ps/γ	

LEEWARD DRIFT				ASCE 7-16 REFERENCE	
CLEAR HEIGHT	Hc =	13.672	FT	FIGURE 7.7-2	
	Hc/Hb =	7.01	OK	SECTION 7.7.1	if Hc/Hb < 0.2, then drift N.A.
"UPPER" ROOF LENGTH	Lu =	68.667	FT	FIGURE 7.7-2	Lu ≥ 20ft
THEORETICAL DRIFT HEIGHT	Hd =	3.57	FT	FIGURE 7.6-1	Hd = Is^(1/2)*(0.43*[Lu^(1/3)]*[Pg+10]^(1/4)-1.5)
ACTUAL DRIFT HEIGHT	Hd =	3.57	FT	SECTION 7.7.1	Hd ≤ Hc
DRIFT WIDTH	w =	14.267	FT	SECTION 7.7.1	if Hd≤Hc, then w=4*Hd≤8*Hc; if Hd>Hc, then w=[(4*Hd^2)/Hc]≤8*Hc
MAX DRIFT LOAD	Pd =	73	PSF	SECTION 7.7.1	Pd = Hd*γ

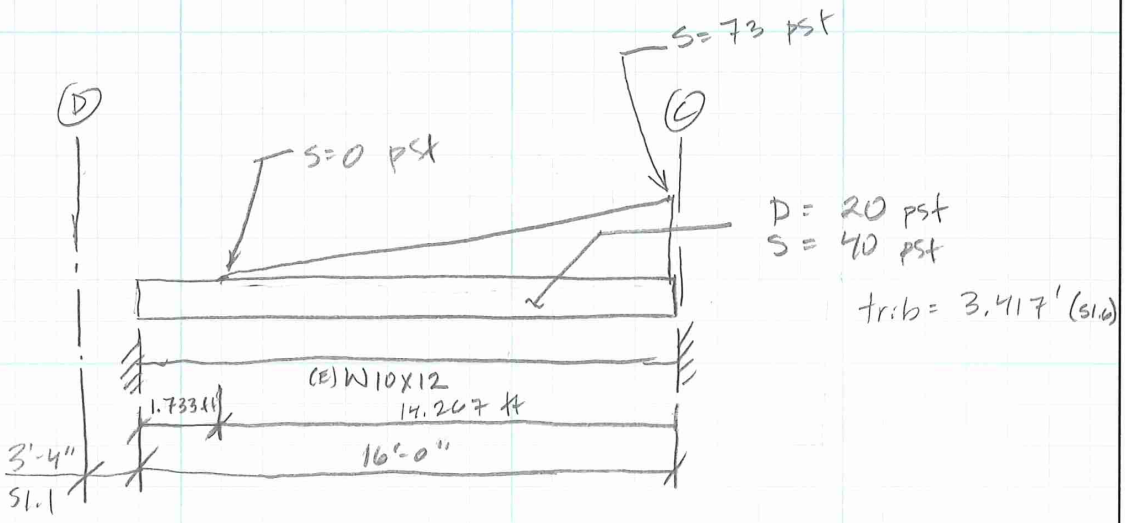
WINDWARD DRIFT				ASCE 7-16 REFERENCE	
CLEAR HEIGHT	Hc =	13.672	FT	FIGURE 7.7-2	
	Hc/Hb =	7.01	OK	SECTION 7.7.1	if Hc/Hb < 0.2, then drift N.A.
"LOWER" ROOF LENGTH	Lu =	100.67	FT	FIGURE 7.7-2	Lu ≥ 20ft
THEORETICAL DRIFT HEIGHT	Hd =	3.20	FT	FIGURE 7.6-1	Hd = 0.75*Is^(1/2)*(0.43*[Lu^(1/3)]*[Pg+10]^(1/4)-1.5)
ACTUAL DRIFT HEIGHT	Hd =	3.20	FT	SECTION 7.7.1	Hd ≤ Hc
DRIFT WIDTH	w =	12.797	FT	SECTION 7.7.1	if Hd≤Hc, then w=4*Hd≤8*Hc; if Hd>Hc, then w=[(4*Hd^2)/Hc]≤8*Hc
MAX DRIFT LOAD	Pd =	66	PSF	SECTION 7.7.1	Pd = Hd*γ





COFFMAN ENGINEERS

project	**ASD ALPENGLOW CAMPBELL RE-ROOF**	by	**DAM**	sheet no.
location	**EAGLE RIVER, AK**	date	**12/07/2020**	
client	**ANCHORAGE SCHOOL DISTRICT**	checked	**MCS**	job no.
topic	**SNOW LOAD**	date	**12/07/2020**	**202203-100**



- (E) W10 (OK) ⇒ Forces calc: 0.143 : 1.0 (see output)

COFFMAN ENGINEERS 800 F Street Anchorage, Alaska 99501 907.276.6664 www.coffman.com AECC249	project ASD Alpenglow Campbell Re-Roof	by DAM	sheet no.
	location Eagle River, AK	date 11/24/20	
	client Anchorage School District	checked MCS	job no. 202203-100
	Alpenglow (e) Structure Snow Drift	date 12/6/20	

Coffman Engineers, Inc.
800 F Street
Anchorage, Alaska 99501
(907) 276-6664

Project Title:
Engineer:
Project ID:
Project Descr:

Printed: 7 DEC 2020, 4:49PM

Steel Beam

File: Alpenglow Re-Roof.ec6

Lic. # : KW-06003501
COFFMAN ENGINEERS

DESCRIPTION: Check (E) W10x12 for Snow Drift

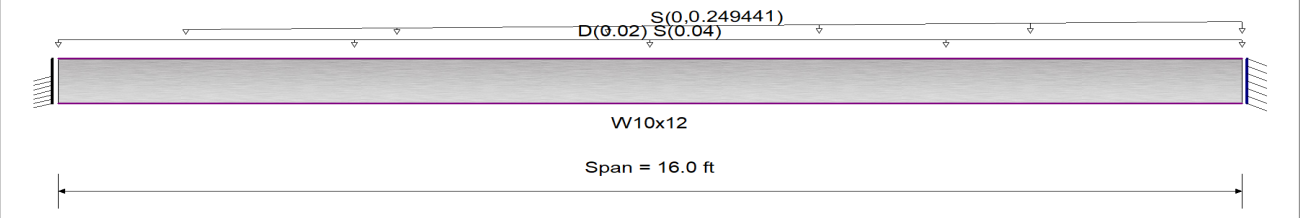
CODE REFERENCES

Calculations per AISC 360-10, IBC 2012, CBC 2013, ASCE 7-10
Load Combination Set : ASCE 7-16

Material Properties

Analysis Method : Allowable Strength Design
Beam Bracing : Beam is Fully Braced against lateral-torsional buckling
Bending Axis : Major Axis Bending

Fy : Steel Yield : 50.0 ksi
E: Modulus : 29,000.0 ksi



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading
Uniform Load : D = 0.020, S = 0.040 k/ft, Tributary Width = 1.0 ft

Varying Uniform Load : S= 0.0->0.0730 ksf, Extent = 1.733 -->> 16.0 ft, Trib Width = 3.417 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.143 : 1	Maximum Shear Stress Ratio =	0.051 : 1
Section used for this span	W10x12	Section used for this span	W10x12
Ma : Applied	4.471 k-ft	Va : Applied	1.90 k
Mn / Omega : Allowable	31.207 k-ft	Vn/Omega : Allowable	37.506 k
Load Combination	+D+S+H	Load Combination	+D+S+H
Location of maximum on span	16.000 ft	Location of maximum on span	16.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.028 in	Ratio =	6,758 >=360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.034 in	Ratio =	5576 >=180
Max Upward Total Deflection	0.000 in	Ratio =	0 <180

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	Max Stress Ratios V	Summary of Moment Values Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Summary of Shear Values Va Max	Vnx	Vnx/Omega
+D+H													
Dsgn. L = 16.00 ft	1	0.022	0.007	0.34	-0.68	0.68	52.12	31.21	1.00	1.00	0.26	56.26	37.51
+D+L+H													
Dsgn. L = 16.00 ft	1	0.022	0.007	0.34	-0.68	0.68	52.12	31.21	1.00	1.00	0.26	56.26	37.51
+D+Lr+H													
Dsgn. L = 16.00 ft	1	0.022	0.007	0.34	-0.68	0.68	52.12	31.21	1.00	1.00	0.26	56.26	37.51
+D+S+H													
Dsgn. L = 16.00 ft	1	0.143	0.051	1.97	-4.47	4.47	52.12	31.21	1.00	1.00	1.90	56.26	37.51
+D+0.750Lr+0.750L+H													
Dsgn. L = 16.00 ft	1	0.022	0.007	0.34	-0.68	0.68	52.12	31.21	1.00	1.00	0.26	56.26	37.51
+D+0.750L+0.750S+H													
Dsgn. L = 16.00 ft	1	0.113	0.040	1.56	-3.52	3.52	52.12	31.21	1.00	1.00	1.49	56.26	37.51
+D+0.60W+H													
Dsgn. L = 16.00 ft	1	0.022	0.007	0.34	-0.68	0.68	52.12	31.21	1.00	1.00	0.26	56.26	37.51
+D+0.750Lr+0.750L+0.450W+H													
Dsgn. L = 16.00 ft	1	0.022	0.007	0.34	-0.68	0.68	52.12	31.21	1.00	1.00	0.26	56.26	37.51
+D+0.750L+0.750S+0.450W+H													
Dsgn. L = 16.00 ft	1	0.113	0.040	1.56	-3.52	3.52	52.12	31.21	1.00	1.00	1.49	56.26	37.51
+0.60D+0.60W+0.60H													
Dsgn. L = 16.00 ft	1	0.013	0.004	0.20	-0.41	0.41	52.12	31.21	1.00	1.00	0.15	56.26	37.51
+D+0.70E+0.60H													

Appendix C

Concept/Planning Level Construction Cost Estimate

HMS Project No. 20109

CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL
CONSTRUCTION COST ESTIMATE

ALPENGLOW ELEMENTARY SCHOOL
STRUCTURAL ROOF REPAIRS
(SMOKE HATCH DEMOLITION/GYM CEILING REPLACEMENT)
ANCHORAGE, ALASKA

PREPARED FOR:

Coffman Engineers
800 F Street
Anchorage, Alaska 99501

December 4, 2020

4103 Minnesota Drive • Anchorage, Alaska 99503 p: 907.561.1653 • f: 907.562.0420 • e: mail@hmsalaska.com

ALPENGLOW ELEMENTARY SCHOOL STRUCTURAL ROOF REPAIRS (SMOKE HATCH DEMO/GYM CEILING REPLACEMENT) PAGE 2
ANCHORAGE, ALASKA
CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL CONSTRUCTION COST ESTIMATE DATE: 12/4/2020

HMS Project No.: 20109

NOTES REGARDING THE PREPARATION OF THIS ESTIMATE

DRAWINGS AND DOCUMENTS

Level of Documents:	Re-roof structural scoping documents and as-built drawings by ECI
Date:	November 30, 1996
Provided By:	Coffman Engineers of Anchorage, Alaska

RATES

Pricing is based on current material, equipment and freight costs.

Labor Rates:	A.S. Title 36 working 60 hours per week
Premium Time:	16.70%

BIDDING ASSUMPTIONS

Contract:	Standard construction contract without restrictive bidding clauses
Bidding Situation:	Competitive bids assumed
Bid Date:	To be determined
Start of Construction:	To be determined
Note:	This work to be performed as part of a complete reroofing project

EXCLUDED COSTS

1. A/E design fees
2. Administrative and management costs
3. Removal of existing roof assembly
4. Replacement of existing roof assembly
5. Remediation of any hazardous materials found during construction

ALPENGLOW ELEMENTARY SCHOOL STRUCTURAL ROOF REPAIRS (SMOKE HATCH DEMO/GYM CEILING REPLACEMENT) PAGE 3
ANCHORAGE, ALASKA
CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL CONSTRUCTION COST ESTIMATE DATE: 12/4/2020

HMS Project No.: 20109

NOTES REGARDING THE PREPARATION OF THIS ESTIMATE (Continued)

GENERAL

When included in HMS Inc.'s scope of services, opinions or estimates of probable construction costs are prepared on the basis of HMS Inc.'s experience and qualifications and represent HMS Inc.'s judgment as a professional generally familiar with the industry. However, since HMS Inc. has no control over the cost of labor, materials, equipment or services furnished by others, over contractor's methods of determining prices, or over competitive bidding or market conditions, HMS Inc. cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from HMS Inc.'s opinions or estimates of probable construction cost.

This estimate assumes normal escalation based on the current economic climate. HMS Inc. will continue to monitor this, as well as other international, domestic and local events, and the resulting construction climate, and will adjust costs and contingencies as deemed appropriate.

Due to the rapidly evolving nature of the COVID-19 coronavirus pandemic and its as-yet unknown affect on the economy, and more specifically the construction industry, HMS Inc. is incorporating an additional contingency titled **Unique Market Risk**'. The amount provided for in the estimate will be adjusted as the situation continues to change and the effect on construction pricing becomes more predictable.

ALPENGLOW ELEMENTARY SCHOOL STRUCTURAL ROOF REPAIRS (SMOKE HATCH DEMO/GYM CEILING REPLACEMENT) PAGE 4
ANCHORAGE, ALASKA
CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL CONSTRUCTION COST ESTIMATE DATE: 12/4/2020

HMS Project No.: 20109

CONCEPT/PLANNING LEVEL COST SUMMARY

		Material	*Labor*	*Total*
01 - SITE WORK		$ 750	$ 8,212	$ 8,962
02 - SUBSTRUCTURE		0	0	0
03 - SUPERSTRUCTURE		405	788	1,193
04 - EXTERIOR CLOSURE		0	0	0
05 - ROOF SYSTEMS		0	0	0
06 - INTERIOR CONSTRUCTION		12,151	12,605	24,756
07 - CONVEYING SYSTEMS		0	0	0
08 - MECHANICAL		0	0	0
09 - ELECTRICAL		0	0	0
10 - EQUIPMENT		0	0	0
11 - SPECIAL CONSTRUCTION		0	0	0
SUBTOTAL:		*$ 13,306*	*$ 21,605*	*$ 34,911*
12 - GENERAL CONDITIONS, OVERHEAD, AND PROFIT	35.00%			12,219
SUBTOTAL:				*$ 47,130*
13 - CONTINGENCIES				
Estimator's Contingency	20.00%			9,426
Unique Market Risk	3.50%			1,979
TOTAL ESTIMATED CONSTRUCTION COST:				***$ 58,535***

ALPENGLOW ELEMENTARY SCHOOL STRUCTURAL ROOF REPAIRS (SMOKE HATCH DEMO/GYM CEILING REPLACEMENT) PAGE 5
ANCHORAGE, ALASKA
CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL CONSTRUCTION COST ESTIMATE DATE: 12/4/2020

HMS Project No.: 20109

01 - SITE WORK	*QUANTITY*	*UNIT*	*MATERIAL*		*LABOR*		*TOTAL*	*TOTAL*
			RATE	*TOTAL*	*RATE*	*TOTAL*	*UNIT RATE*	*MATERIAL/LABOR*
			$	*$*	*$*	*$*	*$*	*$*
DEMOLITION								
Remove existing 6'0"x6'0" smoke hatch assembly	3	EA			300.00	900	300.00	900
Remove roof curb	72	LF			2.50	180	2.50	180
Prep existing surface to receive new roof deck	36	SF			3.50	126	3.50	126
Remove existing 1 1/2"x2'0"x2'0" tectum ceiling panels (grid to remain)	5,625	SF			0.85	4,781	0.85	4,781
Dispose of debris	3	LDS	250.00	750	350.00	1,050	600.00	1,800
SUBTOTAL:				*$ 750*		*$ 7,037*		*$ 7,787*
Labor Premium Time	16.70%					1,175		1,175
TOTAL ESTIMATED COST:				***$ 750***		***$ 8,212***		***$ 8,962***

ALPENGLOW ELEMENTARY SCHOOL STRUCTURAL ROOF REPAIRS (SMOKE HATCH DEMO/GYM CEILING REPLACEMENT) PAGE 6
ANCHORAGE, ALASKA
CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL CONSTRUCTION COST ESTIMATE DATE: 12/4/2020

HMS Project No.: 20109

03 - SUPERSTRUCTURE	*QUANTITY*	*UNIT*	*MATERIAL*		*LABOR*		*TOTAL*	*TOTAL*
			RATE	*TOTAL*	*RATE*	*TOTAL*	*UNIT RATE*	*MATERIAL/LABOR*
			$	*$*	*$*	*$*	*$*	*$*
1 1/2"x20 gauge metal roof deck	150	SF	2.70	405	4.50	675	7.20	1,080
SUBTOTAL:				*$ 405*		*$ 675*		*$ 1,080*
Labor Premium Time	16.70%					113		113
TOTAL ESTIMATED COST:				***$ 405***		***$ 788***		***$ 1,193***

ALPENGLOW ELEMENTARY SCHOOL STRUCTURAL ROOF REPAIRS (SMOKE HATCH DEMO/GYM CEILING REPLACEMENT) PAGE 7
ANCHORAGE, ALASKA
CONCEPT/PLANNING LEVEL DESIGN SUBMITTAL CONSTRUCTION COST ESTIMATE DATE: 12/4/2020

HMS Project No.: 20109

06 - INTERIOR CONSTRUCTION	*QUANTITY*	*UNIT*	*MATERIAL*		*LABOR*		*TOTAL*	*TOTAL*
			RATE	*TOTAL*	*RATE*	*TOTAL*	*UNIT RATE*	*MATERIAL/LABOR*
			$	*$*	*$*	*$*	*$*	*$*
2'0"x2'0" tegular edge standard ceiling tile in existing grid (high work)	5,625	SF	1.98	11,138	1.70	9,563	3.68	20,701
Protect existing floor	5,625	SF	0.18	1,013	0.22	1,238	0.40	2,251
SUBTOTAL:				*$ 12,151*		*$ 10,801*		*$ 22,952*
Labor Premium Time	16.70%					1,804		1,804
TOTAL ESTIMATED COST:				***$ 12,151***		***$ 12,605***		***$ 24,756***