

RFP No. - 2026-02

**DESIGN-BUILD
REQUEST FOR PROPOSAL
Empath Addition**

February 12, 2026

**Maniilaq Association
Capital Projects Office**



**Maniilaq Association
Ferguson Building
733 2nd Avenue,
Kotzebue AK, 99752**

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EXHIBITS

- A. Maniilaq EmPath Unit Addition, Concept Design Narrative, January 30, 2026
- B. Geotech Report – Shannon & Wilson – For Information Only
- C. AIA A141- 2024, Standard Form of Agreement between Owner and Design-Builder for a Traditional Design-Build Project (with Owner modifications)
- D. Insurance and Bonding
- E. A141 – Exhibit B – Design-Build Amendment

1. CALENDAR OF EVENTS / RFP TIMELINE

Listed below are the important dates and times by which the actions noted must be completed. All dates are subject to change by Maniilaq Association (Maniilaq). If Maniilaq Association finds it necessary to change any of these dates or times prior to the due date, the change will be accomplished by addendum.

ACTION	COMPLETION DATE
Issue RFP	February 12, 2026
Last Day for questions	March 3, 2026
Submission Deadline	March 12, 2026
Selection Committee Meeting	March 12 – 17, 2026
Contract Award	March 23, 2026

2. GENERAL INFORMATION

REQUEST FOR PROPOSALS

Electronic proposals received by Maniilaq Association until 3:00 pm on March 12, 2026. Proposers shall take careful notice of the following conditions of this Request for Proposals:

- Proposers are required to submit (1) one PDF electronic copy of their proposal. The Proposer is responsible for assuring actual delivery of the proposal by email to Matthew Bergan, Capital Projects Director, matthew.bergan@maniilaq.com. before the advertised date and hour specified above.
- Submitters may withdraw and/or replace proposals at any time until the deadline for submission of proposals.
- All questions received by March 3, 2026 will be considered. Questions will not be answered over the phone. Questions regarding the RFP process must be in writing and emailed to the following individuals:
Matthew Bergan, Capital Projects Director, matthew.bergan@maniilaq.com
John Taylor, Project Manager john.taylor@maniilaq.org
- Do not attempt to contact any Selection Committee Member, staff member or any person other than Matthew Bergan for questions relating to this project. Anyone attempting to lobby Maniilaq Association representatives may be disqualified.
- IT IS THE SOLE RESPONSIBILITY OF EACH RESPONDENT TO MONITOR MANIILAQ ASSOCIATION'S WEBSITE [Resources | Maniilaq Association](#) FOR ANY AND ALL BID DOCUMENTS, INCLUDING ADDENDUM. Plans will also be available via [The Plans Room LLC](#).
- All Proposers must hold a valid Alaska Business License.
- All Proposers are required to hold all necessary applicable professional licenses and registrations required by Federal, State, Municipality or Borough law and proof of such shall be submitted with each proposal. Obtaining and ensuring compliance to all licensing and registration requirements is the responsibility of the Proposer.
- This RFP does not obligate Maniilaq or the selected Proposer until a contract is signed and approved by both parties. Upon completion of the evaluation process, contract negotiations may commence. If the selected Proposer fails to provide necessary information for negotiations in a timely manner and/or negotiate in good faith, SCF may terminate the award of the contract. SCF will not be responsible for costs incurred by the Proposer resulting from contract negotiations.
- Maniilaq reserves the right to include additional terms and conditions during contract negotiations. However, these terms and conditions must be within the scope of the original RFP and will be limited to price, clarification, definition, administrative, and legal requirements.

INTENT TO PARTICIPATE

Please confirm if your organization/company will or will not submit a proposal in response to this RFP by emailing **Name, E-mail** with the company name, designated contact person, contact person's email,

company address and telephone number. Please title the subject line of the e-mail "***Empath Addition RFP Intent to Participate.***" A notice of intent to participate is required to be eligible to submit a Proposal and to receive addenda.

3. PROPOSAL DOCUMENTS CHECKLIST

The following documents and forms in the following arrangement must accompany each Proposal Package or alternative RFP submitted:

Please submit each of the Items below – 1, 2, 3 as separate PDF's

1. RFP Response: Including Cover, Cover Letter, Technical Response (limited to 15 pages), and Resumes.
2. Pricing Response
3. Additional Required Documents
 - o Proposer's Certification / Addenda Acknowledgement Form
 - o Hold Harmless Agreement
 - o Conflict of Interest Disclosure Form
 - o Non-Collusive Affidavit Form
 - o Alaska Native/American Indian Preference
 - o Licenses & Registrations

4. INTRODUCTION

PURPOSE

The Maniilaq Association is planning an Addition to the Medical Health Center (MHC) in Kotzebue, Alaska, to address immediate behavioral health and intoxication management needs. The project, the Empath Unit Addition, consists of a 1,300 square foot modular addition designed as a functional extension of the existing Emergency Department. The addition increases clinical capacity while minimizing site disturbance, construction duration, and operational impacts to the active hospital campus.

PROJECT SCOPE

The project scope, along with Design Narratives and a Concept Plan are described in Exhibit A: Maniilaq EmPath Unit Addition, Concept Design Narrative, dated January 30, 2026.

DESIGN-BUILD PROJECT DELIVERY METHOD

MANIILAQ intends to use a Phased-Design-Build delivery method for this project.

A phased design-build delivery was selected for this project because:

- It supports collaboration and teamwork among all project stakeholders, including the owner, designer, and contractor.
- All parties are engaged early in the process, which encourages open communication and timely decision-making. Potential issues can be identified and addressed earlier, reducing the likelihood of costly delays or disputes.
- Phasing allows for iterative design and construction, enabling adjustments and improvements throughout the project lifecycle.
- It mitigates risks by fostering collaboration and shared accountability among all project stakeholders.
- Early input from the contractor helps identify potential construction challenges, cost-saving opportunities, and allows for better planning and scheduling.
- MANIILAQ is committed to a close, collaborative partnership with the Design-Build Team to refine, develop, design, and deliver the project.

The selected Design-Builder will provide all design services, cost estimating, constructability, construction phasing/scheduling, subcontractor solicitation/participation, and on-going budget review and assistance as part of its Pre-Construction Services during Phase 1.

Phase 1 deliverables will consist of:

1. Evaluation and written report of the Owner's Concept Plan and Design Narratives, attend planning and review meetings.
2. Development of 35% design and GMP cost estimate, attend planning and review meetings.
3. Develop a Preliminary Project Schedule
4. Owner discussion and approval of the 35% design and cost estimate.

Phase 2 deliverables will consist of:

Design-Builder's Proposal to include:

1. 100% design/construction documents
2. GMP Cost proposal
3. Project Schedule for the Work
4. Early Procurement Items
5. Owner approval of Design-Builders GMP Proposal

The GMP will be the maximum compensation for construction unless the GMP is amended by both parties, as provided for in the contract documents

Should MANIILAQ determine it is in its best interest to continue working with the selected Phase 1 Contractor on Phase 2, that Scope of Work may be added via addendum to the Contract Agreement.

However, MANIILAQ also reserves the right re-solicit for contractors at any time to complete Phase Two of this project. MANIILAQ reserves the right to execute all of the work using another delivery method, including public bid, if good faith efforts between the parties fail to produce an agreeable GMP Amendment.

All design deliverables from Phase 1 shall become the property of MANIILAQ.

MANIILAQ may select, or not select, at their sole discretion, any Contractor that MANIILAQ feels will best address their needs.

5. PROPOSAL FORMAT AND CONTENT

The proposals should be compiled in a professional manner, organized exactly in accordance with this section, with page numbers in bottom righthand corner of footer. Proposers should respond directly to the evaluation criteria for this project; generic marketing information is not acceptable. Additional material (other than that requested below) is not required or desired. Clarity and brevity are encouraged. 11pt minimum font, Arial – all pages; document should be “portrait” orientation format.

Proposals should address the selection criteria listed below. Submittals must adhere to the following requirements. Each submittal must have a cover letter signed by a company official authorized to represent the Proposer. The entire proposal shall not exceed **15 pages**, not including cover letter, resumes, and Price Proposal Form. One page is defined as one side of a standard 8 1/2" x 11" sheet of paper, 10-point type minimum.

Please separate your Written Response from the Pricing Information into two PDFs. The Price Proposal Form, and bonding capacity letter shall be included in the Pricing Information PDF.

Submit your proposal response via e-mail to Matthew Bergan, Capital Projects Director, matthew.bergan@maniilaq.com. An e-mail acknowledgement will be returned.

COVER LETTER (1-2 Pages)

Address Letter To: Maniilaq Association
Mr. Matthew Bergan, PE
Ferguson Building
733 2nd Avenue
Kotzebue, Alaska 99752

RE: EMPATH Addition Project

Briefly state your firm’s understanding of the services to be performed and why your team is the best qualified. Describe the CM/GC Contractor team make-up and organizational relationships. Provide the name and contact information of the individual who is authorized to make representations and commitments for your organization. Please limit cover letter response to 1-2 pages.

RESPONSE TO SELECTION Criteria (15 Pages)

1. Technical Response

A. Similar Project Experience (25)

Describe no more than five (5) projects of similar size, scope, and challenges that your firm has completed in the last 10 years. Projects in remote areas and Healthcare related are preferred. Provide Lump Sum/ GMP and final cost of the Work, including total amount of change orders. Additionally, provide any examples of experience your team has with the Design-Build delivery method, examples of projects where you provided pre-construction services, value engineering services, and brought additional value to the Owner.

For each project, list the project name, construction cost, construction period, project delivery method (i.e., CM/GC, Design-Build, Design-Bid-Build), the role Proposer's company played in the project, brief project description, and lead project manager. Provide an Owner reference with contact name, title, organization, phone, and email address for each project.

B. Key Personnel Resumes (10 Points)

Provide resumes for the key personnel that will be assigned to this project (two (2) pages per person limit). Highlight relevant experience on projects of similar type, complexity and size. At a minimum, include the following team members:

- Contract Manager
- Project Manager
- Superintendent
- Lead/Principal Architect
- Lead Engineers (S,M,E)

Include tenure of each team member with their respective firm. Specifically identify projects on which team members worked together.

C. Project Approach (25 Points)

i. Pre-Construction Services: Describe your company's approach to the design-build process and pre-construction responsibilities. Describe your experience working on a Design-Build project delivery approach with the Owner, Owner's Representative and other consultants to achieve the best facility possible within the established time frame and budget.

ii. Construction Services: Summarize how your firm will staff and organize this project. Include information on your anticipated level of effort during the design phase, estimating process and construction delivery. Outline what work will likely be accomplished by subcontractor vs. your own staff. Discuss key sub-contractors selected and the possibilities for using subcontractor input during the design phase. Provide a proposed project schedule.

iii. Disruption Planning and Mitigation: Discuss how construction activities will be planned and executed to minimize disruption to Maniilaq Health Center operations, staff, patients and visitors. Include information and recommendations on laydown areas. Discuss your experience with ICRA, PCRA, ILSM.

iv. Project Estimating: Explain your method of estimating the costs of construction during the design process before design documents are complete. Describe your value engineering process and how you and your design team work to help reduce construction and life cycle facility costs.

v. Innovations: Summarize any innovative ideas or unique means and methods your team can bring to the Project that may result in savings (schedule and/or cost) or added value to Maniilaq.

vi. Risk Management - Quality, Cost, Schedule and Safety:

1) Describe how your company identifies and resolves project quality issues. Include a brief description of the quality control organization, quality control plan, and the authority assigned to the different levels of staff with quality control responsibilities.

- 2) Summarize your firm's change order and claims history over the last 10 years. For change orders, distinguish between Owner requested changes, differing site conditions, and design errors/omissions. For claims, summarize lawsuits or requested arbitration. Has your firm ever failed to complete any work awarded to it? Are there any judgements, claims, arbitration proceedings or suits pending or outstanding against your firm or its officers?
- 3) Include a description of your scheduling methods and controls to proactively manage the project.
- 4) Describe your company's safety program and any enhancements you may undertake on this project. Provide your current Experience Modification (EMR) rating.

D. Capacity to Accomplish Work (10)

Provide a summary of your firm's current and anticipated workload during this project. Include a brief description of projects, dollar values of construction for which you are responsible either as a prime or subcontractor.

Provide information on the resources available to your team to ensure the timely and successful completion of the Project. Indicate location of offices, current staffing, and available technology.

Proposer must confirm its ability to secure performance and payment bonds for the referenced period. Please provide a letter from firm's bonding agent with proposal confirming current bonding capacity commitments.

E. Alaska Native/American Indian Preference (5)

Describe the nature of any Alaska Native/ American Indian Ownership of the prime firm. Also describe the extent of active professional participation by Alaska Natives and/or Native Americans on the work to be performed under this contract.

2. Pricing

Price Proposal (25)

Price Proposals shall be submitted using the attached price proposal form .

Part 1: Phase 1 - Pre-Construction Fee

Provide a fixed fee for services provided during pre-construction and 35% design phase. This amount should include projected hours for general contractor and design team, reimbursable costs, travel expenses for site visit. Please provide a one-page breakdown of how you arrived at your pre-construction fee and include as an attachment to the price proposal form.

Part 2: Phase 2 – Design-Build Fee

Provide the design-build fee (as a percentage) including profit and overhead that will be applied to the direct Cost of the Work during Phase 2, including the design completion to 100% and construction phase. Costs for the Design-Builder's internal Project Manager for construction phase services shall be included in the proposed Design-Build Fee, regardless of onsite or home office location. The Proposed Design-Builder Fee percentage included in the price proposal shall be used to

establish the actual profit and overhead Fee in the GMP.

In addition, provide fees for changes in the work.

- a. Fees on Direct Change Order Work: Provide markup (as a percentage) that covers profit, home/field office overhead (including key personnel time), and general conditions for direct work performed on change orders.
- b. Fees on Subcontract Change Order Work: Provide markup (as a percentage) that covers profit, home/field office overhead (including key personnel time), and general conditions that will be applied to subcontract work on change orders.

Part 3 – Bonds and Insurance:

Provide a bonding capacity letter from your Bonding Agency. Include costs for the required Bonds and Insurance as set forth in the RFP (see sample contract for requirements). Similar to the DB Fee above, state the percentage and multiply it by the target Guaranteed Maximum Price "GMP" Construction Costs provided to determine the single dollar amount for the Bonds and Insurance cost for the purpose of analysis of the Fee & Price Proposal.

Part 4 – Staff Rates for Phase 1:

Includes dollar amounts for staff Member Classifications, Hourly Rates, and Estimated Hours.

Part 5 – Summary of Fee & Price Proposal:

The dollar amount for the Phase 1 Costs will be added to the dollar amounts for the DB Fee, Bonds, and Insurance to determine a single amount that shall be the Proposer's Total Fee/ Price Proposal.



PRICE PROPOSAL - EmPath

PROPOSERS MUST COMPLETE THE SECTION BELOW

Part 1 – Pre-Construction Fee.

\$

Part 2 – Construction D-B Fee (% of total Construction Cost (GC+DC)). Assume the Total Estimated Cost of the work to be \$3,000,000, for purposes of this calculation.

_____ % * \$3,000,000 = \$_____

Part 3 – Bonds and Insurance (% of total Construction Cost). Assume a Total Estimated Cost of the work to be \$80,000,000, for purposes of these calculations.

Insurance Premiums:

_____ % * \$3,000,000 = \$_____

Performance and Payment Bond:

_____ % * \$3,000,000 = \$_____

Part 4 – Staff Hourly Rates. Fill out the below table for staff hourly rates. Rates shall be fully burdened to include all Overhead and Profit Add additional Pages as needed.

		\$
Estimated Reimbursable Description	Qty	Total Cost
		\$
		\$
		\$
		\$
		\$

Annual escalation percentage for Hourly Billing rates _____ %

Part 5 – Summary of Fee and Price Proposal. Complete the below table using the calculated values from above, to arrive at a total Proposal Dollar Amount.

<u>Summary of all Proposal Items:</u>	Proposal Amount TOTALS:
Part 1 – Pre-Construction Fee	\$ _____
Part 2 – Design-Build Fee	\$ _____
Part 3: Bonds and Insurance	\$ _____
<u>PROPOSAL TOTAL:</u>	\$ _____

The DB Fee and Bonds and Insurance percentages will be used as the basis for negotiating the Phase 2 final Guaranteed Maximum Price.

Please attach the following:

- Bonding Capacity Letter
- Breakdown of your pre-construction price proposal (1 page please)

ADDITIONAL CONDITIONS

MANIILAQ reserves the right to reject any or all Proposals received, to request additional information, or to extend the deadline for submittals.

Confidentiality of Documents: Upon receipt of proposals by MANIILAQ, the proposals shall become the property of MANIILAQ without compensation to the proponent, for disposition or usage by MANIILAQ at its discretion.

Costs to Prepare Responses: MANIILAQ assumes no responsibility or obligation to the respondents and will make no payment for any costs associated with the preparation or submission of these proposals.

INTERPRETATIONS, CLARIFICATIONS AND ADDENDA

No oral interpretations will be made to any CONTRACTOR as to the meaning of the RFP Contract Documents. Any questions or request for interpretation received VIA E-MAIL by MANIILAQ before the stated deadline, will be given consideration. All such changes or interpretations will be made in writing in the form of an addendum and, if issued, will be distributed prior to the established RFP opening date. Each CONTRACTOR shall acknowledge receipt of such addenda in the space provided on the Proposal Form.

In case any CONTRACTOR fails to acknowledge receipt of such addenda or addendum, their RFP package will nevertheless be construed as though it had been received and acknowledged and the submission of their RFP will constitute acknowledgment of the receipt of same. All addenda are part of the RFP Documents, and each CONTRACTOR will be bound by such addenda, whether or not received by them. It is the responsibility of each CONTRACTOR to verify that they have received all addenda issued before the established RFP / RFQ scheduled deadline.

GOVERNING LAWS AND REGULATIONS

The CONTRACTOR is required to be familiar with and shall be responsible for complying with all federal, state, and local laws, ordinances, rules, and regulations that in any manner affect the work.

CONFLICT OF INTEREST DISCLOSURE

Each respondent shall complete and have notarized the attached disclosure form of any potential conflict of interest that the Respondent may have due to ownership, contracts, or interest associated with this project

FORM OF CONTRACT

AIA Document A141-2024 Standard Form of Agreement Between Owner and Design-Builder (with Maniilaq Association project-specific revisions) as the Contract, where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price. A141 - Exhibit A – Insurance and Bonding, A141 – Exhibit B – Design-Build Amendment.

ADDITIONAL INFORMATION

Maniilaq is not liable for any costs incurred by respondents in the preparation of their proposal responses.

Maniilaq reserves the right to waive any formalities, and to make the selection as deemed in its best interest. This includes the right to reject any and all responses, and the right to consider the Respondents experience and past performance in awarding a contract.

All contractor personnel must pass a Maniilaq Association background check prior to mobilizing to the project site. This is due to the project site being a medical facility, governed by certain Policies and Procedures designed to protect patients.

6. EVALUATION AND AWARD

RFP EVALUATION

Once the RFPs are received, the Selection Committee members will independently review each submittal and score each RFP based on the evaluation criteria below. The selection committee will be comprised of members from the Maniilaq Association Project Team.

Scoring will be weighted as follows:

Selection Criteria	% of Total Points
Similar Project Experience	25
Key Personnel	10
Project Approach	25
Capacity	10
AN/AI Preference	5
Price Proposal	25
Total	100

PROCEDURE REQUIREMENTS

Proposal submittals will be reviewed and ranked by the MANIILAQ selection committee and oral presentations/interviews may be requested from a shortlist of finalists selected by the Committee as a result of their evaluation of the initial Request for Proposals. The Committee will recommend its ranking of the top CONTRACTOR to the MANIILAQ Board of Directors for approval.

KEY CONTRACTOR PERSONNEL

In submitting a proposal package, the Respondent is representing that each person listed or referenced in the proposals package shall be available to perform the services described for the project, baring illness, accident or other unforeseeable events of similar nature in which case the Respondent must be able to promptly provide a qualified replacement. In the event the Respondent wishes to substitute personnel, the Respondent shall propose a person with equal or higher qualifications and each replacement person is subject to prior written MANIILAQ approval.

NEGOTIATION

MANIILAQ reserves the right to negotiate any and all elements of this response.

AWARD OF RESPONSE

MANIILAQ reserves the right to reject any or all responses, to waive any minor informality or irregularity in any response, and to make award to the response deemed to be most advantageous to MANIILAQ.

CONFLICT OF INTEREST

If any officer, director, or agent of your organization is also an employee of MANIILAQ, then you shall clearly identify in your response the name of the individual(s) and the position they hold in

your organization. Further, you shall disclose the name(s) of any MANIILAQ employee(s) who owns, directly or indirectly, any interest in your organization or any of its branches. This does not include stock in a publicly traded organization unless the individual holds more than a ten percent (10%) stake. You shall complete and have notarized a Conflict-of-Interest Form and include it in your proposal package.

If there is a conflict of interest as defined above, then the respondent cannot be considered for award.

RESTRICTED DISCUSSIONS

From the date of issuance of the RFP until final MANIILAQ action, the Respondent shall not discuss the RFP or any part thereof with any employee, agent, or representative of MANIILAQ except as expressly authorized by MANIILAQ point of contact identified in this RFP above for this solicitation. Violation of this restriction will result in rejection of the respondent's proposals package.

No negotiations, decisions, or actions shall be initiated or executed by the Respondent as a result of any discussions with any MANIILAQ employee. Only those communications that are in writing from the authorized MANIILAQ point of contact, Matthew Bergan shall be considered pertinent to this RFP.

AWARD

It is understood that MANIILAQ is not obligated to make an award under or as a result of this RFP or to award such contract. MANIILAQ reserves the right to award such contract, if any, to the best qualified Respondent(s). MANIILAQ has the sole discretion and reserves the right to cancel this RFP, and to reject any and all proposals packages, to waive any and all informalities and/or irregularities, or to re-advertise with either the identical or revised specifications, if it is deemed to be in "MANIILAQ's" best interest to do so.

STANDARD INSURANCE REQUIREMENTS

Insurance requirements are detailed in Exhibit A to A-141 Insurance and Bonds included with this Request for Proposal.

Notice-To-Proceed (NTP):

NTP will be issued after a contract is signed by both parties and MANIILAQ is in receipt of required pre-construction documents such as insurance certificates.

Required Clauses in the Contract:

Bidders are hereby advised that the Maniilaq Procurement Policy requires that all construction contracts contain the following clauses:

- a) Copeland "Anti-Kickback" Act (18 U.S.C. 874) clause, as supplemented in Department of Labor regulations (29 CFR Part 3).

7. ADDITIONAL REQUIRED DOCUMENTS

PROPOSER'S CERTIFICATION

Submit To: Maniilaq Association Ferguson Building P.O. Box 256 733 2 nd Avenue Kotzebue AK 99752	MANIILAQ Association REQUEST FOR PROPOSAL (RFP) CERTIFICATION AND ADDENDA ACKNOWLEDGMENT			
DUE DATE:	DUE TIME:	RFP # 202602		
TITLE: Hospital Roof Assessment and Replacement				
CONTRACTOR NAME	PHONE:			
CONTRACTOR MAILING ADDRESS	FAX:			
CITY, STATE, ZIP:	EMAIL:			
<p>"I, the undersigned, certify that I have reviewed the addenda listed below (list all addenda received to date). I understand that timely commencement will be considered in award of this RFP and that cancellation of award will be considered if commencement time is not met, and that untimely commencement may be cause for termination of contract. I further certify that the services will meet or exceed the RFP requirements. I, the undersigned, declare that I have carefully examined the RFP, specifications, terms, and conditions as applicable for this Request, and that I am thoroughly familiar with all provisions and the quality and type of coverage and services specified. I further declare that I have not divulged, discussed, or compared this RFP with any other "RESPONDENT" and have not colluded with any "RESPONDENT" or parties to an RFP whatsoever for any fraudulent purpose."</p>				
Addendum #	Addendum #	Addendum #	Addendum #	Addendum #
<p>"I certify that this quote is made without prior understanding, agreement, or connection with any corporation, "VENDOR", or person submitting an RFP for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this RFP and certify that I am authorized to sign this response and that the offer is in compliance with all requirements of the RFP, including but not limited to certification requirements. In conducting offers with an agency for "MANIILAQ", respondent agrees that if this RFP is accepted, the respondent will convey, sell, assign, or transfer to MANIILAQ all rights, title and interest in and to all causes of action it may now or hereafter acquire under the anti-trust laws of the United States for price fixing relating to the particular commodities or services purchased or acquired by the "MANIILAQ". At "MANIILAQ"s discretion, such assignment shall be made and become effective at the time the purchasing agency renders final payment to the respondent."</p>				
Authorized Agent Name, Title (Print)		Authorized Signature		Date
<i>This form must be completed and returned with your submittal</i>				

HOLD HARMLESS AGREEMENT

The Contractor agrees to hold the MANIILAQ harmless against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting there from, arising out of the agreement, to the extent that such claims are attributable, in whole or in part, to a negligent act or omission by the Contractor.

The Contractor shall purchase and maintain workers' compensation insurance for all workers' compensation insurance and employers' liability.

The Contractor shall also purchase any other coverage required by law for the benefit of employees.

Required insurance shall be documented in Certificates of Insurance and shall be provided to the MANIILAQ representative requesting the service.

By signature upon this form the Contractor stipulates that he/she agrees to the Hold Harmless Agreement, and to abide by all insurance requirements.

Contractor/CONTRACTOR– Print Name

Signature

Project Name

Date

The effective date of this Hold Harmless Agreement shall be for the duration of this project.

This document must be completed and returned with your Submittal.

CONFLICT OF INTEREST DISCLOSURE FORM

I HEREBY CERTIFY that

1. I (printed name) _____ am the
(Title) _____ and the duly authorized representative
of the CONTRACTOR _____ (Name)
_____ whose address is

_____, and that I possess the legal authority to make this affidavit on behalf of myself
and the CONTRACTOR for which I am acting; and,

2. Except as listed below, no employee, officer, or agent of the
CONTRACTOR have any conflicts of interest, real or apparent, due to
ownership, other clients, contracts, or interests associated with this
project; and,
3. This bid proposal is made without prior understanding, agreement, or
connection with any corporation, CONTRACTOR, or person submitting a
bid proposal for the same services and is in all respects fair and
without collusion or fraud.

EXCEPTIONS (List)

Signature: _____

Printed Name: _____

CONTRACTOR Name: _____

Date: _____

State of _____

County of _____

Sworn to and subscribed before me this _____ day of
_____, 20____ Personally Known _____

OR Produced Identification _____, Type of Identification _____

My Commission Expires _____

(Printed, typed, or stamped commissioned name of notary)

This document must be completed and returned with your Submittal

NON-COLLUSIVE AFFIDAVIT FORM

AFFIDAVIT

PRIME PROPOSER:

State of: _____

Judicial District

_____, being first duly sworn, deposes and says:

"That he/she is the Proposer, or a partner or officer of the firm, party, etc., making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or a sham; that said Proposer has not colluded, conspired, connived or agreed, directly or indirectly, with any Proposer or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communications or conference, with any person, to fix the bid price of affiant or any other Proposer, or to fix any overhead, profit or cost element or said bid price, or of that of any other Proposer, or to secure any advantage against the Maniilaq Association or any person interested in the proposed contract; and that all statements in said proposal or bid are true."

Signature of: _____
Proposer's Representative _____

NOTARY

Subscribed and sworn to before me this _____ day of _____, 2026.

My Commission Expires:

This document must be completed and returned with your Submittal

AN/AI Preference:

Is an Alaska Native / American Indian Business Owner Preference being claimed?

YES or NO

(Must include proof of AN/AI Ownership attached to this form)

Authorized Signature: _____

Name/Title: _____

Company Name: _____

Email: _____ Phone: _____

Address

City

State

Zip Code

Authorized Signature: _____ Date: _____

This document must be completed and returned with your Submittal

LICENSES AND REGISTRATION

- Alaska Business License.
- All Proposers are required to hold all necessary applicable professional licenses and registrations required by Federal, State, Municipality or Borough law and proof of such shall be submitted with each proposal. Obtaining and ensuring compliance to all licensing and registration requirements is the responsibility of the Proposer.



Maniilaq EmPath Unit Addition Concept Design Narrative

January 30, 2026

Submitted by



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EXHIBITS

Exhibit A Concept Design Drawings

ACKNOWLEDGEMENTS



ACKNOWLEDGEMENTS

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SITE LOCATION



SITE LOCATION

Overview Site Location



Enlarged Site Location



BACKGROUND & EXISTING CONDITIONS



BACKGROUND AND EXISTING CONDITIONS

Overview

The area served by the Maniilaq Association Health Services division is vast and consists of the communities within the Northwest Arctic Borough and Point Hope, with a collective population of about 8,000 people. Care is based out of the Maniilaq Health Center (MHC) in Kotzebue and in village health clinics in eleven outlying communities. Long Term Care is provided in Kotzebue.

High Level Facility Condition Assessment

The MHC is a hospital situated in Kotzebue, Alaska and is located immediately adjacent to the small boat harbor and four blocks east of the airport. The original building structure was designed in 1990 by Anderson Bjornstad Kane Jacobs, Inc., and was constructed in 1995. It offers a wide range of healthcare services to the residents of the Northwest Arctic Borough and is the primary healthcare facility for the region. The services provided by the hospital include an outpatient clinic, dentistry, optometry, pharmacy, radiology, laboratory, mental health counseling, obstetrics, special procedures, an inpatient suite, and emergency department. The building occupies an area of 88,000 square feet and includes administrative offices, facilities maintenance and engineering, central stores, and food services.

Facility condition assessments have been completed by ANTHC in 2018 and 2023 and are available for review and analysis.

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

The purpose of this Design Report is to provide the Maniilaq Association with a detailed design narrative for the proposed Maniilaq EmPath Unit Addition.

Design Concept

The Maniilaq Association proposes the EmPath Unit Addition to the Medical Health Center (MHC) in Kotzebue, Alaska, to address immediate behavioral health and intoxication management needs. The project consists of a 1,300 square foot modular addition designed as a functional extension of the existing Emergency Department. The addition increases clinical capacity while minimizing site disturbance, construction duration, and operational impacts to the active hospital campus.

The addition will be located on the west side of the MHC, positioned above the existing ambulance garage bay and connected internally to the Emergency Department. The building will be elevated on driven steel piling, a strategy well suited to Arctic conditions that preserves existing site circulation, limits disturbance to permafrost-sensitive soils, and supports long-term structural performance. The modular construction approach enables off-site fabrication, improved quality control, reduced on-site labor, and accelerated delivery in a remote environment.

Architecturally, the addition will integrate seamlessly with the existing MHC through compatible materials, scale, and detailing. Exterior construction will consist of wood-framed modular assemblies with high-performance wall systems, vinyl fixed and operable windows for daylight and ventilation, and a standing seam metal roof matching the existing facility. No exterior doors are proposed, as all access and egress will occur through the adjacent Emergency Department in full compliance with life-safety and building code requirements.

The interior environment is designed to be warm, welcoming, and therapeutic, supporting patient stabilization, healing, and recovery while promoting staff effectiveness. A classic and timeless interior aesthetic is paired with durable, maintainable finishes appropriate for a high-use clinical setting. Materials are selected for longevity, impact resistance, and compatibility with frequent cleaning and disinfecting, with preference given to products incorporating inherent antimicrobial properties. Interior partitions and doors are designed to meet or exceed required acoustic performance standards, ensuring privacy and dignity within patient and staff spaces.

Structurally, the addition is designed as a structurally independent facility separated from the existing hospital by a seismic joint, allowing independent movement during seismic events. The superstructure consists of modular wood construction supported by an elevated steel frame, which in turn is supported by driven steel piles. The structure is designed as an Essential Facility (Risk Category IV) and meets all applicable wind, snow, and seismic load requirements for the region. Lateral forces are resisted through wood shear walls and diaphragm action, with loads transferred through the steel frame into the pile foundation system.

Mechanical, electrical, plumbing, and fire protection systems are designed to extend existing hospital infrastructure in a controlled and reversible manner, consistent with the temporary and modular nature of the EmPath unit. Plumbing, heating, and fire sprinkler systems will connect to existing building systems through accessible interstitial and utilidor spaces, with isolation points provided to allow future removal without disruption to hospital operations. A dedicated heat recovery ventilation (HRV) system will serve the addition, providing continuous, code-compliant ventilation suitable for 24/7 operation in extreme cold conditions.

Electrical systems will be served from existing normal and emergency power infrastructure, with new panelboards and branch circuits sized to support the EmPath program without requiring generator upgrades. Lighting will utilize energy-efficient LED fixtures consistent with existing hospital standards, with appropriate controls for patient comfort, safety, and staff operations. Telecommunications, fire alarm, and security systems will be extended in coordination with Maniilaq standards, maintaining continuity with existing hospital systems.

Overall, the EmPath Unit Addition is a cost-effective, constructible, and operationally efficient solution that addresses urgent behavioral health needs while respecting the environmental, logistical, and infrastructure constraints of rural Alaska. The design prioritizes patient dignity, staff safety, and long-term flexibility, providing Maniilaq Association with a durable and adaptable facility that supports its mission and community healthcare goals.

DESIGN NARRATIVE



DESIGN NARRATIVE

Architectural

Overview

The Maniilaq Association proposes the EmPath Unit Addition to the Medical Health Center (MHC) in Kotzebue, Alaska. The project consists of a 1,300 square foot modular addition, designed to integrate seamlessly with the existing facility while supporting Maniilaq's mission to provide high-quality, culturally responsive healthcare services. The addition is conceived as an extension of the current Emergency Department, enhancing clinical capacity while minimizing site disturbance, construction duration, and operational impacts to the active medical campus.

Site and Context

The addition will be located on the **west side of the MHC site**, positioned directly above the existing ambulance garage bay and connected internally to the Emergency Department. The surrounding area consists primarily of gravel driveways and parking pads associated with emergency access and service functions. Due to the use of an **elevated piling foundation system**, site disturbance will be minimal, preserving existing circulation patterns and limiting impacts to permafrost-sensitive soils. This approach aligns with best practices for construction in Arctic environments and supports long-term building performance.

Geotechnical Considerations

A previously completed geotechnical investigation exists for the project site; therefore, a new subsurface investigation is not anticipated. To confirm applicability to the proposed addition, a Geotechnical Recommendations Memorandum will be requested to verify foundation design parameters and ensure continued compliance with site-specific soil and permafrost conditions.

Building Construction and Envelope

The EmPath Unit Addition will utilize **wood-framed modular construction**, consistent with proven construction methods in rural Alaska that support quality control, reduced on-site construction time, and cost efficiency.

Exterior wall assemblies will be typical of modular construction and designed to meet all applicable energy, durability, and life-safety requirements. Fenestration will consist of **vinyl windows**, incorporating a combination of fixed and operable units to provide natural daylight and opportunities for fresh air ventilation while maintaining thermal performance.

No exterior doors are proposed, as the addition functions as an internal extension of the existing MHC. All means of egress will be provided through the adjacent Emergency Department in compliance with code requirements.

The roof system will be a **standing seam metal roof**, selected to match the existing MHC roofing and to provide long-term durability in Kotzebue's harsh climatic conditions. The roofing system will comply with all Federal, State, and Local codes and will be installed in accordance with manufacturer specifications.

Interior Design Philosophy

The interior design of the EmPath Unit Addition is guided by the goal of creating a **warm, welcoming, and therapeutic environment** that supports patient healing, rehabilitation, and recovery while also promoting staff performance. The design emphasizes a **classic and timeless aesthetic**, avoiding trends that could quickly feel dated, and reinforcing a sense of safety, dignity, and calm.

Finishes, fixtures, and furnishings will balance the need for **behavioral health safety and security** with an environment that feels familiar and non-institutional. Material selections will prioritize longevity, ease of maintenance, and appearance retention, recognizing the operational demands of a high-use clinical environment.

Interior Finishes and Materials

All floor coverings will be **commercial-grade**, meeting code requirements for slip resistance, accessibility, and sustainability. Floor transitions will be minimized to reduce trip hazards and support barrier-free circulation throughout the addition. Materials will be selected to withstand frequent cleaning and disinfecting, with preference given to products incorporating **inherent antimicrobial properties**, such as copper or silver fibers. Overall interior finishes will be durable, impact-resistant, and supportive of a clean, modern healthcare image.

Interior Partitions and Acoustics

Non-bearing interior partitions will be designed to support required clinical equipment and furnishings. Wall assemblies in patient work and discussion areas will meet or exceed **minimum Sound Transmission Coefficient (STC) ratings** required by applicable healthcare standards and codes, ensuring privacy and acoustic comfort. Partition thicknesses will be adjusted as needed to accommodate concealed piping and building systems. Installation of metal stud framing will comply with **ASTM C754**.

Interior Doors and Hardware

Interior doors will be **solid core wood doors**, custom grade, with plain-sliced, slip-matched veneers and transparent finishes to reinforce a warm, high-quality interior character. Acoustical door and frame assemblies will achieve **STC ratings of 45 to 50**, matching or exceeding adjacent wall assemblies to maintain speech privacy and therapeutic effectiveness.

Door hardware will be durable, high-quality, and consistent with established **Maniilaq MHC standards**, supporting safety, accessibility, and long-term performance.

Concept Design

Please refer to Exhibit A for Concept Design Drawings.

Structural

Building Codes

The structural design for this project shall be in accordance with the following codes and standards:

- International Code Council (ICC): 2021 International Building Code
- American Society of Civil Engineers (ASCE): 7-16 Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- American Institute of Steel Construction (AISC): 360—16: Specification for Structural Steel Buildings

Design Loads

Design loads for this building addition will be in accordance with the 2021 International Building Code as adopted by the State of Alaska. Design loads and criteria are as follows:

Structural Risk Category	IV – Essential Facilities
Dead Loads	Self weight of building materials and permanent equipment
Floor Live Loads	50 pounds per square foot + 15 pounds per square foot partition allowance
Snow Loads	Ground snow load = 60 pounds per square foot Minimum roof snow load = 51 pounds per square foot Snow drift load per ASCE 7-16 Importance factor = 1.2
Wind Loads	Nominal design wind speed, 3-second gust = 160 miles per hour Exposure category D
Seismic Loads	Spectral response acceleration parameter at short periods, $S_s = 0.46$ Spectral response acceleration parameter at a period of 1 second, $S_1 = 0.15$ Design response acceleration parameter at short periods, $S_{DS} = 0.45$ Design response acceleration parameter at a period of 1 second, $S_{D1} = 0.27$ Lateral Force Resisting System: Cantilevered Steel Columns Response modification coefficient, $R = 2.5$ Seismic design category D Importance factor = 1.5

Project Description

The proposed structure will be a free-standing addition to the existing hospital. It will be structurally separate from the existing structure, which will require a seismic joint where it abuts the existing building to allow independent movement between the addition and the existing structure. The building will be elevated significantly above the exterior grade to allow ambulance access to the at-grade entrance below.

Structural Description

SUPERSTRUCTURE AND VERTICAL LOAD RESISTING SYSTEMS:

SNOW LOADING, SELF WEIGHT, AND LIVE LOAD

The primary structure will be modular wood construction, with the basis of design consisting of two 12'-6" wide x 52' long modules. Roof framing will be solid wood joists or wood I-joists supporting plywood/OSB roof decking and spanning the width of each module. These will be supported by the modular walls on each side. Where the modules adjoin, the roof joists will be supported by a combination of bearing walls and post-and-beam construction, using wood beams to span openings as shown in the architectural floor plan. Bearing walls and interior posts will bear on timber beams at the modular floor, which will also support wood floor I-joists. Plywood/OSB wood decking will comprise the floor.

The modules will be transported to the site unconnected. They will be erected into place and attached together with simple nails, screws, and or standard wood connector hardware, such as straps or clips. The modules will be attached to and supported by a steel frame directly beneath the modules, consisting of wide flange steel sections. This steel platform will include a cantilever to bridge toward the existing hospital building. The short connecting corridor structure can be site-constructed with light-framed wood floor, walls, and roof and tied to the adjacent module. A seismic joint enclosure will be required around all four sides (floor, walls, roof) where it abuts the existing building exterior wall, which will require a new corridor opening to be cut into it. Some wall reinforcing will be required in the existing wall to reinforce it for the new opening. This can be accomplished with wood or cold-formed steel wall framing in kind with the existing building wall construction.

The elevated steel frame will be supported by the foundation piling.

LATERAL LOAD RESISTING SYSTEMS – WIND AND SEISMIC LOADS

The plywood/OSB roof and floor decks will act as lateral-load-resisting diaphragms, transmitting lateral loads on exterior walls to the supporting shear walls. The exterior module walls will be plywood/OSB-sheathed shear walls with sheathing on one side only. Straps and other holdown hardware will be required at building corners to resist overturning and uplift forces. The connection between the modules and the supporting steel frame will be detailed to transmit these lateral forces into the steel beams, which will transmit lateral forces to the top of the foundation piling.

BUILDING FOUNDATION PILING

Due to the low quality of soils, particularly near the surface, and presence of permafrost below the building, the recommended foundation system will consist of driven steel piling. This recommendation is based on privileged existing available geotechnical information which may or may not be made available to the bidding and/or selected Design Builder(s): the original geotechnical report by Shannon and Wilson dated January 1990. The selected Design Builder will be required to confirm the foundation system and approach with either a professional review of the existing geotechnical data (if available) or a new geotechnical investigation performed by a licensed and competent geotechnical engineer. This effort should include, at a minimum, the difference in vertical loading demand between this added structure and the main hospital, the increased lateral loading demand caused by the elevation above grade, the reduced expected period of use of this

addition (5-10 years), the cost of deep driven pile vs. shallower systems with passive cooling, and geotechnical or climatic changes that may have occurred at the site between 1990 and the present.

Based on the available information, as qualified in the paragraph above, the recommended basis-of-design foundation system will consist of 8" (nominal) round steel pile with 1/2" minimum wall thickness driven to a depth of 50' below ground surface. Vertical loads transmitted to the pile from the elevated steel frame will be resisted by the pile acting as steel columns above grade and transferred into the soil via a combination of sidewall friction and end bearing. Lateral forces transmitted to the steel pile from the elevated steel frame will be resisted through lateral bending of the piles, which will act as cantilevered columns, laterally restrained by the soil to a depth-of-fixity as calculated in accordance with geotechnical recommendations. X-bracing between the pile above grade and below the elevated steel frame may be required to reduce lateral movement and bending stress in piles.

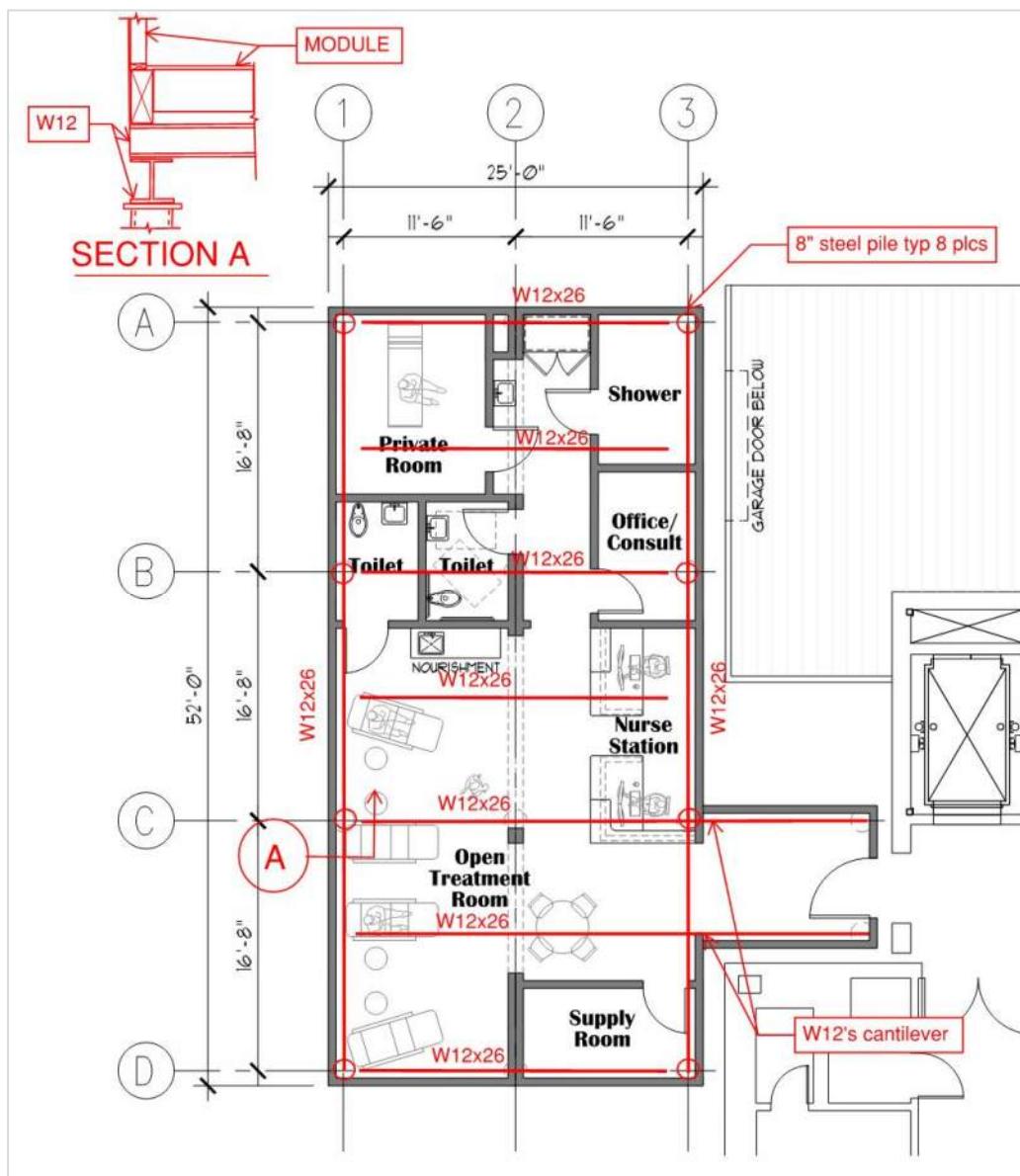


Figure S1: Structural Framing Layout

Mechanical

General

This concept design level mechanical narrative has been prepared to assist the A/E, Cost Estimator, and Owner team in understanding the mechanical system concepts proposed for the Maniilaq Health Center behavioral health expansion in Kotzebue, Alaska. The proposed expansion is a modular, temporary extension of the existing hospital footprint intended to support short-term behavioral health and intoxication management functions. The space is not intended to operate as a full institutional inpatient psychiatric unit, but rather as a controlled and durable holding environment with appropriate safety, hygiene, and operational considerations.

Mechanical systems will be designed in accordance with applicable codes and practical engineering standards for Kotzebue, Alaska, including but not limited to the International Building Code, International Mechanical Code, International Fire Code, NFPA standards, the Uniform Plumbing Code, and all applicable local and state amendments. Where appropriate, the design will consider relevant portions of the FGI Guidelines for the Design of Hospitals and Outpatient Facilities, with the understanding that the functional intent of the space allows for selective application of institutional requirements rather than full psychiatric inpatient compliance.

Given the temporary and modular nature of the addition, mechanical systems will be designed to be code compliant, robust, and readily removable at the end of the anticipated service life of the space. The overall intent is to extend existing hospital infrastructure in a manner that can be isolated, capped, or removed without interrupting the capacity, performance, or reliability of the existing Maniilaq Health Center mechanical systems.

Future design services will be performed by a Professional Mechanical Engineer registered to practice in the State of Alaska.

Plumbing Systems

The existing plumbing system is routed through a full height interstitial space located below the main floor of the Maniilaq Health Center. Nearby sanitary sewer and domestic hot and cold water branch piping will be extended from this space to serve the new bathroom groups and shower area within the behavioral health suite. Isolation valves will be provided at the new domestic hot and cold water branch connection serving the behavioral health expansion to allow for system isolation and future removal. New waste connections will be made to the existing 4 inch sanitary piping main located within the interstitial space. Domestic hot water will be connected to the existing 110 °F hot water branch. Beneath the building extension, a utilidor space will be provided to route new plumbing piping within a heated enclosure. The existing full height interstitial space will not be extended beneath the building extension, and the new utilidor will be sized only to allow minimum access for maintenance and new mechanical infrastructure. Refer to Figure 1 for plumbing piping connection points within the existing health center.

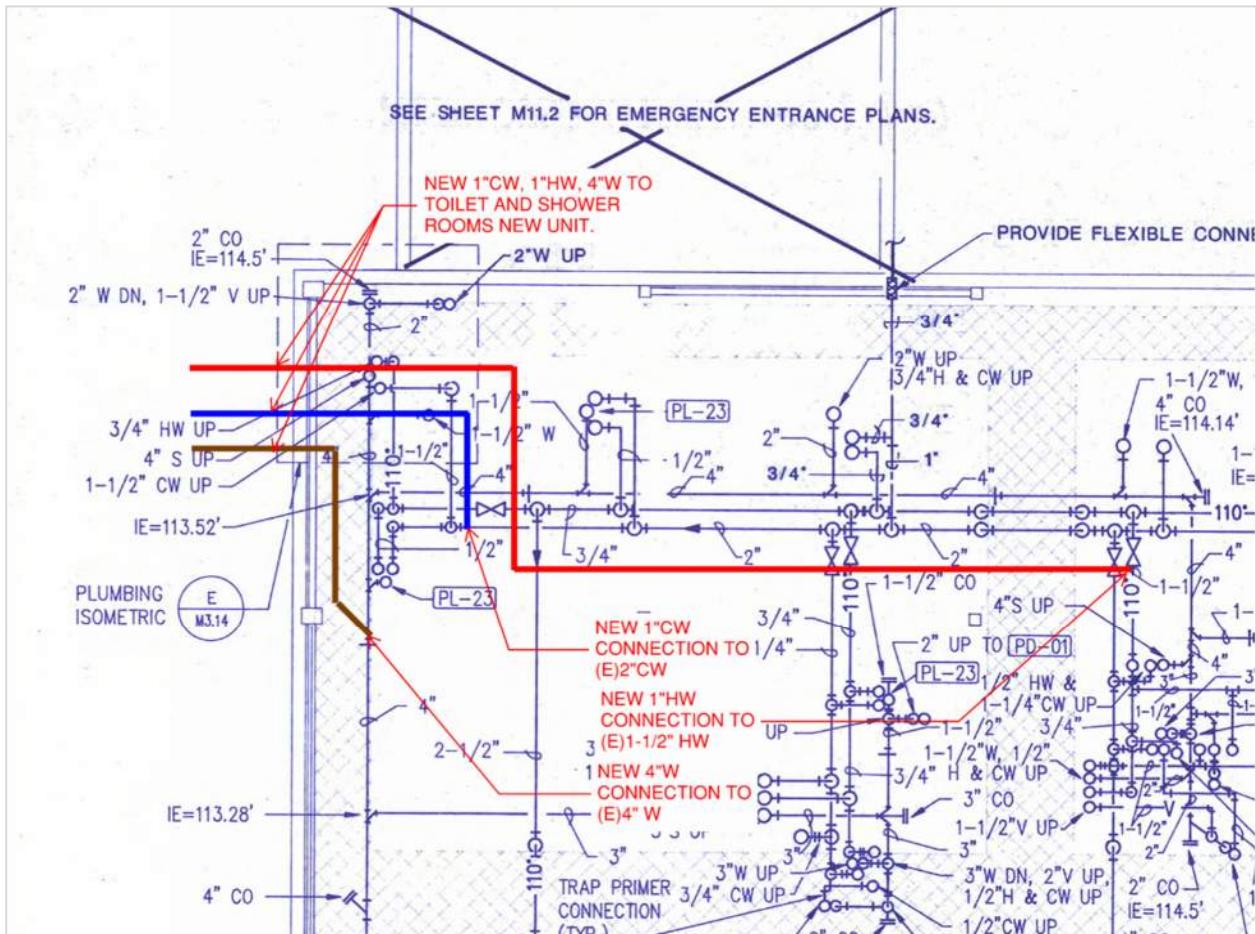


Figure M1: Existing Plumbing Connection Point

Plumbing fixtures will be standard commercial grade suitable for medical facilities. Institutional ligature resistant fixtures will not be required for this project. The basis of design includes floor-mounted, tank-type American Standard toilets and wall-mounted lavatories with touchless Delta faucets. These fixtures will be constructed of vitreous china and be ADA compliant where required. Shower build-outs shall be E.L. Mustee and meet ADA Accessible requirements as well. As an option for the Owner, a floor drain may be provided within the Open Treatment Room, Private Room, or Toilet Rooms to facilitate easy cleaning for staff.

Heating

The existing heating system is served by dedicated boilers and circulation pumps, providing a 180°F water/glycol mixture to terminal units, baseboard, and air handler heating coils throughout the building. Heating piping is routed through the interstitial space, noted above, in a reverse-return configuration from the central boiler plant to the facility's terminal units. Heating for the behavioral health expansion will be provided by radiant ceiling panels and baseboard heating units. Radiant ceiling panels will be coordinated with the architect for access to piping and any regular maintenance activities depending on the new ceiling type provided within the space. New 1-1/4" HGS/R piping will be attached to the existing 2-1/2" heating mains and routed through the new utilidor in a reverse/return configuration to the new terminal units in the space. See Figure 2 for heating piping connection points within the existing interstitial space.

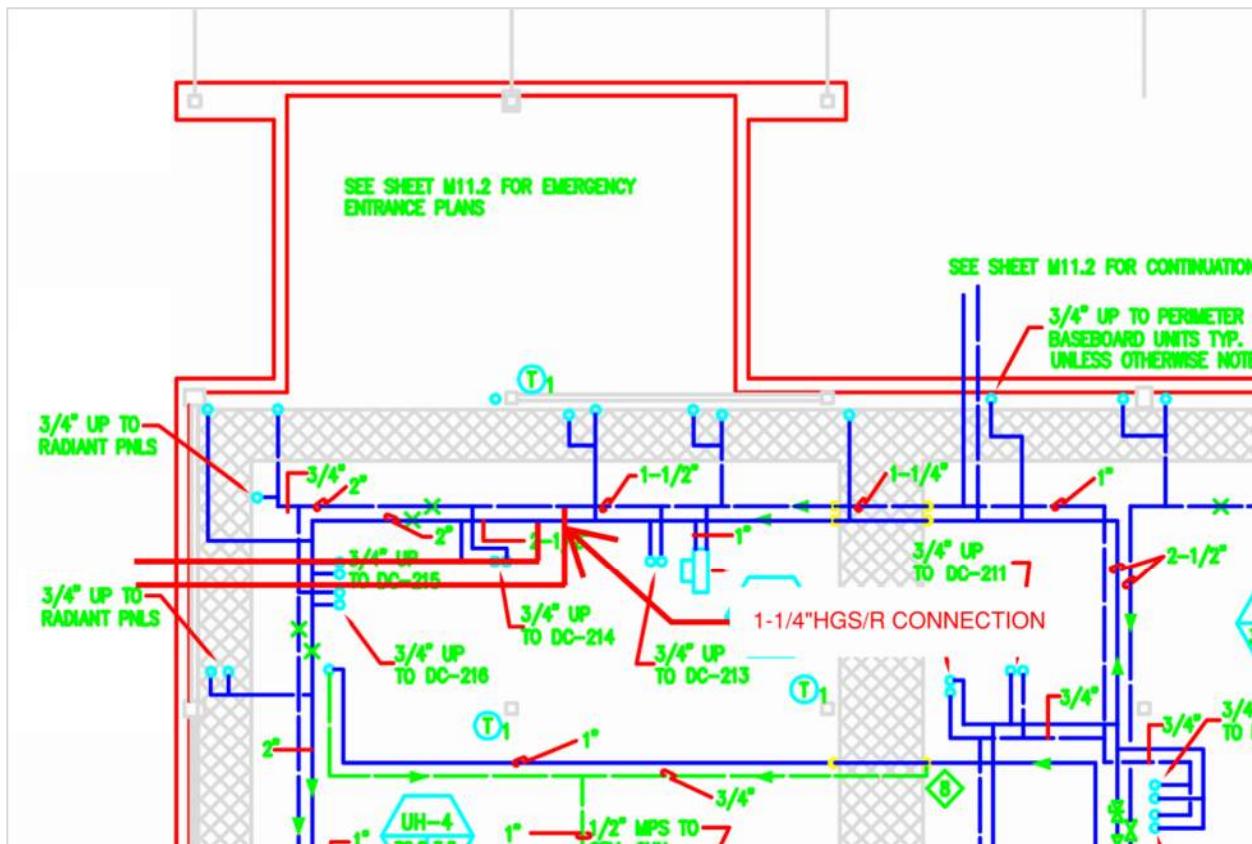


Figure M2: Heating Water/Glycol Connection Point

Open-finned baseboard heating will be provided within the utilidor to maintain the enclosure temperature. In addition, heating piping will be extended to provide heating glycol to the new preheat coil described in the ventilation section of this report. Considerations will be provided within the Open Treatment Room, Private Room, and Toilet Rooms for vandal resistant and ligature resistant terminal heating units. Refer to Figures 3 and 4 for baseboard and radiant ceiling heater options for the new expansion.

Point of use thermostats shall be provided and interlocked to each terminal heating unit. As an option, the expansion may be interlocked to the existing Siemens Control System for central monitoring of the new space.

However, due to the expected 24-hour, 7-day per week operation of the space, this is only to be provided at the owner's discretion.



Figure M3: Baseboard Heating Option



Figure M4: Radiant Ceiling Panel Option

Ventilation

The existing HVAC system at the Maniilaq Health Center consists of a constant volume central air handling system with reheat coils serving individual zones. The existing system configuration does not allow for extension of the existing ductwork to serve the new suite; therefore, a dedicated heat recovery ventilation (HRV) unit will be provided for the behavioral health expansion. The HRV system will be sized to meet FGI ventilation requirements for outdoor air and will include a preheat coil to allow operation during extreme winter conditions.

The space is expected to be occupied on a 24 hours per day, 7 days per week basis, and the HRV unit will be capable of operating at all design conditions for Kotzebue, Alaska. An HE 05IN unit is recommended as the basis of design, operating at approximately 300 CFM with 0.75 inches of external static pressure. Due to the limited defrost controls and operation of the unit, a preheat coil sized to pre-heat the air from -33°F to 35°F is recommended to be added to the unit. Refer to Figure 5 for the HRV basis of design.

HE 05IN
INDOOR UNIT



Energy recovery core is AHRI Certified®

ENERGY RECOVERY VENTILATOR
EC MOTORIZED IMPELLER

ETL
Intertek

SPECIFICATIONS

Ventilation Type: Static plate, heat, and humidity transfer	Accessories: Filters: MERV 13, 2" (shipped loose) Backdraft damper: 10", 12" Automatic balancing damper: 4", 5", 6" Motorized Dampers: 8" Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanneal Louver with 8" round duct connection: 12" W x 8" H Hooded wall vent 8": galvanized, paintable galvanneal Potentiometer speed control: remote installed Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E) Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D) IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D) Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W) Smoke detector: duct mount (SD-D) BACNet fan control: wall mount (BACNETFC-W) Indoor electric duct heater: RH series (1–11.5 kW), EK series (1–175 kW); Hanging bracket kit Hanging spring vibration isolation kit
Airflow Range: 120–375 CFM	
AHRI 1060 Certified Core: One L62-G5	
Standard Features: Non-fused disconnect 24VAC transformer/relay package Cross-core differential pressure ports Independent blower control OA/SA and RA/EA swappable airflows	
Filters: Total Qty. 2, MERV 10: 10" x 20" x 2"	
Unit Weight: 94 lbs.	
Max. Shipping Dimensions & Weight (in carton): 41" L x 41" W x 13" H 108 lbs.	
Motor(s): Qty. 2, 220W ea., Direct drive EC motorized impeller packages (120V/1Ph/60Hz)	

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Air-to-Air ERV
AHRI Standard 1060

Energy Recovery COMPONENT is certified. Actual performance in packaged equipment may vary.

Figure M5: HRV Basis of Design

Point of use exhaust fans will be provided for the Toilet Rooms and Shower Room within the behavioral health expansion. Exhaust systems will be sized in accordance with applicable code requirements and will operate continuously to support odor control and maintain negative pressure within these spaces relative to adjacent areas. Exhaust air will be discharged directly to the exterior and will not be recirculated. See figure 6 for general ventilation equipment and ductwork layout.

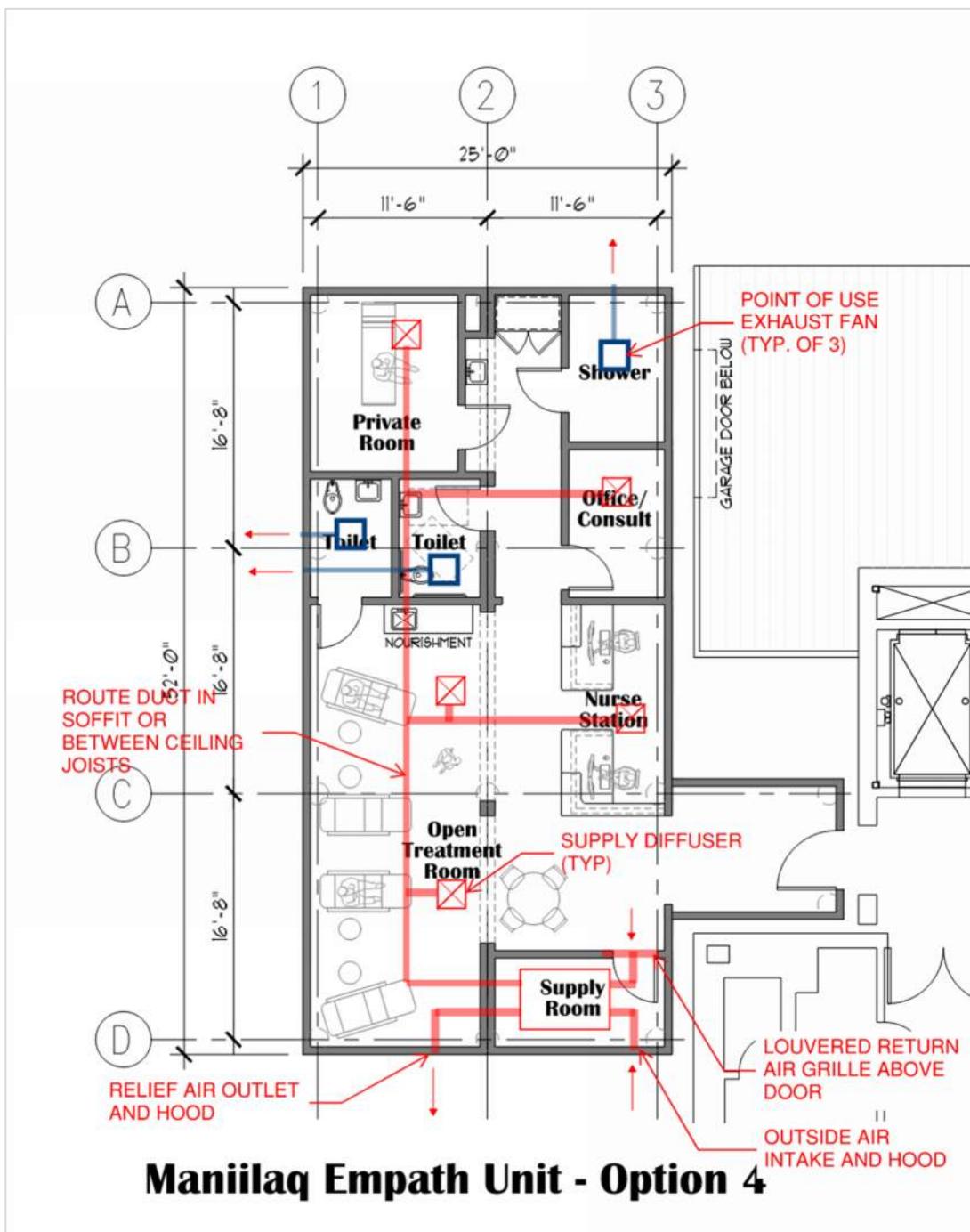


Figure M6: HVAC Tentative Layout

Fire Sprinkler System

New fire sprinkler devices will be provided throughout the behavioral health suite and connected to existing fire sprinkler branch piping within the main hospital. Sprinkler zoning and alarm notification sequencing will be coordinated with the existing facility fire protection system. Fire sprinkler system design will be performed by a NICET certified fire sprinkler system designer.

Electrical

General

This concept design level narrative has been prepared to assist the A/E/Cost Estimator/Owner team in understanding the electrical system concepts that are being considered for the Maniilaq Health Center behavioral health expansion.

Electrical systems will be designed in accordance with applicable codes and practical engineering methods for Kotzebue, Alaska, including, but not limited to: the International Building Code, the National Electrical Code, the International Fire Code, NFPA, IECC as well as local code amendments. In addition, the design will comply with the recommendations set forth in the FGI Guidelines for the Design of Hospitals and/or Outpatient Facilities, as applicable to the intended use of the EmPath unit. Given the temporary modular nature of the EmPath addition, systems will be designed to be code-compliant, durable, and readily removable where practical, without extending infrastructure that is not warranted for this scope. Design services will be performed by a Professional Electrical Engineer registered for practice in the State of Alaska.

Normal Power Distribution

The existing electrical distribution system consists of a 1600 Amp, 277/480V, three-phase, four-wire circuit breaker main distribution switchboard which supplies power to all building loads including non-essential loads and essential loads via automatic transfer switches. All existing panelboards, transformers and generators are anticipated to remain under this project. To supply power to new loads in the new EmPath unit, we anticipate a new 100 Amp, 120/208Y, 3-phase panelboard will be installed in the EmPath unit. This panel will be supplied from a new 1.25" conduit with 4#2 AWG conductors and 1#8 AWG ground to a new 100A, 3-pole circuit breaker in existing Panel LBN1 located in Electrical Room B on the normal power to accommodate the new loads added during this project. Final feeder sizing, breaker selection, and available capacity will be verified during design development based on confirmed connected and demand loads. Feeder routing will be coordinated with structural and architectural elements associated with the elevated modular construction.

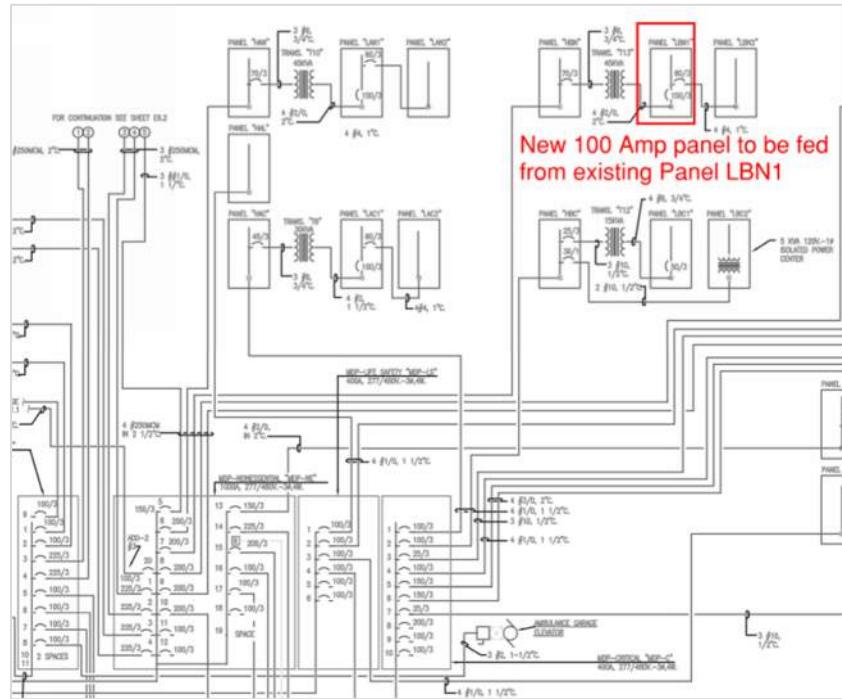


Figure E1: Existing Single Line Diagram

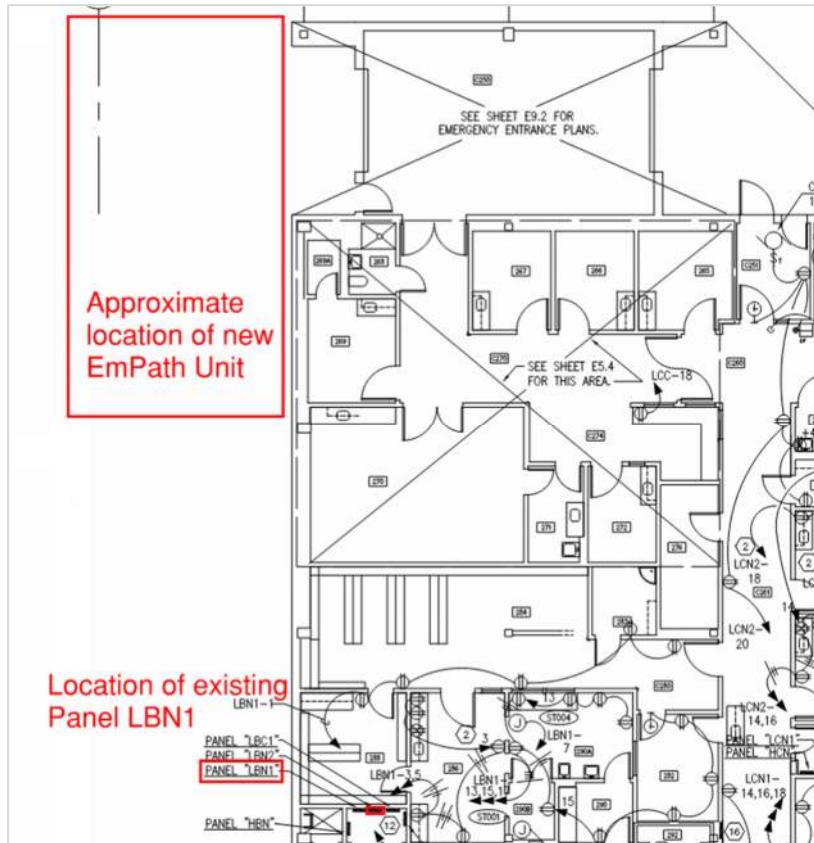


Figure E2: Location of Existing Panel LBN1

Emergency Generator Power Distribution

The building currently has three parallel 400kVA generators which supply power to a generator main distribution panelboard. The generator main distribution panel supplies power to 4 downstream automatic transfer switches which provide power to essential loads on the life safety, critical and equipment branches via automatic transfer switches. We do not anticipate any modifications to the existing generator power distribution system to accommodate the new EmPath unit.

Secondary Distribution and Branch Circuit Wiring

All branch circuit wiring in the new EmPath unit will be supplied from copper conductors in EMT conduit, or may be type MC-HCF cable if approved by the owner. All patient care areas in the new EmPath unit, including the open treatment room, private room, and consult room will be wired with redundant ground-fault current paths in accordance with NEC 517.13. All receptacles throughout the new addition will be tamper resistant type 20 Amp rated, heavy-duty type, NEMA 5-20R. Each patient chair location in the open treatment room and in the private room will be provided with two duplex receptacles, one located on each side of the chair. Each toilet room will have one GFCI type duplex receptacle. Each workstation at the nurse station will be supplied with 2 duplex receptacles. General purpose convenience outlets will be provided in the supply room and circulation space. In addition to convenience receptacle outlets, we anticipate providing receptacles on dedicated circuits for selected equipment such as copiers, refrigerators, microwaves, coffee makers, instahot dispensers, crash carts, blanket warmers, etc. New mechanical loads requiring power will be minimal. Each toilet/shower room will have an exhaust fan connected to normal power. A single 20A, 120V branch circuit will also be supplied for connection to new heat recovery ventilator. No new critical branch receptacles or equipment loads are anticipated within the EmPath unit unless specifically requested by the Owner. Final receptacle locations and mounting heights will be coordinated with architectural and behavioral-health requirements where applicable.

Interior Lighting

No existing interior lights are anticipated to be demolished, however, there may be selective demolition in the elevator lobby to accommodate the new addition. Existing light fixtures in all other areas will remain. New fixtures added under the addition will be LED type and of similar appearance to that of the existing fixtures in the building. Basis of design for new recessed hard lid mounted light fixtures will be Lithonia CPANL series and LDN series downlights. The new office/consult room and private room will have dimmable lighting controls with occupancy sensors. The new toilet rooms, shower rooms, and supply rooms will have occupancy sensors for automatic on/off controls. The nurse station and open treatment rooms will have manual switches for local control of lighting. Lighting levels will be designed in accordance with IES recommendations for healthcare and behavioral health environments, with emphasis on glare control and occupant comfort.

Emergency lighting and exit signs will utilize integral batteries to provide a minimum of 90-minutes of illumination upon loss of power. Exit signs will be LED type and will be located to provide clear direction to exits and conform to the requirements of NFPA 101.

Exterior Lighting

One existing exterior site lighting pole will be required to be relocated to accommodate the building addition. The existing branch circuit serving the existing exterior lighting will be intercepted and extended to avoid conflict with the new building foundation and to ensure the existing site lighting remains energized. New exterior light fixtures will be mounted to the bottom side of the new EmPath unit to ensure the area leading up to the ambulance bay is illuminated. It is anticipated that four (4) surface mounted LED fixtures will be provided on the bottom of the EmPath unit structure controlled via photocell and/or time-clock, with local manual override switches mounted near the ambulance bay doors.



Figure E3: Existing Exterior Light Pole

Telecommunications

New horizontal Category 6 UTP cabling will be extended from the nearest telecommunications room to new data jacks located in the new EmPath unit. Typical data outlets will receive two (2) CAT-6 cables/jacks. Each workstation at the nurse station will have two data outlets, each with two cables/jacks. Each patient chair in the open treatment room and private room will receive one data outlet with two cables/jacks. The office/consult room will receive two data outlets with two cables/jacks. One male terminated data cable will be provided in a central location near the nurse station for connection to a wireless access point. If required, additional data cables will be provided for selected pieces of equipment. New telecommunications work will be coordinated with Maniilaq Health Center information technology standards.

CCTV Cameras

It is anticipated that three (3) new owner supplied surveillance cameras will be installed and each camera will require one Category 6 UTP cable. Quantity and locations of cameras to be confirmed with the owner during the design process.

Fire Alarm System

New fire alarm detection and notification devices will be located throughout the new EmPath unit and will be connected to existing fire alarm branch circuits from the building's Siemens voice evacuation type fire alarm system. Device zoning and notification sequencing will be coordinated with existing smoke compartments and the facility's voice evacuation strategy. Fire alarm system design will be completed by a NICET certified fire alarm system designer.

Nurse Call System

No existing nurse call devices are anticipated to be demolished. The new EmPath unit will not require any additional nurse call devices.

Access Controls

No existing access control devices are anticipated to be demolished. The new EmPath unit will not require any additional access control devices.

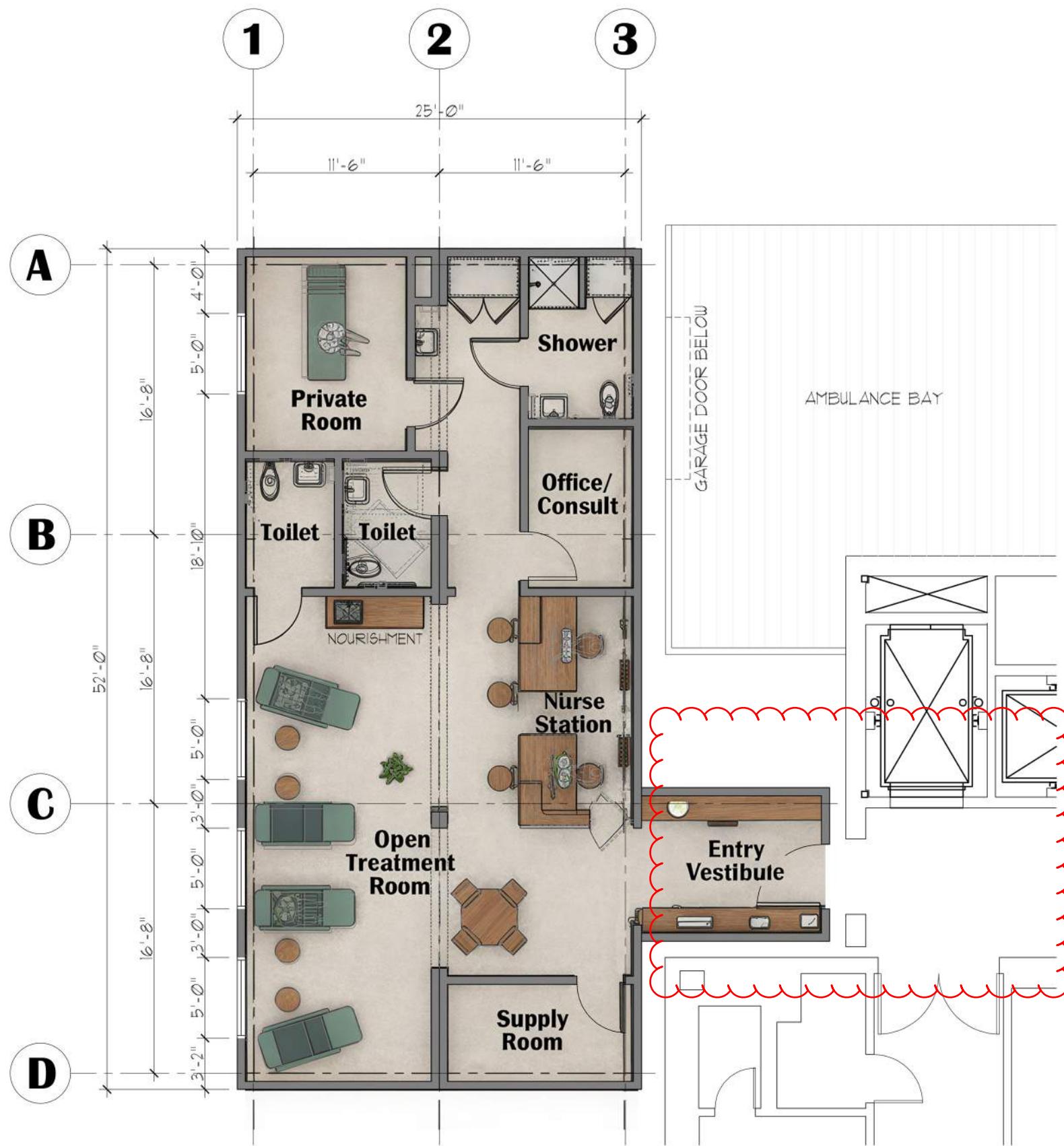
EXHIBITS



Concept Design Drawings

Maniilaq EmPath Unit Addition Kotzebue, Alaska

Rev. 2026-01-30



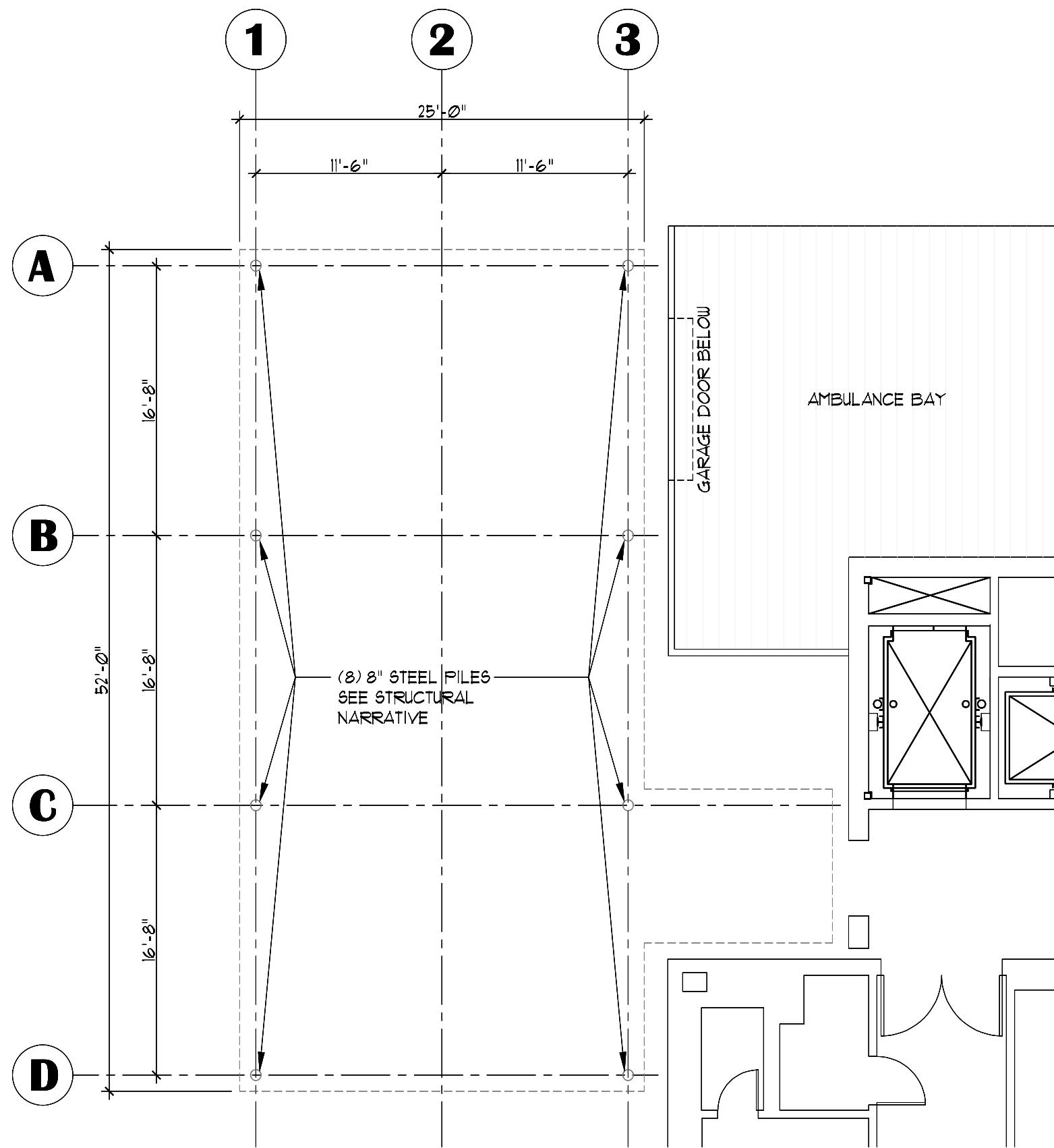
Concept Floor Plan

Scale: 1/8" = 1'-0"

Concept Design Drawings

Maniilaq EmPath Unit Addition Kotzebue, Alaska

Rev. 2026-01-30



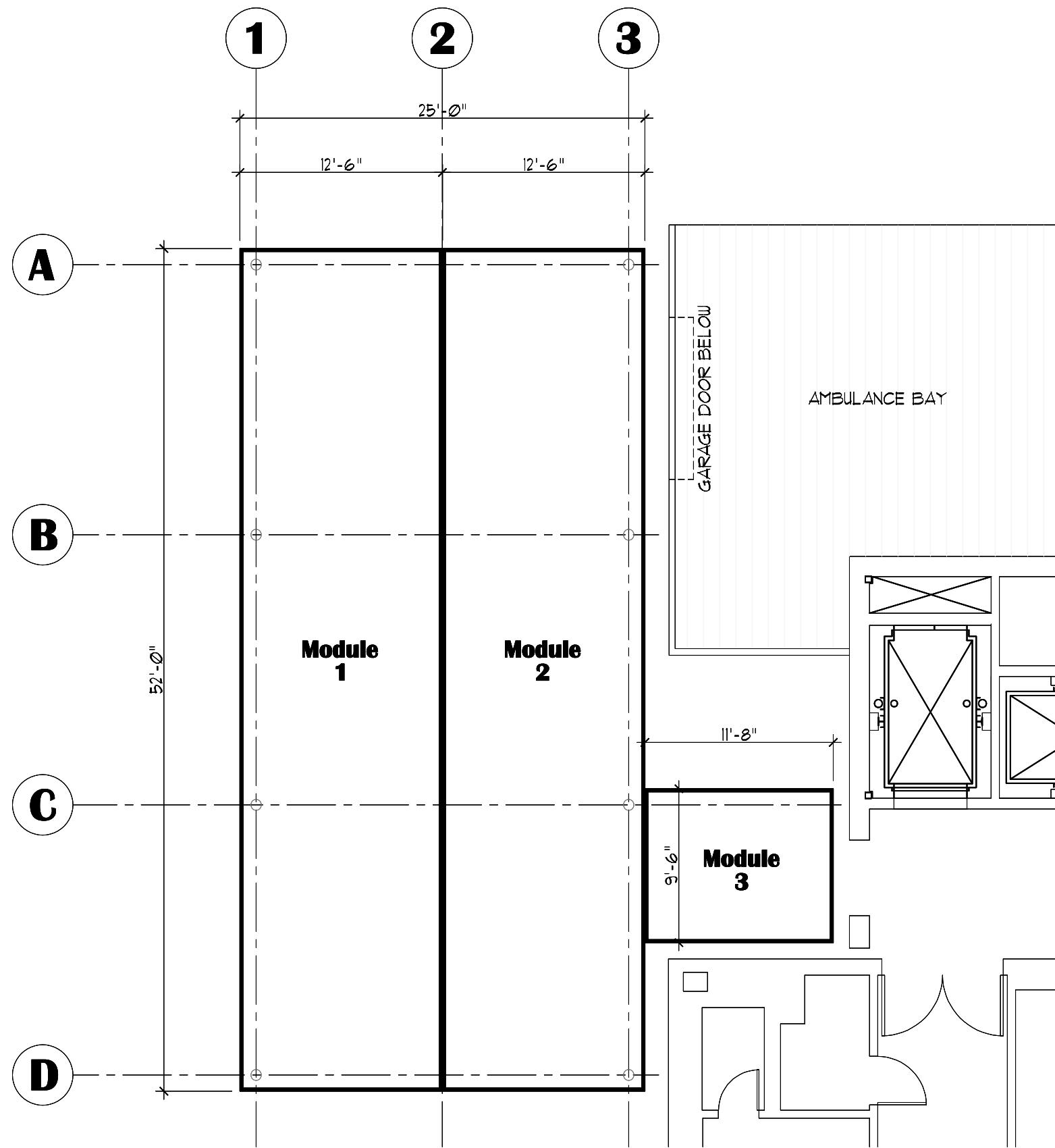
Concept Piling Layout

Scale: 1/8" = 1'-0"

Concept Design Drawings

Maniilaq EmPath Unit Addition Kotzebue, Alaska

Rev. 2026-01-30



Concept Module Layout

Scale: 1/8" = 1'-0"

Concept Design Drawings

Maniilaq EmPath Unit Addition
Kotzebue, Alaska

Rev. 2026-01-30



Concept Design Drawings

Maniilaq EmPath Unit Addition
Kotzebue, Alaska

Rev. 2026-01-30



EXTERIOR RENDERING (BIRD'S EYE VIEW)



EXT. ELEVATION (FRONT VIEW)



EXT. ELEVATION (SIDE VIEW)

December 29, 2025

Mr. Paul Baril, AIA
Nvision Architecture, Inc.
1600 A Street, Suite 300
Anchorage, AK 99501

RE: NO RIGHT TO RELY ON THIS COPY OF FOUNDATION ENGINEERING STUDIES FOR THE PROPOSED NEW KOTZEBUE HOSPITAL, SHANNON & WILSON JOB NO. 31-1-01044.

Dear Mr. Baril:

At your request, and because Livingstone Slone, Inc. was our client, and because Livingstone Slone, Inc. is now part of Nvision Architecture, Inc., I am providing you with the report we submitted to Livingstone Slone, Inc. dated January 1990. The enclosed report is being furnished to you solely as a courtesy to you. You have no right to and should not rely on the contents of this report.

Our report was prepared exclusively for our Client's use in light of our Client's objectives, schedule, budget, and risk management preferences in connection with the referenced project and for use only at the time it was prepared. It was not intended to be used by anyone else, on any other project, at any other time, or for any other purpose.

Shannon & Wilson did not contract with, did not intend to benefit from, and was not paid to provide benefit to any third-party when we provided our services and report to Livingstone Slone, Inc. There are no third-party beneficiaries to our contract with our Client, and no one, other than our Client, has the right to rely on any of the information, data, findings, recommendations, or conclusions contained in the enclosed report.

You should independently verify the accuracy of all such information, data, findings, recommendations, and conclusions. If the enclosed report is reused or relied on by anyone other than Livingstone Slone, Inc. without Shannon & Wilson's written permission, Shannon & Wilson shall not be held responsible for any claims, damages, losses, or expenses resulting from such unauthorized reuse or reliance.

Note that the scope of services associated with this report was limited to Livingstone Slone, Inc.'s specific requirements in light of Livingstone Slone, Inc.'s objectives, schedule, budget, and risk management preferences. This report is based solely on the services we provided to Livingstone Slone, Inc., as described in the report. Accordingly, certain items were

intentionally omitted from the scope of services and were not provided. If a service is not intentionally indicated, do not assume it has been provided.

We did not perform a complete investigation or assessment of all possible conditions or circumstances that may have existed at the referenced site. The scope of services provided to Livingston Slope, Inc. is contained in our proposal and contract with Livingston Slope, Inc. A copy of that proposal and contract may be requested from Livingston Slope, Inc.

In addition, recognize that the passage of time affects the information provided in the report. Subsurface conditions may be affected by natural processes or human activity and can change rapidly—sometimes overnight. Because our report is based on conditions that existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. For example, groundwater elevations commonly vary seasonally. To help avoid costly problems, we should be consulted if a significant amount of time has passed since the issuance of our report to determine if additional tests are necessary.

Construction operations and/or property use at or adjacent to the site and natural events, such as floods and earthquakes, may also affect subsurface conditions and thus the continuing adequacy of our report. To help avoid costly problems, we should be advised of any such events and should be consulted to determine if additional tests are necessary.

Subsurface site explorations and testing identify actual subsurface conditions at only those points and elevations where samples were taken, at the time they were taken. We extrapolated the data derived from those samples, and we provided our professional opinions and recommendations based on our education, training, experience, and judgment. Even under optimal circumstances, actual conditions may differ from those inferred to exist, because no Consultant, no matter how qualified, and no subsurface program, no matter how comprehensive, can reveal what is hidden by earth, rock, and time. The only way to know for certain everything that lies below the surface is to excavate the entire site, which obviously was not done. Accordingly, actual conditions between sample points and elevations may be far more gradual or abrupt than our report indicates, and actual conditions in areas not sampled may differ from those predicted in our report. While nothing can be done to prevent such situations, retaining us to observe subsurface conditions during earthwork construction operations can reduce this risk.

Note that the report is, in all cases, subject to certain qualifications and limitations that are noted in the report itself. Because geotechnical engineering is based extensively on professional judgment and opinion, it is far less exact than other design disciplines. To help

address this problem, our report contains various qualifications and limitations to our opinions, recommendations, and conclusions. These provisions remind all parties that our profession is not an exact science. We offer no guarantees or warranties of any kind. We cannot promise any particular result. We only promised our Client that we would use the skill, care, and judgment ordinarily exercised by other Consultants providing the same or similar services under the same or similar conditions at the time and locality that we provided our services. We cannot eliminate all risks or predict all project-related problems; we can only help reduce them. We encourage you to read these qualifications and limitations closely.

By accepting the enclosed report, it is understood that you agree with all the terms and conditions of this letter.

If you have any questions, please contact me.

Sincerely,

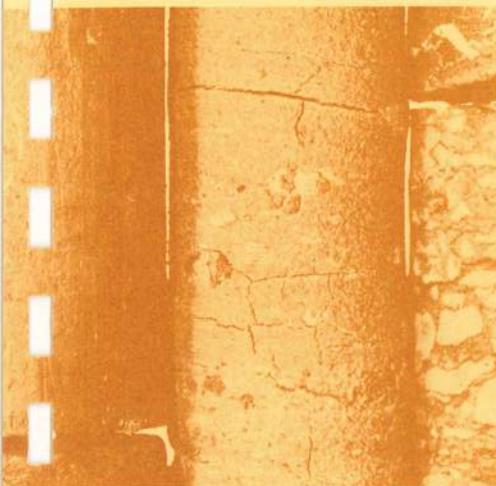
SHANNON & WILSON



Wendy A. Presler, P.E.
Associate Vice President

Enc. Report: Foundation Engineering Studies; Proposed New Kotzebue Hospital

Foundation Engineering Studies
Proposed New Kotzebue Hospital
Kotzebue, Alaska



Livingston Slone, Inc.
3900 Arctic Blvd., Suite 301
Anchorage, Alaska 99503-5790

January 1990

K-1044

SHANNON & WILSON, INC.

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EXECUTIVE SUMMARY

Our geotechnical field and laboratory studies for the proposed new hospital site in Kotzebue, Alaska included field explorations and laboratory testing. The field and laboratory studies are summarized in our January 1990 report titled "Field and Laboratory Studies Proposed New Kotzebue Hospital". This report presents the results of the foundation engineering studies and includes selected data summarized from the field and laboratory studies report. Also included is a bibliography of some of the literature and references reviewed and used in our design analysis.

Field explorations and laboratory testing studies indicated that the proposed site is underlain by typical Kotzebue soils consisting of a sequence of gravel over sand over silt. The silts graded into clayey soils with depth and gravelly silts and clays with occasional thin gravel zones were encountered below 72 to 85 feet. The soils, with the exception of the surficial seasonally active zone, are permafrost with temperatures below a depth of 15 feet in the range of 24 to 28 degrees Fahrenheit. Zones of highly saline unbonded and marginally frozen soils were observed in many of the borings. Soil salinity varied greatly within borings as well as between borings. In general, however, salinities were less than 8 ppt in the upper 20 feet of each boring, and increasing abruptly below 20 feet. Segregated ice in the form of ice lenses and random stratified ice was observed throughout the borings and was predominantly located in the top 30 feet and at depth in the gravelly zones.

Our geotechnical analyses and studies considered several foundation options for support of the proposed structure. After considering various site modification techniques in conjunction with conventional foundations, we concluded that a shallow, slurry backfilled, passively refrigerated pipe pile foundation or a deep driven pile foundation are possible options for support of the structure. For comparison purposes design calculations and analyses were conducted to compare both pile foundation options. Our design calculations indicated that a 25 foot deep, slurry backfilled, 14 inch diameter, thermo ring pipe pile placed in a 24 inch diameter pre-bored hole can achieve a sustained capacity of near 55 kips. A driven pile foundation 90 feet deep using similar design assumptions could achieve a sustained capacity of near 110 kips. The deep pile system develops approximately half

of its capacity (55 kips) in the top 25 feet. The remaining half of its capacity is developed in its lower 70 feet. These load capacities are based on a limited creep analysis with an anticipated settlement of 1 inch or less in 30 years.

To our knowledge a foundation system has not been designed and used beneath a building as large as the proposed hospital in areas of highly variable bonded and unbonded saline permafrost. Due to the size, expense, and importance of this proposed structure, an instrumentation and monitoring program is recommended to monitor pile performance with either deep or shallow pile foundations.

We believe either deep driven or shallow, slurry backfilled thermo ring piles can provide a positive foundation system for the proposed new hospital. However, the unknowns and risks with the driven piles appear to be greater than with the drilled and slurried backfilled thermo ring piles. We therefore conclude and recommend that a slurried backfilled thermo ring pile system be used to support the structure.

FOUNDATION ENGINEERING
PROPOSED NEW KOTZEBUE HOSPITAL
KOTZEBUE, ALASKA

1.0 INTRODUCTION

1.1 Purpose and Scope

This report presents the results of Shannon & Wilson, Inc. and Duane Miller & Associates geotechnical foundation studies for a proposed new hospital in Kotzebue, Alaska. This report presents our discussions, conclusions and our recommendations for foundations for the proposed hospital. The purpose of this report is to present a discussion of the foundation alternatives considered and detailed recommendations for support of the proposed structure thereby assisting in the design of the facility. This report also addresses questions and concerns of Maniilaq Association and others involved in the project.

A summary of all the field work for this project is presented in our report dated January 1990 and titled "Geotechnical Field and Laboratory Studies, Proposed New Kotzebue Hospital". This report was prepared for Livingston Sloane, Inc. and summarizes in detail the results of the 1989 field work. Two previous studies have been performed at this site. The results of these studies are discussed in part in the January 1990 report mentioned above. One of these reports is titled "Preliminary Geotechnical Study, Proposed New AANHS Hospital" and was prepared for Anderson Associates in September of 1986. The second report is titled "Preliminary Geotechnical Studies, Proposed New Native Health Service Hospital" and was prepared in December 1988 for Anderson Associates.

The field work conducted for this project including subsurface drilling and sampling of borings as well as surface studies. Samples of soil from the borings were collected and delivered to our laboratory where testing was performed to determine specific engineering properties of the subsurface materials.

The information collected during our studies was used to develop an understanding of the subsurface soil conditions for use in this design analysis of potential hospital foundation systems. Much of the current literature regarding pile foundations in permafrost was reviewed and used to develop our design analyses, recommendations and conclusions

presented in this report. A bibliography of some literature and references reviewed and used in conjunction with this project is presented at the end of this report.

The basic scope of this work was in general accordance with that outlined in our abbreviated Form of Agreement Between Architect and Consultant dated February 13, 1989. Our work was authorized by acceptance of this agreement made between Livingston Slone, Inc. and Shannon & Wilson, Inc. This agreement was signed by Mr. Donald E. Slone of Livingston Slone, Inc. This report, which predominantly discusses foundation design analyses and recommendations, was prepared under a separate cover from the field and laboratory studies at the request of Livingston Slone, Inc. in January of 1990.

1.2 Proposed Construction and Project Description

It is understood that the proposed hospital will be a single story structure approximately 80,000 to 90,000 square feet in plan. We also understand that the column spacing may be on the order of 24 to 30 feet. With a 24 column spacing, total loads of up to 215 kips are anticipated with approximately 90 kips being dead load and 125 kips of live load. At a column spacing of 30 feet, total loads of up to 340 kips are anticipated with approximately 140 kips dead load and 200 kips in live load.

The site which is under consideration is approximately 8 acres in area bordered by Fifth Avenue, Mission Street, Grizzly Way, and the Seventh Avenue right of way.

2.0 DISCUSSIONS OF FOUNDATION ALTERNATIVES CONSIDERED FOR SUPPORT OF THE PROPOSED HOSPITAL

2.1 General Discussions

The soils encountered in the borings drilled on the proposed site generally consisted of a tundra organic mat over sand and gravel, sand, silty sand, silt and clay. The gradation of the subsurface soils generally became finer with depth and transitions between soil zones were often gradual.

The characteristics of the soils encountered at various depths will influence the feasibility and design of potential foundation systems. The upper 15 feet of gravel and sand in the borings generally contained ice rich zones with ice crystals (Vx), random ice (Vr) and stratified ice (Vs). Segregated ice was also observed in gravelly silt and clay, clayey silt and silty clay sequences below a depth of 75 to 80 feet. The ice observed in these zones was generally stratified ice or ice lenses ranging in thickness from 1/4 inch to over 6 inches. Saline, marginally bonded and unbonded zones of soil were encountered throughout the borings. Most of the unbonded soils were observed below a depth of about 30 feet which also corresponds to those soils which typically contained high salt concentrations (salinities). The presence of high salinity soils adversely impacts the design of a frozen soil foundation system. Freezing point depressions of several degrees Fahrenheit are present in many of the unbonded soil zones. This, together with the soil creep characteristics of saline soils, will decrease adfreeze strengths and increase creep settlement rates at a given temperature. The soil conditions and characteristics which we believe are important in the design of a building foundation at this site are: soil temperature, soil thaw settlement and stability characteristics, presence or absence of soils with a depressed freezing point, compressibility and bearing capacity of thawed soils or unbonded permafrost and/or adfreeze and friction strength of both frozen bonded and unbonded or thawed soils.

Our October 1986 report addressed three categories of foundation systems originally considered for the proposed hospital. These categories were: 1) at grade conventional foundations; 2) deep pile foundations; and 3) shallow pile foundations which included both

refrigerated driven H-piles and pre-augered slurry backfilled piles. These foundation options as discussed in our 1986 report will be discussed below in light of our most recent 1989 field and laboratory data and to provide a background of foundation options considered.

2.2 Conventional Foundations

Based on the soil conditions encountered in our borings, the results of our laboratory analyses, and on our experience in Kotzebue, we do not recommend founding the structure on an at grade conventional spread and continuous footing foundation system. A conventional footing foundation will require extensive modification of the site or the foundation system. An at grade conventional spread and continuous footing foundation founded on the site without extensive site modification would not be expected to perform within normally acceptable standards of settlement.

The performance of a conventionally founded structure on this site without extensive site modification may most easily be understood by comparison to the existing AANHS hospital and other structures in the area. In 1984 we studied the subsidence problems of the existing Native Health Service Hospital in Kotzebue. This hospital was constructed on conventional foundations over an essentially unmodified site in 1959. Since its initial construction the hospital has experienced extensive settlement related problems. As of 1984 the existing hospital had settled a maximum of about 9 inches and a thaw bulb had propagated to a depth of near 45 feet below the floor slab near the center of the structure.

At this project site, settlement of conventional foundations would be due to three factors: 1) a thawing of the high ice content, near-surface granular soils; 2) thawing of the deeper silty near-saturated soils; and 3) consolidation of both the granular and silty soils after thawing.

Based on the site conditions encountered in our exploratory borings, we anticipate that settlements on the order of 6 to 18 inches could occur under a conventionally founded

heated structure constructed on insitu soils. These estimates are based on the thawing and consolidation of the surficial 30 to 40 feet of soil.

During our initial studies we had considered several site modification techniques which are often performed or used to reduce the settlement potential of the soils under a conventional foundation. The site modification techniques considered were: 1) overexcavation of ice rich material and replacement with clean non-frost susceptible backfill; 2) pre-thawing and consolidation of ice rich soils; and 3) construction of a refrigerated gravel pad to maintain insitu frozen soil conditions. In our opinion each of these options has disadvantages which affects its feasibility at the hospital site. These disadvantages are discussed below.

2.2.1 Overexcavation

In our October 1986 report we briefly discussed the possibility of using a technique of overexcavation of the highly rice rich, near surface soils and replacement with a compacted, clean, non-frost susceptible gravel fill. With this technique the thaw settlement-prone soils would be removed from the site and the structure would be founded in a compacted replacement sand and gravel. In our opinion the top 15 feet of soil at the site contains the majority of visible ice. Removal of this top 15 feet of soil and replacement with a compacted non-frost susceptible soil would greatly reduce thaw settlement at the site. However, to reduce thaw settlement potential to within tolerable limits, we anticipate that the top 30 to 40 feet of soil would have to be thawed, replaced or modified.

We understand that the proposed hospital will have a footprint approximately 2 acres in size. Assuming that the site was overexcavated and backfilled, we anticipate that a minimum plan area consisting of about 105,000 square feet would be removed and backfilled. This is approximately 3900 cubic yards material for every foot of excavation or replacement fill. Our December 1988 report presented the results of our studies concerning the availability and cost of gravel in the Kotzebue area. The report concluded that the availability of gravel is questionable, and if available may cost as much or more than \$15 per cubic yard or more in place at the source. Therefore, the cost of replacement gravel

fill for this project, excluding excavation and replacement costs at the project site and excavation and hauling costs from the borrow source, could be as high as \$58,000 per foot of excavation.

The cost of replacement gravel fill, if available, for a 15 foot excavation excluding all placement handling and excavation costs could approach 1 million dollars. In addition a 15 foot excavation would not in itself reduce thaw settlement potential to within tolerable limits. In our opinion ice rich soils below a depth of 15 feet could thaw and reflect settlement through the gravel fill into the structure. Deeper overexcavation and replacement fills could reduce this settlement potential, however groundwater problems could limit this activity. Based on the above discussions and our understanding of the site and its conditions, we do not believe site wide overexcavation and replacement fill techniques are suitable for use in modifying the site for conventional foundations.

2.2.2 Pre-Thawing

Our October 1986 report also addressed the site modification techniques of pre-thawing. Pre-thawing of the site and subsequent consolidation of the thawed soils could allow the construction of a conventionally founded at grade structure. With the technique of pre-thawing the native soils would have to be thawed to a depth below which the settlements reflected at the surface and foundations caused by thawing from building heat and subsequent consolidation would be minor. Based on the depth of thaw and settlement history of the existing AANHS Hospital, pre-thawing to a depth of 40 to 60 feet would probably be adequate. An area approximately 30 feet beyond the building limits would also need to be pre-thawed to limit lateral movement of soil and subsequent settlement as the thaw bulb thaws perimeter soils.

Pre-thawing is generally accomplished by installing pipes or probes to the desired thawing depth in pre-bored holes. The spacing between pipes determines the length of time required to complete the thawing. Spacings of about 8 to 16 feet are common. The pipes are then manifolded together and either steam, hot water or cold water is circulated to

accomplish the thawing. While steam or hot water is much faster, cold water thawing is generally more economical.

We understand that cold water thawing is used to thaw the overburden at the gold fields in Nome. Thaw pipes are installed to bedrock at a depth of 70 to 80 feet, and are spaced about 16 feet apart. With this spacing, we understand that it takes one or two seasons (summers) to completely thaw an area. Cold water pre-thawing of a building site for the new hospital would require the construction of a system of settling ponds to recirculate the thawing water. We anticipate that the time constraints for this project would not allow a two year or more cold water thawing program.

We have recommended, designed and observed hot water/steam thawing of soils in the Fairbanks area. These projects were generally small and only localized frozen areas within a foundation footprint were thawed. Where used the top 15 to 20 feet of soil were thawed in one to two weeks, and several inches of settlement were observed during thawing. The costs of hot water/steam thawing are generally high due primarily to the energy costs. We estimate that steam or hot water thawing would cost approximately \$40 to \$50 per cubic yard.

With either method of pre-thawing, additional site work would be required prior to construction of a conventional foundation. Site work such as consolidation of the thawed soils by pre-loading or other methods may be required. In addition the surficial soil would need to be reworked to provide a compacted non-frost susceptible gravel fill in which the foundation could be constructed. Based on these discussions and on the size of the proposed hospital, we do not believe pre-thawing is, in itself, an economical option.

2.2.3 Refrigerated Gravel Pad

The remaining site modification technique mentioned which is often used to modify sites for construction of conventional foundations is the construction of a refrigerated gravel pad. This technique has been successfully used in many smaller structures and is presently being

used in the new jail in Kotzebue. The purpose of a refrigerated gravel pad foundation is to maintain the frozen soil conditions below an insulated gravel pad in which a conventional foundation is constructed. This is accomplished by using Thermosyphons (two phase passive heat transfer devices) to remove heat from the gravel pad below the insulation and soils below the gravel pad beneath a structure and freeze or cool the soils during the winter. The system is designed so that during the summer the thaw bulb beneath the structure does reach thaw settlement sensitive soils.

The proposed new hospital has a footprint of close to 2 acres. With a building footprint this large, we are not confident that a self-refrigerated gravel pad foundation system can be designed and constructed to maintain a frozen stable subgrade. The length of horizontal evaporator sections (possibly in excess of 300 feet) required beneath the building, their required slope, their heat removal requirements, and the size and configuration of the condenser sections are the limiting factors. In addition the cost and limited availability of good gravel fill reduce the feasibility of this type of foundation.

2.3 Deep Pile Foundations

The concept of founding the proposed hospital on a deep foundation system which would not require active or passive refrigeration was considered for this project. Four of our exploratory borings were drilled to depth of 100 feet or more to observe soil conditions for deep foundation. Our 1986 study as well as other reports indicated that a deep gravel layer suitable for end bearing piles may be encountered below 70 to 80 feet in depth. Our detailed deep borings for our 1989 study encountered gravelly soils with thin gravel zones at depth, however no continuous or thick gravel zone was encountered. The results of our studies also indicate that the thin gravelly zones at depth are not suitable bearing strata for end bearing piles. Massive ice lenses up to 6 inches in thickness were also observed throughout these soils. The viscoelastic properties of ice would lend to creep-related settlements in end bearing piles.

Deep non-refrigerated pile foundations could also develop their load carrying capacity

through an adfreeze bond with frozen and bonded soils, frictional strength with unbonded frozen or thawed soils and end bearing in non-ice rich or unfrozen soils. The creep and adfreeze characteristics of highly saline frozen soils and marginally frozen soils are not well understood, and very little research data exists on these highly saline soils. Due to the highly variable nature of deep unbonded and frozen bonded soils at this site, together with highly saline soils, large variations in pile capacities and performance would be anticipated with deep, non-refrigerated pile foundations. However, a deep driven pile foundation could be designed to support the proposed structure if adequate factors of safety are used. Deep pile foundations will be discussed in detail in following sections.

2.4 Shallow Refrigerated Pile Foundations

A shallow refrigerated pile foundation would gain support in the surficial 20 to 30 feet of soils at the site. The surficial 20 feet of soils at this site have relatively low salinities and are generally well bonded. Below a depth of 30 feet the salinities are generally on the order of 30 to 50 ppt or higher. A foundation system consisting of two phase passively refrigerated thermo ring piles bearing in the upper 20 to 30 feet of soil at this site, in our opinion, would provide support for the proposed structure. This type of foundation system is commonly used in Arctic and sub-Arctic coastal environments.

As discussed in previous sections we have considered various potential foundation systems for the proposed hospital. Each of the foundation options and site modification techniques discussed has its limitations which, in our opinion, suggest that either a deep driven or a shallow refrigerated foundation would be applicable for support of the proposed structure at this site. Based on the results of this study, together with the results of our previous studies for this proposed hospital, we are recommending that the proposed hospital be founded on a shallow refrigerated thermo ring pile foundation.

Self refrigerating thermo ring piles, as opposed to deep driven pile foundations, would extract heat from the ground once the air temperature is colder than the ground temperature. In Kotzebue the thermo ring piles should act to cool the ground on the order

of 8 months per year. The ground temperature beneath the structure should gradually decrease with time resulting in increased adfreeze capacities and decreased creep rates. Overall we believe the shallow self refrigerated system would provide a more conservative design.

The following section of this report discusses the advantages and disadvantages of both a deep driven pile foundation as supported and proposed by Peratovich Consultants, Inc. (PC) and a shallow refrigerated pile foundations as recommended and proposed by Shannon & Wilson, Inc. and Duane Miller and Associates.

3.0 DISCUSSION OF SHALLOW SLURRIED PILES VS. DEEP DRIVEN PILES

Two foundation options are being considered for support of the new hospital in Kotzebue, a deep, driven pile as proposed by Peratrovich Consultants, Inc. (PC) and a shallow, slurried, thermo ring pile. Our analysis shows that if properly designed and installed, either system will provide positive support for the structure. However, the two systems have distinctly different levels of uncertainty regarding design assumptions, thermal effects and installation problems. The following discussion of the two options is based on the data from the previous investigations and the January 1990 design by Peratrovich Consultants, structural engineers.

3.1 Analysis of Vertical Load Capacity

The vertical load that the pile can safely withstand depends on the duration of the load. Creep settlement of the piles will govern the allowable capacity for sustained loads. The piles will have a much higher capacity available for resisting peak loads of short duration.

The sustained load capacity of the piles will primarily depend on the duration of the load, the creep rate of the frozen soil adjacent to the pile, and the allowable differential settlement. An accepted method of creep analysis is the following equation developed by Nixon and Weaver.

$$U_s = \frac{3^{(n+1)/2} a B T_s^n}{n-1}$$

where U_s = Pile displacement rate
 a = Pile radius
 T_s = The applied stress on the pile shaft
 B = Creep coefficient

A value of 3 is commonly used for the creep exponent, n . The parameter B depends on soil type, ice content, salinity and temperature. The laboratory data for saline soils by Nixon and Lem show that B has a wide range of values for slight changes in salinity and temperature. The soil type, temperature and salinity of the samples tested by Nixon and

Lem are similar to the soils at the hospital site.

A comparison of creep properties of fresh water ice and saline permafrost shows that the values for ice are unconservative. For the same temperature depression below the freezing point, the B value for ice is about 100 times smaller than the B value for saline permafrost. Data for piles in ice should not be used for the design of the piles in the saline permafrost at Kotzebue. There is not any accepted method of relating the creep properties of saline permafrost to the blow counts observed during sampling in our opinion.

The following analysis does not account for effects of confinement and development of frictional components that could increase the pile capacity. This should result in a higher capacity for the deep driven piles in layers where excessive ice or frozen soils are not present.

The analysis of vertical pile capacity has been performed for comparison purposes using the end of summer ground temperature condition. This penalizes the allowable capacity in the top 20 to 30 feet because during many months of the year this section of the pile will be much colder and will have a substantially reduced creep settlement rate. This is especially the case with a self-refrigerating thermo ring pile. This seasonal cooling has been ignored intentionally to provide a factor of safety for the shallow adfreeze thermo pile.

The short term capacity of the pile will depend on the time of the year, the strength or adfreeze bond of the frozen soil and the duration of the load. Short term loadings are not expected to govern the design of the piles for the hospital.

3.2 Differential Settlement

At this site the differential settlement can and probably will equal the total settlement that occurs under the building. The deep driven piles will penetrate a wide range of subsurface conditions, from saline, icy permafrost to low saline permafrost or unbonded permafrost. The published literature shows that the difference in creep rates for this wide range of

salinities could be several orders of magnitude. Therefore, a fully loaded pile installed in icy, saline permafrost could move the maximum amount of expected settlement and the adjacent pile could experience a settlement as small as one tenth or one hundredth of that amount. This can best be understood by comparing the large variation in salinity and presence or absence of unbonded zones between adjacent borings at the site. The shallow pile system would develop bearing in the near surface, more uniform, low saline soils. For this reason the differential settlement/creep of the shallow pile system is expected to be less than the deep pile system.

The literature recommends a maximum angular distortion of 1/500 for a continuous steel frame. For the 24-foot spacing this is equal to a differential settlement of 0.6 inch. A maximum calculated creep settlement of 1/2 to 1 inch over the 30 year design life appears to be needed to meet this criteria.

3.3 Ground Temperatures

The analysis of creep settlement is extremely sensitive to the temperature of the permafrost. The analysis at this site should be based on the warmer temperature profile as shown by the data from B-3 which shows the influence of a gravel surface on the ground temperatures. At depth, B-3 shows an average temperature of 25.5°F (-3.6°C) in a boring located within the area of the proposed building.

3.4 Design Comparison

The two proposed systems are compared in the following table. Both systems have been analyzed using the same assumptions regarding temperature profile (end of summer), high salt contents from 21 feet below existing grade, and a capacity based on the Nixon-Weaver equation for a 30 year design life.

Drilled-Slurried Pile	Driven Pile
<p>The <u>design assumes</u> a 14-inch thermal siphon pipe pile with 2-inch wide helix rings over the lower 20 feet and installed to a depth of 25 feet below natural grade in a drilled hole with a diameter of 24 inches. The annulus is backfilled with a sand, fresh water slurry which is vibrated in place and allowed to freeze before loading.</p>	<p>The <u>design assumes</u> a 24-inch diameter pipe pile with 1/2 inch wall and driven to 90 feet below natural grade. Before driving starts, a pilot hole is drilled to the design depth and hot water is placed in the hole. To allow for future cooling of the ground, a cooling loop is installed inside the pipe pile after the pile driving is finished. The inside of the pile is backfilled with a sand slurry that is allowed to freeze so positive thermal contact is made between the loop and pile.</p>
<p>The <u>thermal effect</u> from the slurry is 5,000 BTU/foot of pile.</p>	<p>The <u>thermal effect</u> from the hot water and internal slurry is 10,000 BTU/foot of pile.</p>
<p><u>Sustained capacity</u> is 55 kips for 1 inch of total settlement.</p>	<p><u>Sustained capacity</u> is 110 kips for 1 inch of total settlement.</p>
<p>The thermal siphon will cool the ground each winter as soon as ambient air temperatures drop below freezing.</p>	<p>The cooling loops provide no cooling until sometime in the future when they are converted to thermal siphons or connected to an active refrigeration system.</p>

3.5 Internal Sand Fill for the Driven Piles

In our opinion the driven piles should be installed so that cooling of the pile can be accomplished if needed in the future. Cooling is a commonly used and effective method of reducing the creep rate of a pile in saline permafrost if unacceptable settlements are occurring.

The internal pipe loop must have thermal continuity with the steel pipe. The proposed method is to fill the pipe with wet sand after the pile driving is completed. Since a sand-ice mixture has a higher thermal conductivity than an unfrozen sand, the sand should be

allowed to freeze.

To protect the pipe from excessive hoop stresses due to ice expansion, the wet sand should be placed so that it is slightly under-saturated. This can be done with an air-entraining agent.

PC has suggested a glycol sand mixture in the driven piles. In our opinion, using non-freezing fluids in the pile such as glycol is an unwarranted risk to the permafrost. Spillage of glycol could cause degradation of the permafrost surface and loss of support. Because glycol is heavier than water and does not stay mixed, it is likely to migrate out the bottom of the open end pipe.

3.6 Construction Considerations

Drilled slurried piles are best installed during a limited time of the year. The best time to drill the holes and place the piles is at the end of the winter before breakup. The piles can also be installed in late summer or early winter if they won't be loaded until the following year. Summer and fall installation schedules run the risk of encountering unfrozen and caving soils and water in the active layer and surface casing may be required.

The driven piles can be installed at almost any time of the year. However, when the active layer is thawed, it will interfere with the drilling of pilot holes and surface casing may also be required.

The driven piles most likely will require a properly pre-drilled pilot hole, and probably hot water in the hole in order to facilitate installation. The pilot holes would also be required in order to know whether the pile is stopping on dense unbonded soils or on icy, but creep sensitive materials. Previous experience in Kotzebue with pilot holes is not encouraging. During construction of the Armory in 1986, 12-inch pipe piles were driven into 12 inch diameter pilot holes. The piles had been driven the day after drilling and the ground had cooled enough so that shallow refusal was encountered and buckled the piles. Using hot

water probably would have overcome this problem.

Quantities Per Pile

The following table compares the materials and equipment anticipated for both types of pile installation. Both systems will include a layer of rigid board insulation near the ground surface. Because of the difference in capacity, about two slurred piles would be needed for every driven pile.

Drilled and Slurried Pile	Driven Pile
35 feet long, 14-inch diameter pipe with 1/4 inch by 2 inch helix at 12-inch pitch over bottom 20 feet, pressurized thermal siphon over bottom 30 feet with protected valve at top and helix or ring condensers. Manufactured in Anchorage.	100 feet long, 24-inch diameter with 1/2 inch wall, open ended, with internal tip protector. Supplied from Seattle
2 cubic yards of sand for slurry in annulus.	5 cubic yards of sand for internal fill (assumes only top half needs fill).
Texoma or highway auger with 24-inch bit and kelly capable of drilling to 30 feet deep.	Rotary drill with hollow steel capable of drilling 8-inch diameter to 95 feet deep.
Slurry operation for placement of sand.	Hot water truck or supply for thermal modification (240 gal/pile).
Light crane for handling 2600 pounds per pile.	Slurry operation for placement of sand.
	Heavy crane to handle 12,500 pound pile plus leads and pile hammer.
	Welded, pressure tested 2-inch diameter steel U-pipe for internal cooling loop to 30 feet deep. Field installed and outletted after driving.

The selection of a piling option should be made after a detailed cost comparison is made. However, it seems obvious that if the dollars are close, the selection should lean towards the more widely used permafrost option of the drilled and slurried pile. It should also be noted that a drilled and slurried pile can be constructed using conventional techniques and local labor. A drilled and slurried pile gains its support from the shallow, hard frozen, low to non-saline permafrost that blankets the site. If the installation is performed when the active layer is frozen, the construction risks and anticipated problems are small.

The thermal effects from the two systems during construction are the same (2 slurried piles x 5000 BTU/foot versus 1 driven pile at 10,000 BTU/foot). However, the thermal piles will remove this heat from the ground in the first winter and cool the soils below existing pre-construction temperatures. With the driven pile, this introduced heat will cause a permanent warming of the ground of about one-half degree Fahrenheit especially if the ground surface insulation is placed before or shortly after pile installation.

The driven pile will go deep and penetrate into saline permafrost that varies greatly in characteristics as compared with the top 20 feet of permafrost. The lower 70 feet of the pile only develops 50% of the pile's capacity. We are not aware of any such pile system having been used in saline permafrost in Kotzebue. The Armory building is supported on driven pipe piles, but the soils investigation found no significant salinity and the piles were only driven to depths of 50 feet. Serious problems and delays were encountered during the pile driving since the pilot holes were not thermally modified before driving.

As stated at the beginning of this section, either option can provide a positive foundation system for the proposed new hospital. However, the unknowns and risks with the driven piles appear to be greater than with the drilled and slurried thermal piles. We therefore conclude and recommend that a slurried thermal pile be used to support the structure.

4.0 ENVIRONMENTAL CONCERNS AND ASSUMPTIONS

As discussed in Section 3.0 we recommend that the proposed structure be founded on a shallow, passively-refrigerated pile foundation. This section discusses our detailed design recommendations for a slurried backfilled, passively-refrigerated pipe piling foundation system. The recommendations are based on historical environmental conditions in the Kotzebue area such as wind speed, air temperatures and permafrost temperature, soil and ice conditions. Recent literature indicates that, due to global warming effects, designers in arctic environments should consider a 1°C rise in average soil temperature per decade unless otherwise substantiated. If the environmental conditions such as average annual air temperature increase over the life of the structure, or over a period of several years during the life of the structure, the performance of any adfreeze or creep settlement designed pile foundation could be adversely affected.

With the size of the proposed building footprint there is also concern regarding the potential of snow drifting beneath the structure. Snow drifting adjacent to interior passively refrigerated piling could inhibit the performance of the piling. We understand that the proposed structure was modeled to determine the potential of snow drifting beneath the structure and its likelihood of occurrence. Based on the results of this model we understand that snow drifting problems are expected to be minimal with little to no snow drifting expected under the proposed structure.

If the environmental conditions such as average annual air temperature increase over the life of the structure, or over a period of several years during the life of the structure, or if snow drifting is or becomes a problem, the performance of the passive refrigeration devices could be adversely affected. The recommendations outlined below assume that the future environmental conditions will be similar to those historically observed. If the future environmental conditions indicate local warming trends in the Kotzebue area or if snow drifting is determined to be a problem, these foundation recommendations presented should be re-evaluated in light of the changed conditions. Due to the potential for varying or

changing thermal conditions, we recommend that a pile performance monitoring program be used throughout the life of the structure. Details of the recommended monitoring program will be discussed in a later section.

5.0 SLURRIED BACKFILLED PILING RECOMMENDATIONS

The pile foundation recommended by Shannon & Wilson, Inc. and Duane Miller and Associates for the proposed building consists of closed end steel pipe piling placed in a pre-augered hole with the annulus between the pile and the hole filled in with a sand and gravel slurry material as mentioned earlier. The piling should be designed and installed as passively refrigerated load carrying piles with provisions for future modifications which may include active refrigeration or additional capacity for passive refrigeration. Load-carrying passive-refrigerating two phase Arctic Foundations, Inc. thermo ring-piles or passive-refrigerating single phase liquid convection piles with rings or protuberances could be used to support the proposed structure. Because of potential problems with a single phase freezing point liquid leaking into the permafrost, our preference is for the two phase system.

5.1 Installation

A schematic diagram of typical slurried-back piles in permafrost is shown on Figure 1. The diameter of the pre-drilled hole should be at least 6 inches greater than the maximum diameter of rings or protuberances on the piling. If pilings are installed during the winter season, it is recommended that the piling be free of ice or snow prior to installation. The annular space between the soil and the pile should be backfilled with a machine mixed non-saline sand and gravel slurry. The slurry sand and gravel backfill should be a clean, well graded mixture of sand and gravel with a maximum particle size of less than 1 inch. The sand/gravel slurry should have sufficient high water content to freely flow around the pile, about the consistency of 6-inch slump concrete. The water used for mixing the slurry should be fresh and not warmer than 40°F at the time of mixing. We recommend that the slurry be placed at a rate of approximately 2 to 4 cu.ft./min. and carefully vibrated with a small vibrator to prevent bridging or trapping of water and to displace air voids. Care should be exercised during summer months to allow slurry freezeback to occur from the pile toward the soil rather than from the soil toward the pile. This should minimize the formation of a salt water brine interface along the pile surface. The minimum spacing between piles placed by dry auger, slurry backfilled method should be five auger hole diameters center

to center.

5.2 Thermal Design Criteria

We recommend that the passive-refrigerating devices or piling have sufficient heat removal capacity to prevent the thawing and excessive warming of the permafrost below the active layer and to maintain the design ground temperatures proposed for support of the structure. In our opinion, the heat transfer devices or passively refrigerated piling should be capable of maintaining the ground temperatures below a depth of 3 feet at or below the design soil temperature during the summer months. The design soil temperatures are summarized below:

<u>Depth</u>	<u>Design Soil Temperatures</u>
0-3'	No load zone
3'-8'	29.5°F
8'-20'	27°F
20'-30'	26°F

Therefore the minimum capacity of the device should be such that the heat removal during the winter is sufficient to maintain the design temperature along the pile during the summer.

We recommend that all steel piling exposed to solar radiation be painted white to change their emissivity and reflectivity characteristics so that the heat conduction along the pile into the ground is minimized. A white vinyl or epoxy paint, approximately 4 mills thick is typically recommended for this purpose.

We recommend that the ground surface be insulated with 4 inches of rigid extruded board insulation. This will help maintain the cold ground temperatures and decrease the active zone depth. The insulation should extend a minimum of 12 feet beyond the perimeter of the proposed building. A clean free draining sand and gravel leveling course should be placed over the original ground surface prior to the placement of the insulation. Four

inches of insulation can then be effectively placed by overlapping the layers of 2 inch insulation. In our opinion, at least 12 inches of sand or gravel should be placed over the insulation to provide a work pad which should protect the insulation. If larger and heavier equipment is used on the site than typically used when installing shallow slurry backfilled ring piles, a thicker pad may be required. These concepts are illustrated in Figure 1. The insulation should be placed in the spring of the year as discussed in Section 6.0 when the ground temperature at depth is at its coldest.

With a passively refrigerated pile foundation design we recommend that a minimum 4 foot free air space be maintained between the bottom of the floor and the final grade in order to isolate the possible exchange of heat from the building to the underlying ground, and to provide a space for the operation of pile condenser sections or heat exchangers when passive refrigeration devices are used. Open lattice work or screening is typically used to minimize the ventilation space from being used as a storage area, however the screening or lattice could aggravate snow drifting beneath the structure. In our opinion lattice work, screening or fencing should not be used, and the ventilation space should be maintained as a clear open area.

The free air space would also provide room for active refrigeration piping or additional passive refrigeration condenser sections if required. All piping, utilities or structures placing within the ventilation space should be designed and located to minimize snow drifting and/or air flow disturbance below the structure.

5.3 Pile Load Capacities and Settlement

The foundation design presented below represents a synthesis of soil and ground temperature data obtained from our exploration program along with available data on adfreeze and creep deformation in frozen and saline soil. For the proposed structure, an allowable settlement of 1 inch per 30 years (in addition to initial construction settlements of less than 1/2 inch) was used in the calculation. The calculations also assume design temperatures will exist near the piles for a period of four months. The remainder of the

year the pile will be in operation and the soil temperatures near the pile will be colder.

Based on the soil conditions encountered in our borings we recommend founding the piles in the upper 25 feet of soil at this site. If the piling are installed as discussed in the preceding sections, the design capacities presented in Figure 2 would be applicable. The design capacities presented in Figure 2 have a factor of safety of two (2) applied to the creep rate. We recommend a minimum pile embedment depth of 20 feet.

The sustained load presented in Figure 2 is defined as the load which is equal to the dead load plus that portion of the live load which is expected to act on the structure for 25 percent of a year or longer. The sustained loads are based on the creep deformation of ice-rich frozen saline soil, and not on the adfreeze strengths of the pile/soil interface. This limiting analysis is true, provided the piling has rings or protuberances, and does not possess a surface film of rust or ice which could lubricate the pile, causing a direct loss of bond at the pile surface. The piling should be free from scale rust, paint or any other surface treatment prior to installation. As a precaution against loss of bond strength at the pile soil interface, we recommend that the piling be designed with protuberances (rings, fins, or plates) along the bottom 20 feet of the pile which will mobilize additional soil resistance in shear and force shear and creep to occur nearer the outside of the pre-augered hole. This slurry backfill pile design assumes 2-inch rings will be welded to the bottom 20 feet of the pile.

The sustained loads presented on Figure 2 assume that clean non-saline slurry sand and gravel is used and placed as recommended, thereby forcing creep deformation to occur within the insitu soils at the slurry soil insitu soil boundary.

The maximum thickness of the active layer for our design is estimated to be approximately 3 feet. The active layer should, in our opinion, reduce to less than 2 feet if ground surface insulation is used as recommended in conjunction with passively refrigerated piles. The use of ground surface insulation in conjunction with passively refrigerated piles will also lower

the overall soil temperatures in the bearing soils.

The sustained pile capacity summary presented in Figure 2 represents a design based on long term creep settlements. This is, in our opinion, the controlling situation with a thermo ring pile. The use of rings on a pile reduces the effect of loss of adfreeze bond between pile surface and soil by transferring load through the rings and developing load carrying capacity dependent on the shear strength and creep characteristics of the slurry backfill and natural soils. Adfreeze bonds tend to fail in a brittle mode causing immediate loss of capacity. Therefore design of deep driven piles should consider the short term ultimate adfreeze loads.

5.4 Pile Loading

Pile loading should not begin until all slurry backfill is frozen back and at a temperature of 30°F or colder. At a temperature of 30°F no more than 25 percent of the design sustained load should be applied to the piles. When the piles have frozen back to a temperature near 28°F, up to 80 percent of the design load may be applied. The total design load should not be applied until the piles have frozen back to the design temperatures. We recommend that actual temperatures at the pile surface be monitored by temperature measuring devices discussed in Section 5.5.

If the piles are installed in late spring or summer, the passive refrigeration action of the piles and natural freezeback may not remove enough heat to freeze back the slurry and surrounding soil to and maintain the design soil temperatures throughout the summer. We anticipate that active refrigeration may be required to achieve and maintain soil temperatures below or at the design temperature if a spring construction schedule is desired. The actual length of time for passive refrigeration to operate, or for amount of active refrigeration required to maintain design soil temperatures the first year will vary depending on the ambient temperature and soil conditions after pile installation and during freezeback time.

Potential contractors should also be aware that surface casing may be required to seal off surface groundwater flow if pile installation is scheduled for a time when the active layer is not frozen.

5.5 Instrumentation and Pile Performance Monitoring

We recommend that a minimum of two thermistors be installed at locations approximately 2 feet above the bottom of the pile and 5 feet below ground surface preferably at each pile or pile group location or at least at every other pile or pile group location.

In addition occasional thermistors should be installed radially out from two or three selected piles to monitor soil temperatures at a distance of 10 to 15 feet from the pile. The purpose of this instrumentation is to permit monitoring of the pile performance throughout the life of the structure. By monitoring soil temperatures adjacent to each pile on a regular and continuous basis, variations from expected and required soil/pile temperatures can be noted. Slight warming of ground temperatures adjacent to piles would most likely result in accelerated long term creep rates and not ultimate failure. Temperature monitoring would therefore bring attention to potential accelerated creep rates long before major pile settlements or failures occur. Unusual soil warming near a particular pile could indicate loss of pile charge, snow drifting near the pile, insufficient heat removal capacity or other problems. By noting these warming trends pile maintenance could be performed to alleviate the problem or active refrigeration could be used to artificially freeze the pile and surrounding soils to the design temperatures.

We recommend that the instrumentation be installed and designed to be protected from disturbance, weathering or vandalism. In addition, the instrumentation leads from the piles could be grouped at locations indoors where they can be conveniently accessed and read on a regular schedule. Recording of pile temperatures two to three times a year would be sufficient. It would be most important to monitor temperatures in late fall when the soils would be expected to be at their warmest.

In addition, functioning of the thermo pile condenser sections can be readily checked with handheld infrared heat detectors. These devices can be used to quickly survey the operation of thermopiles or thermo siphon devices. Operating thermo pile or thermo siphon condenser sections will show up as a warm object with the infrared devices. If improper condenser operation is detected, pile charge pressure could be checked and the pile could be re-charged as required.

During the first two to three couple of years of operation we recommend that other parameters such as snow drifting, microclimatic formation, and air movement be monitored to determine the potential impacts of these parameters on the performance of the pile foundations.

5.6 Site Grading and Erosion Protection

In our opinion the surficial organic ground cover, beneath the proposed building, may be left in place and blanketed with sand and gravel. This blanket of granular material would, in our opinion, serve as a working surface. The blanket of granular material would also serve as a base leveling course over which surface insulation could be placed. If site grading requirements require removal of the organic ground cover, the material should be excavated and wasted, and where necessary replaced with compacted sand and gravel. We recommend that a working surface of sand and gravel of at least 12 inches be placed over the insulation to protect it from equipment during the construction phase. These concepts are illustrated in Figure 1. The site should be graded so that any surficial drainage or roof runoff is directed away from the structure.

6.0 FOUNDATION CONSTRUCTION SCHEDULE

This section discusses our recommended construction schedule for a drilled slurry backfilled pile foundation with foundation work beginning in fiscal year 1991. Fiscal year 1991 begins on October 1, 1990, a time of year when Kotzebue temperatures are consistently dropping below freezing, active soil layers are freezing, heavy snowfall can be expected and Kotzebue Sound is beginning to freeze up. For these reasons we do not recommend initiating foundation work at the beginning of fiscal year 1991. We recommend that foundation work begin toward the end of fiscal year 1991 with building construction scheduled to follow, at the earliest, in late fiscal year 1992, see Figure 3.

Foundation and civil site work involving grading, excavation and placement of soils should occur during mid to late summer and early fall. At this time of year the active layer soils would be thawed their deepest and excavation of borrow material and site soils would be expected to be easier to accomplish. During this time of year air temperatures are generally above freezing, most all surficial ice and snow has melted, and placement and compaction of fill soils would be possible in a thawed state. In addition if frozen borrow soils are obtained, they could be spread on site and allowed to thaw prior to grading and compaction.

Placement and compaction of fill in late summer would also help to densify and consolidate the surficial active layer soils which are not removed. Initial site grading and preparation would be extremely difficult in late winter or early spring due to both the frozen active layer and below freezing temperatures in which site fill placement would be performed. Placement and compaction of fill soils over frozen active layer soils, which are typically ice rich, would most likely lead to distress in the fill when the active layer soils thaw. We recommend that site grading be performed prior to the installation of the piles.

We also recommend that slurry sand and gravel and any additional fill material be excavated from borrow sites and stockpiled on site during mid to late summer in fiscal year

1991 for use in pile installation and as fill for capping ground surface insulation after it has been placed.

Slurry backfilled pile installation could be performed during early to mid fiscal year 1992 through the gravel pad installed during late fiscal year 1991. We recommend that the piles be installed in January through mid March of 1992. During these months most of the active layer soils would be frozen reducing potential problems with thawed surficial active layer soils and groundwater sloughing into pre-drilled holes. Completion by mid March should allow time for the piles to passively freeze back and achieve load carrying capacity prior to a summer construction season. Construction and installation of drilled slurried piles later than early April may require artificial refrigeration to freeze the piles back and maintain them at a temperature where construction can begin. The need for artificial refrigeration or amount that would be required is difficult to predict. Factors such as air temperature and wind velocity as well as installation date and subsurface soil conditions and temperature will all affect the degree and rate of freezeback.

Ground surface insulation should be placed after the piles are installed and the site is cleaned to remove auger cuttings and re-leveled. In our opinion the ground surface insulation can be placed as late as the first of June following the pile installation. This should be a time of year when the surficial soils are beginning to thaw and air temperatures are above freezing for extended periods of time. Fill over the insulation should be placed when thawed to minimize damage to the insulation.

Foundation construction could be accelerated if it were possible to let a separate site preparation/materials contract. This would permit the placement of a portion of the pad in fiscal year 1990 (August or September). The insulation could then be placed the following spring (fiscal 1991) with the piles shipped that summer and installed in winter of fiscal year 1992.

7.0 PILE LOAD TESTING

Early in the negotiating for our involvement in this project the decision was made to not perform load testing of piles at this site. The primary reason load testing was deleted from our studies was because of the anticipated high costs of installing load test and reaction piling and conducting the load tests. Initially we had anticipated running long term load tests on deep driven and shallow slurried piles. The discussions below include some advantages and disadvantages of pile load testing for this project.

Advantages of Using Pile Load Tests

- 1) Pile design analysis can be correlated with actual site specific pile load test data to determine factor of safety and accuracy in design analysis assumptions.
- 2) Unanticipated pile installation problems or difficulties would be noted, studied and considered in the development of foundation recommendations prior to full scale foundation installation.
- 3) Pile load test results may indicate an over conservative pile design and result in savings in installation and material costs.

Disadvantages of a Pile Load Test

- 1) Expense, as discussed earlier.
- 2) Time constraints at this point in the project. Mobilization of equipment, installation of piles and monitoring equipment, allowing time for freezeback to occur and long term pile load tests may delay the project 1 to 2 years. Load testing in anticipated creep sensitive soils should be conducted over a long period of time to develop an understanding of the creep settlement characteristics of the soils. Short term tests may not accurately predict long term pile behavior.
- 3) Suspected highly variable subsurface soil conditions indicate the need for several load tests in differing soil conditions. Even with several load tests, high factors of safety may be required to cover unanticipated soil conditions.

This would especially be a concern with deep driven piles. Shallow slurried piles would be placed in the more consistent surficial soils.

- 4) It is also important that the pile load tests be performed during the time of year when the typical ground temperatures are at the warmest. Test piles installed during the winter may give results which are not indicative of the creep settlement that the piles may undergo during the warmest soil temperature of the year, which is typically summer or early fall. Therefore piles should be installed and allowed to freezeback and then warm naturally while the load tests are conducted. The process of freezeback and natural warming would require monitoring and therefore additional time and expense.

8.0 REVIEW OF PC DEEP DRIVEN PILE FOUNDATION RECOMMENDATIONS

Deep driven pile foundations have been discussed and compared with drilled slurry pile foundations in Section 3.0. Many of the comparisons and comments made in Section 3.0 will be summarized in this section. This section summarizes our comments concerning PC's deep driven pile recommendations in light of our drilled slurred pile recommendations.

- 1) In determining adfreeze and creep settlement criteria for design, PC used the coldest soil temperature observed on site (Boring B-1) which is not located within the building footprint. We recommend using temperatures from Boring B-3 which is located in the building footprint and then considering the warming of the soil due to the thermal modification in the pilot holes.
- 2) Pile settlements for deep driven piles should be considered to largely occur as differential settlement and not a combination of total and differential as proposed by PC. Deep piles will penetrate a wide range of varying soil conditions. Therefore a pile in icy saline permafrost could be adjacent to a pile in well bonded low salinity permafrost resulting in strikingly different settlement characteristics. This is considered less of a problem with drilled slurred piles.
- 3) PC proposed to install cooling loops inside driven piles for use in cooling subgrade soils when, and if necessary. We understand that Alyeska uses liquid cooling loops and considers them a maintenance problem. Reportedly they often end up leaking. Leaking freezing point depressed fluids can erode adfreeze bonds. See the discussion on glycol below.
- 4) PC proposes to use a non-freezing material such as glycol or sea water and soil to backfill cooling loops installed in driven piles. Using non-freezing fluids in the pile such as glycol is an unwarranted risk to the permafrost. Spillage of glycol could cause degradation of the permafrost and loss of support. Because glycol is heavier than water and does not stay mixed, it is likely to move out the bottom of the open-end pipe. The internal pipe loop

must have thermal continuity with the steel pipe. A proposed method is to fill the pipe with wet sand after the pile driving is completed. Since a sand-ice mixture has a higher thermal conductivity than an unfrozen sand, the sand should be allowed to freeze. To protect the pipe from excessive hoop stresses due to ice expansion, the wet sand should be placed so that it is slightly under-saturated. This can be done with an air-entraining agent. The volume of sand required for backfilling half of a single deep pile is 1 cubic yard more than that required for backfilling two shallow slurry backfilled thermo ring piles.

- 5) Drilling of pilot holes through unbonded zones of soil will require casing with air rotary drilling techniques or continuous flight auger. If hot water is then introduced into the hole to thermally modified soils as PC has proposed, casing or hollow stem auger may have to remain in the hole until after the hot water and thermal modification has occurred.
- 6) Construction sites where driven piles are installed are typically very noisy and cause a disturbance to people living nearby. The size and type of piles proposed for the driven pile foundation will require a large pile driving hammer which will create a considerable level of noise pollution. The senior citizen's center is adjacent to the proposed site and concerns from these individuals as well as many others in town may limit pile driving activities to only selected periods of the day and result in higher pile installation costs than originally anticipated.
- 7) Driven piles, as opposed to drilled slurried piles, typically have substantially more problems meeting location and alignment specifications.
- 8) It is anticipated that both driven piles and drilled slurried piles will thermally modify the site during installation, see Section 3.0. However, driven piles (unless actively refrigerated) will have to rely on natural freezeback to cool warmed soils whereas driven slurried piles will have passive refrigeration. Introduction of a large volume of hot water could result in warming the permafrost beneath the building footprint. Thus, the coldest ground

temperature profile assumed by PC in their design could be even more unconservative. See item 1 above.

- 9) PC recommends 2 feet of gravel cover over the insulation. For a non-refrigerated driven pile foundation we agree with PC concerns and recommendations. With a drilled slurried pile foundation, we do not believe more than 1 foot of gravel will be required unless damage from heavy equipment is anticipated.
- 10) We understand that PC used adfreeze and creep settlement design values for ice and ice rich soils. A comparison of creep properties of fresh water ice and saline permafrost shows that the values for ice are unconservative. For the same temperature depression below the freezing point, the B value for ice is about 100 times smaller than the B value for saline permafrost. In our opinion data for piles in ice should not be used for the design of the piles in saline permafrost at Kotzebue. Also there is not any accepted method of relating the creep properties of saline permafrost to the blow counts observed during sampling, in our opinion.

9.0 LIMITATIONS

The analyses, conclusions and recommendations contained in this report are based on site conditions as they existed during the field studies and further assume that the exploratory borings are representative of the subsurface conditions throughout the site, that is, that the surface and subsurface conditions everywhere are not significantly different from those disclosed by the explorations and field studies. If, during construction, subsurface conditions different from those encountered in the exploratory holes or during our field studies are observed or appear to be present beneath excavations, advise us at once so we can review these conditions and reconsider our recommendations, when necessary.

Unanticipated soil conditions are commonly encountered and cannot be fully determined by merely taking soil samples or test borings or by conducting field studies. Such unexpected conditions frequently require that additional expenditures be made to obtain a properly constructed project. Therefore, some contingency fund is recommended to accommodate such potential extra costs.

If substantial time has elapsed between the submission of this report and the start of work at the site, or if conditions have changed because of natural causes or construction operations at or adjacent to the site, we recommend that this report be reviewed to determine the applicability of the conclusions and recommendations considering the time lapse or changed conditions.

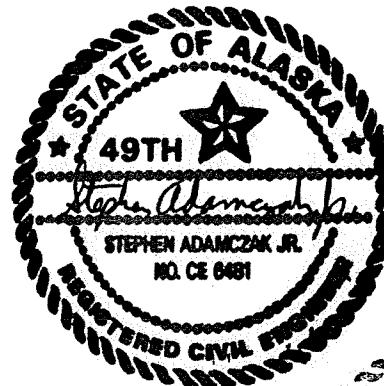
We recommend that we review those portions of the plans and specifications which pertain to earthwork and foundations to determine if they are consistent with our recommendations. In addition, we are available to observe construction, particularly the placement of slurred backfilled piling, gravel fill and insulation and preparation of all foundations.

This report was prepared for the exclusive use of the owner and architect and/or engineer in the design of the subject facility. It should be made available to prospective contractors and/or the contractor for information on factual data only and not as a warranty of subsurface conditions such as those interpreted from the boring logs and field and laboratory studies data and presented in discussions of subsurface conditions included in this report.

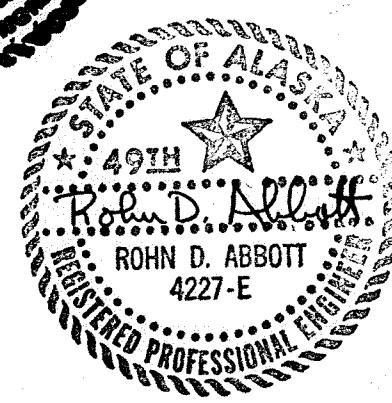
Sincerely,

SHANNON & WILSON, INC.

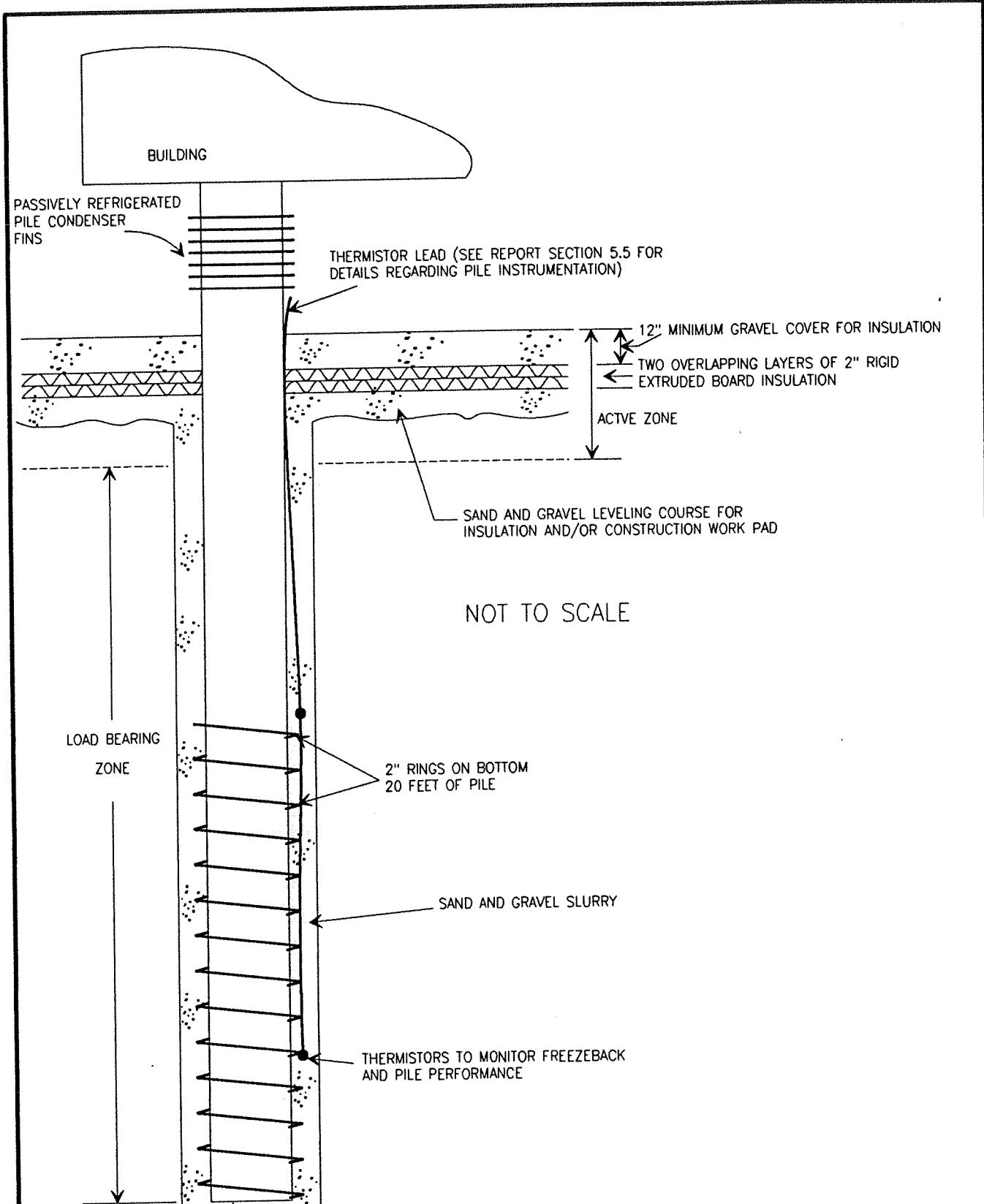
By Stephen Adamczak
Stephen Adamczak, P.E.
Principal Engineer



Reviewed By Rohn D. Abbott
Rohn D. Abbott, P.E.
Senior Vice President



Reviewed By Duane L. Miller
Duane L. Miller, P.E. (CE 3696)
Duane L. Miller & Associates



NOTES:

SEE REPORT SECTION 5.0 FOR DETAILS REGARDING THE RECOMMENDED DESIGN OF A PASSIVELY REFRIGERATED SLURRY BACKFILLED THERMO-RING PILE.

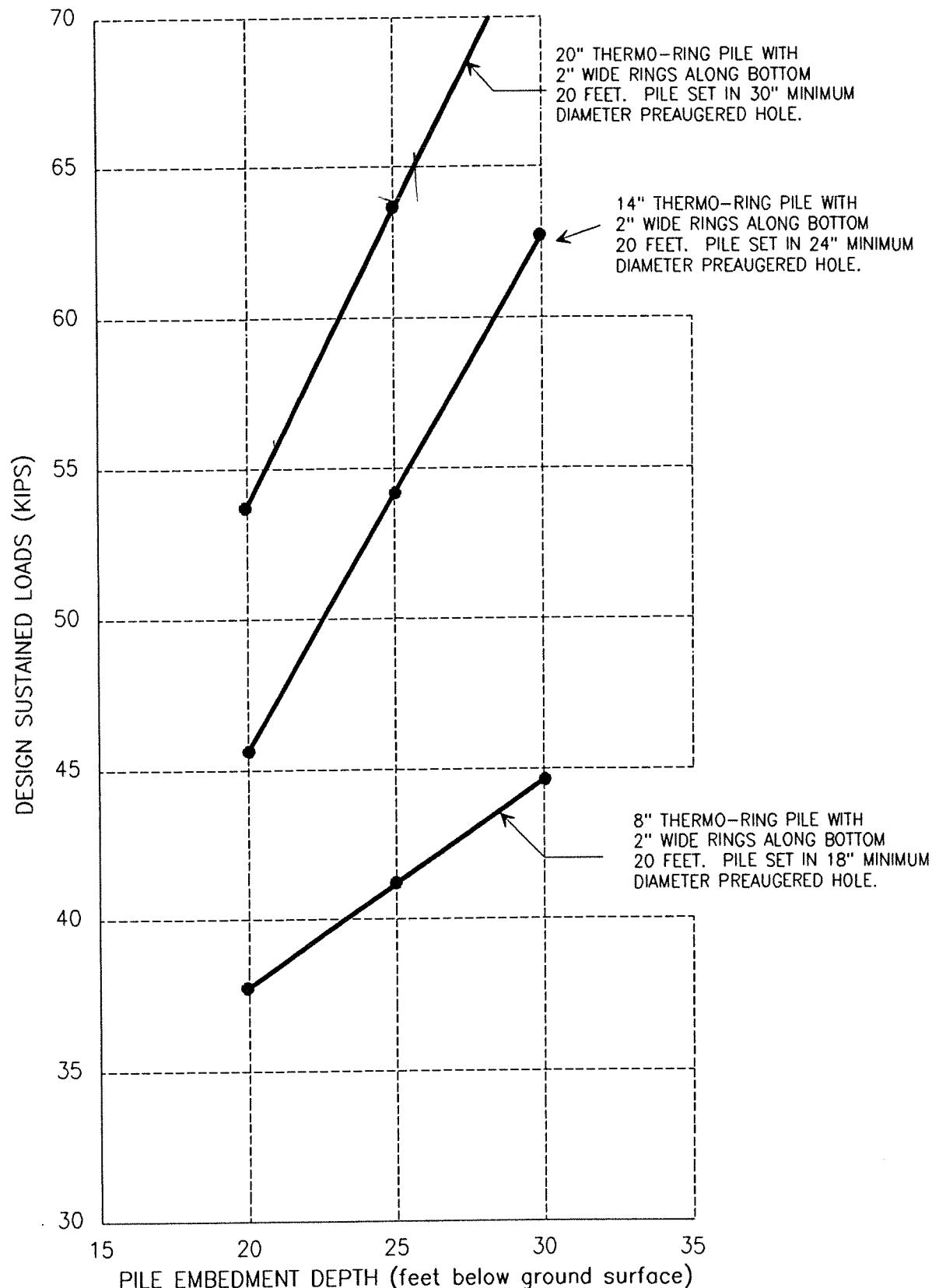
Livingston Slone, Inc.
 Proposed New Kotzebue Hospital
 Kotzebue, Alaska
 PASSIVELY REFRIGERATED SLURRY
 BACKFILLED PILE FOUNDATION RECOMMENDATIONS
 January 1990

K-1044



SHANNON & WILSON, INC.
 Geotechnical Consultants

Fig. 1



NOTE:

SEE SECTION 5.0 FOR DETAILS
REGARDING RECOMMENDED PILE
INSTALLATION AND DESIGN

Livingston Slope, Inc.
Proposed New Kotzebue Hospital
Kotzebue, Alaska

RECOMMENDED SUSTAINED DESIGN LOADS

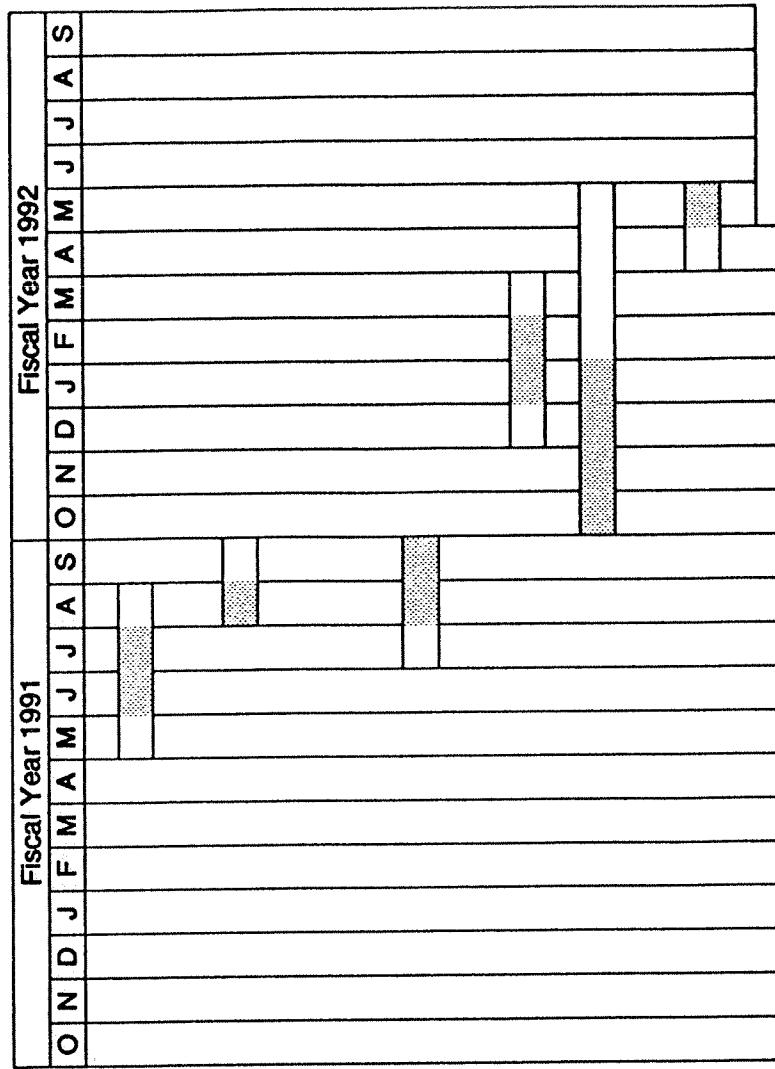
January 1990

K-1044



SHANNON & WILSON, INC.
Geotechnical Consultants

Fig. 2



LEGEND:

Suggested time interval to perform task

Recommended time interval to perform task

NOTE:

Variations in climatic and site conditions as well as construction schedules could affect the performance of tasks within the time intervals recommended. Variations would be expected.

Livingston Slope, Inc.
Proposed New Kotzebue Hospital
Kotzebue, Alaska

**RECOMMENDED FOUNDATION
CONSTRUCTION SCHEDULE**

January 1990

K-1044



SHANNON & WILSON, INC.
Geotechnical Consultants

Fig. 3

**BIBLIOGRAPHY OF SOME OF THE LITERATURE AND REFERENCES
REVIEWED AND USED IN CONJUNCTION WITH
THIS FOUNDATION ANALYSES**

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Personal Communications with:

J.F. (Derick) Nixon - ESSO Resources Canada, Ltd., Research Dept., Calgary,
Alberta, Canada

Branko Ladanyi - Northern Engineering Centre (CINEP)
Ecole Polytechnique, Montreal, Quebec, Canada

Dave Sego - Civil Engineering Dept., University of Alberta
Edmonton, Alberta, Canada

Saline Permafrost Workshop, October 26, 1989 in Winnipeg, Manitoba.

**Standard Form of Agreement Between Owner and Design-Builder for a
Traditional Design-Build Project**

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

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

Maniilaq Association
PO Box 256
Kotzebue, Alaska 99752

and the Design-Builder:
(Name, legal status, address, and other information)

TBD

The Owner's Designated Representative (Program Manager):

Arcadis US, Inc.
880 H Street, Suite 101
Anchorage, AK 99501

The Owner's Designated representative is also referred to in the Contract Documents as
the "Owner Representative" and the "Program Manager".

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

Maniilaq Health Center, Empath Addition
436 5th Avenue
Kotzebue, Alaska 99752

The Owner and Design-Builder agree as follows.

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

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

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Owner's Criteria

This Agreement is based on the Owner's Criteria set forth in this Section 1.1. The Owner's Criteria is fixed as of the date of this Agreement.

(For each item in Section 1.1.1 through 1.1.10, insert the information or a statement such as "not applicable" or "unknown at the time of execution.)

§ 1.1.1 The Owner's program for the Project:

(Identify below, or in an attached exhibit, the documentation in which the program is set forth, or state the manner in which the program will be developed.)

Concept Design Package from Nvision Architects dated DATE.

§ 1.1.2 The Owner's design requirements for the Project:

(Identify below, or in an attached exhibit, the documentation that contains the Owner's design requirements, including any performance specifications for the Project.)

§ 1.1.3 The Project's physical characteristics:

(Identify or describe below, or in an attached exhibit, if appropriate, size, location, dimensions, or other pertinent information, such as geotechnical or environmental reports; site, boundary, topographic, or existing building surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site; Project and site requirements; etc.)

§ 1.1.4 The Owner's anticipated Sustainable Objective for the Project, if any:

(Identify below, or in an attached exhibit, the Owner's Sustainable Objective for the Project, such as Sustainability Certification, benefit to the environment, enhancement to the health and well-being of building occupants, or improvement of energy efficiency. If the Owner identifies a Sustainable Objective, incorporate AIA Document A141®–2024, Standard Form of Agreement between Owner and Design-Builder for a Traditional Design-Build Project, Exhibit C, Sustainable Projects Exhibit, into this Agreement to define the terms, conditions, and Work related to the Owner's Sustainable Objective.)

§ 1.1.5 The Owner's building information modeling requirements for the Project, if any:

(Identify below, or in an attached exhibit, the Owner's building information modeling requirements for the Project, such as the requirement that the Design-Builder provide a model for subsequent use by the Owner or share models with the Owner's Consultants and Separate Contractors. If the parties agree upon protocols for transmission of, use of, and reliance on information or documentation in digital form, then identify and attach that document.)

§ 1.1.6 The Owner's budget for the Work to be provided by the Design-Builder is set forth below:

(Provide the Owner's total budget for the Design Services, Construction Work, related services, and reasonable contingencies, required to fulfill the Design-Builder's obligations under the Design-Build Documents following execution of the Design Build Amendment. If known, include a line-item breakdown of costs.)

§ 1.1.7 The Owner's anticipated design and construction milestones:

.1 Design Builder's Proposal submission date:



.2 Construction commencement date:



.3 Substantial Completion date or dates:



.4 Other milestone dates:

(Include other dates, such as milestones for Evaluation of the Owner's Criteria, Preliminary Design, the anticipated start of construction, or phased completion dates.)

§ 1.1.8 In the event the Owner requires the Design-Builder to retain a specific person or entity to perform a portion of the Work, such as an architect, consultant, or subcontractor, those persons or entities shall be identified below:
(List name, legal status, address and other information.)

§ 1.1.9 Additional Owner's Criteria upon which this Agreement is based:
(Identify below, or in an attached exhibit, special characteristics or needs of the Project not identified elsewhere.)

§ 1.1.10 The Owner's requirements for accelerated or fast-track design and construction, multiple bid packages, or phased construction are set forth below:
(Identify any requirements for fast-track scheduling, multiple bid packages, or phased construction.)

§ 1.2 Project Team

§ 1.2.1 The Owner identifies the following representative in accordance with Section 7.1.1:
(List name, address, and other information.)

Owner's Representative/Program Manager
Arcadis US, Inc.
880 H Street, Suite 101
Anchorage, AK 99501

Owner's Program Manager is authorized to act on the Owner's behalf on issues directly related to the Project. References to the Owner in this Agreement, with respect to the submittal of documents, reviews, inspections, meeting attendance, etc. shall mean both personnel with Project responsibilities employed directly by the Owner, and personnel and subcontractors with Project responsibilities employed by the Program Manager. However, when this Agreement stipulates "Owner approval", such approvals are reserved for and shall only be made by authorized individuals who work directly for the Owner, unless specifically stated otherwise in this Agreement or otherwise delegated in writing to the Program Manager. The Owner and Program Manager shall render decisions and approve submittals in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Work.

Owner:
Maniilaq Association
Matthew Bergan, PE
Capital Projects Director
733 W. 2nd Avenue
P.O. Box 256
Kotzebue, Alaska 99752

E-mail: matthew.bergan@maniilaq.org
Direct: 907-442-7961

§ 1.2.2 The Owner will retain the following consultants and Separate Contractors:
(List name, address, and other information.)

.1 Land Surveyor:



.2 Geotechnical Engineer:



.3 Other consultants:

(List any other consultants, e.g., Cost Consultant, Scheduling Consultant, to be retained by the Owner.)



.4 Separate Contractors:

(List any Separate Contractors to be retained by the Owner.)



§ 1.2.3 The Design-Builder identifies the following representative in accordance with Section 3.1.2:
(List name, address and other information.)



§ 1.2.4 In addition to those persons or entities identified in Section 1.1.8, the Design-Builder shall retain the Architect, Consultants, Subcontractors, and suppliers, identified below:
(List name, discipline, address, and other information.)



§ 1.2.5 Neither the Owner's nor the Design-Builder's representative shall be changed without ten days' notice to the other party.

§ 1.3 Dispute Resolution

§ 1.3.1 Initial Resolution of Claims. Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Construction Work set forth in Section 12.2.2, or arising under Sections 10.3 and 10.4, shall be:
(Check the appropriate box.)

Subject to a Meet and Confer obligation in accordance with Section 15.2.1.

Referred to the following Project Neutral for an initial decision in accordance with Section 15.2.2.
(Insert name, address, and contact information for Project Neutral.)

Owner's Representative:

Arcadis US, Inc.
880 H Street, Suite 101

If the Owner and Design-Builder do not select a Project Neutral above, the Parties shall meet and confer as a condition precedent to mediation pursuant to Section 15.3.

§ 1.3.2 Binding Dispute Resolution. For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3, the method of binding dispute resolution shall be the following:
(Check the appropriate box.)

- Arbitration pursuant to Section 15.4
- Litigation in a court of competent jurisdiction
- Other: *(Specify)*

If the Owner and Design-Builder do not select a method of binding dispute resolution above, or do not subsequently agree in writing to a method of binding dispute resolution other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

§ 1.4 Definitions

§ 1.4.1 Architect. The Architect is a person or entity providing Design Services for the Design-Builder for all or a portion of the Work and is lawfully licensed to practice architecture in the applicable jurisdiction. The Architect is referred to throughout the Design-Build Documents as if singular in number.

§ 1.4.2 Confidential Information. Confidential Information is information containing confidential or business proprietary information that is designated as “confidential.”

§ 1.4.3 Consultant. A Consultant is a person or entity providing services for the Design-Builder for all or a portion of the Work and is referred to throughout the Design-Build Documents as if singular in number. If the Consultant provides professional services, the Consultant shall be lawfully licensed to provide such services, as required by the applicable jurisdiction.

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

§ 1.4.5 Contract Sum. The Contract Sum is the amount to be paid to the Design-Builder for performance of the Work after execution of the Design-Build Amendment, as set forth in the Design-Build Amendment.

§ 1.4.6 Contract Time. The Contract Time is the period of time identified in the Design-Build Amendment, measured from the date for commencement of the Construction Work, including authorized adjustments, established as the period for the Design-Builder to achieve Substantial Completion of the Work.

§ 1.4.7 Subcontractor. A Subcontractor is a person or entity performing all or a portion of the construction, required in connection with the Work, for the Design-Builder. Each Subcontractor shall be lawfully licensed, if required in the jurisdiction where the Project is located.

§ 1.4.8 Cost of the Work. The Cost of the Work includes all costs reasonably incurred by the Design-Builder in the proper performance of the Work as described in Article B.6 of the Design-Build Amendment.

§ 1.4.9 Day. The term “day” as used in the Design-Build Documents shall mean calendar day unless otherwise specifically defined.

§ 1.4.10 Design-Build Documents. The Design-Build Documents consist of this Agreement between Owner and Design-Builder (hereinafter, this Agreement), other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract and are as fully a part of the Contract as if attached to this Agreement or repeated herein. A Modification is (1) a written amendment to the Contract signed by both parties, including the Design-Build Amendment, (2) a Change Order, or (3) a Change Directive. The Design-Build Documents will also include the Drawings, Specifications, and other documents listed in the Design-Build Amendment. If anything in the other Design-Build Documents, other than a Modification, is inconsistent with this Agreement, this Agreement shall govern.

§ 1.4.11 Design-Builder. The Design-Builder is the person or entity identified as such in this Agreement and is referred to throughout the Design-Build Documents as if singular in number. The term “Design-Builder” means the Design-Builder or the Design-Builder’s authorized representative.

§ 1.4.12 Work. “Work” means the (a) services required of the Design-Builder prior to the execution of the Design-Build Amendment, (b) Design Services, and (c) Construction Work.

§ 1.4.12.1 Design Services. “Design Services” are the professional services, including those services that are rendered by architects and engineers, which are required to fulfill the Design-Builder’s obligations under the Design-Build Documents. Design Services do not include professional or other services necessary to support Construction Work which are provided by Subcontractors engaged by the Design-Builder.

§ 1.4.12.2 Construction Work. “Construction Work” is the construction, and services to support construction, required by the Design-Build Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided, or to be provided, by the Design-Builder to fulfill the Design-Builder’s obligations under the Design-Build Documents.

§ 1.4.13 Early Release Work. “Early Release Work” is a limited, predetermined portion of the Project or scope of the Work that the Owner authorizes the Design-Builder to commence before the parties execute the Design-Build Amendment.

§ 1.4.14 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Design-Builder, Subcontractors, Architect, or Consultants under their respective agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.4.15 Notice

§ 1.4.15.1 Except as otherwise provided in Section 1.4.15.2, where the Design-Build Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission as set forth below:

(Insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission. If the parties agree upon protocols for electronic transmission of notice, identify and attach that document.)

§ 1.4.15.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.4.16 Owner. The Owner is the person or entity identified as such in this Agreement and is referred to throughout the Design-Build Documents as if singular in number. The term “Owner” means the Owner or the Owner’s authorized representative.

§ 1.4.17 The Project. The Project is comprised of all design and construction, of which the Work performed under the Design-Build Documents may be the whole or a part, and may include design and construction by the Owner and by

Separate Contractors.

§ 1.5 The Owner and Design-Builder may rely on the Owner's Criteria set forth in Article 1. If the Owner's Criteria materially changes after execution of this Agreement, the Owner and the Design-Builder shall execute a Modification to adjust the Project schedule, the Design-Builder's services, and the Design-Builder's compensation. The Owner shall adjust the Owner's budget in Section 1.1.6 and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Owner's Criteria.

ARTICLE 2 COMPENSATION AND PROGRESS PAYMENTS

§ 2.1 Compensation for Work Prior To Execution of Design-Build Amendment

§ 2.1.1 For the Design-Builder's performance of Work prior to the execution of the Design-Build Amendment, the Owner shall compensate the Design-Builder as follows:

(Insert amount of, or basis for, compensation, or indicate the exhibit in which the information is provided. If there will be a limit on the total amount of compensation for Work performed prior to the execution of the Design-Build Amendment, state the amount of the limit.)

Lump Sum Fee of

§ 2.1.5 Payments to the Design-Builder Prior To Execution of Design-Build Amendment

§ 2.1.5.1 Unless otherwise agreed, payments for Work prior to execution of the Design-Build Amendment shall be made monthly upon presentation of the Design-Builder's invoice.

§ 2.1.5.1.1 Amounts unpaid Thirty (30) days after the invoice date shall bear interest at the rate entered below, or in the absence thereof, at the legal rate prevailing from time to time at the principal place of business of the Design-Builder.

(Insert rate of monthly or annual interest agreed upon.)

3.75 %

§ 2.1.5.2 Records of Reimbursable Expenses and services performed on the basis of hourly rates shall be available to the Owner at mutually convenient times for a period of two years following execution of the Design-Build Amendment or termination of this Agreement, whichever occurs first.

§ 2.2 Payment for Early Release Work

For the Design-Builder's performance of Early Release Work, the Owner shall pay the Design-Builder in accordance with the authorization for the Early Release Work, unless otherwise agreed to by the parties.

§ 2.3 Compensation for Work Performed After Execution of Design-Build Amendment

§ 2.3.1 For the Design-Builder's performance of Work after execution of the Design-Build Amendment, the Owner shall pay to the Design-Builder the Contract Sum as set forth in Article 9 and the Design-Build Amendment.

§ 2.3.2 Liquidated Damages

The Design-Builder's liability for liquidated damages resulting from the Design-Builder's failure to achieve Substantial Completion within the Contract Time shall be as follows:

(For each item in Section 2.3.2.1 through 2.3.2.4, insert the information or a statement such as "not applicable".)

- .1 Insert the monetary amount of liquidated damages, if any, to be assessed:
(Identify the monetary amount of liquidated damages, the incremental period of time for each assessment, and whether that amount is uniform or variable over time.)

- .2 Insert the date(s) or event(s), if any, that triggers the commencement of the assessment of liquidated damages, if other than the date of Substantial Completion of the entire Project:

.3 Insert the limit, if any, on the total amount of liquidated damages:



.4 Insert any other terms for liquidated damages:



ARTICLE 3 GENERAL REQUIREMENTS OF THE WORK OF THE DESIGN-BUILD CONTRACT

§ 3.1 General

§ 3.1.1 The Design-Builder shall comply with any applicable licensing requirements in the jurisdiction where the Project is located.

§ 3.1.2 The Design-Builder shall designate in writing a representative who shall have express authority to bind the Design-Builder with respect to all matters under this Agreement.

§ 3.1.3 The Design-Builder shall perform the Work in accordance with the Design-Build Documents. The Design-Builder shall not be relieved of its obligations to perform the Work in accordance with the Design-Build Documents by the activities, tests, inspections, or approvals of the Owner.

§ 3.1.4 If the Design-Builder performs Work contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Design-Builder shall assume responsibility for such Work and shall bear the costs attributable to correction.

§ 3.1.4.1 Neither the Design-Builder nor any Subcontractor, Consultant, or Architect shall be obligated to perform any act which they believe will violate any applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities. If the Design-Builder determines that implementation of any instruction received from the Owner, including those in the Owner's Criteria, would cause a violation of any applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Design-Builder shall notify the Owner in writing. Upon confirmation by the Owner that a change to the Owner's Criteria is required to remedy the violation, the Owner and the Design-Builder shall execute a Modification.

§ 3.1.5 The Design-Builder shall be responsible to the Owner for acts and omissions of the Design-Builder's employees, Architect, Consultants, Subcontractors, and their agents and employees, and any other persons or entities performing portions of the Work for, or on behalf of, the Design-Builder.

§ 3.1.6 The Design-Builder shall schedule and conduct periodic meetings with the Owner to review matters such as procedures, progress, coordination, and scheduling of the Work.

§ 3.1.7 The Design-Builder shall furnish the services of Architects, Consultants, Subcontractors, and suppliers identified in Article 1 or otherwise required to fulfill its obligations under the Design-Build Documents. The Owner understands and agrees that the services of such parties are performed in the sole interest of, and for the exclusive benefit of, the Design-Builder. When applicable law requires that services be performed by licensed professionals, the Design-Builder shall provide those services through qualified and licensed professionals.

§ 3.1.8 The Design-Builder, with the assistance of the Owner, shall prepare and file documents required to obtain necessary approvals of authorities having jurisdiction over the Project.

§ 3.1.9 Progress Reports

§ 3.1.9.1 The Design-Builder shall keep the Owner's Representative and Owner informed of the progress and quality of the Work. On a monthly basis, or otherwise as agreed to by the Owner's Representative, Owner and Design-Builder, the Design-Builder shall submit written progress reports to the Owner's Representative and Owner, showing estimated percentages of completion and other information identified below:

.1 Work completed for the period;

.2 Project schedule status;

.3 Submittal schedule and status report, including a summary of outstanding Submittals;

- .4 Requests for information to be provided by the Owner, including those that are outstanding;
- .5 Approved Change Orders and Change Directives;
- .6 Pending Change Order and Change Directive status reports;
- .7 Tests and inspection reports;
- .8 Status report of Work rejected by the Owner;
- .9 Status of submissions and approvals required by authorities having jurisdiction over the Project;
- .10 Status of Claims previously submitted in accordance with Article 15;
- .11 Cumulative total of the Cost of the Work to date including the Design-Builder's compensation and Reimbursable Expenses, if any;
- .12 Current Project cash-flow and forecast reports;
- .13 A cost summary, comparing actual costs to updated cost estimates, if the Contract Sum is the Cost of the Work with or without a Guaranteed Maximum Price; and
- .14 Additional information as agreed to by the Owner and Design-Builder.

§ 3.1.10 Design-Builder's Schedule

§ 3.1.10.1 The Design-Builder, as part of the Design-Builder's evaluation of the Owner's Criteria, shall prepare and submit for the Owner's Representative and Owner's acceptance a Project schedule, which shall provide for expeditious and practicable execution of the Work. The Project schedule shall (1) include the time required for design and construction, (2) not exceed time limits set forth under the Design-Build Documents, (3) be revised at appropriate intervals as required by the conditions of the Work and the Design-Build Documents, (4) include allowances for periods of time required for the Owner's review, and (5) include allowances for approval of submissions by authorities having jurisdiction over the Project.

§ 3.1.10.2 The Design-Builder shall perform the Work in general accordance with the most recent Project schedule accepted by the Owner's Representative and Owner.

§ 3.1.11 Standard of Care

The Design-Builder shall perform (a) services required of the Design-Builder prior to the execution of the Design-Build Amendment, and (b) Design Services consistent with the degree of skill and care ordinarily provided by Design-Builders performing the same services in the same or similar locality under the same or similar circumstances.

§ 3.1.12 Warranty

The Design-Builder warrants to the Owner that the Construction Work furnished under the Contract will be of good quality and new unless the Design-Build Documents require or permit otherwise. If required by the Owner's Representative and Owner, the Design-Builder shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The Design-Builder further warrants that the Construction Work will conform to the requirements of the Design-Build Documents and will be free from defects, except for those inherent in their quality or otherwise expressly permitted by the Design-Build Documents. Construction Work not conforming to these requirements may be considered defective. The Design-Builder's warranty excludes remedy for damage or defect caused by abuse, alterations to the materials, equipment, or construction not executed by the Design-Builder, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

§ 3.1.13 Royalties, Patents and Copyrights

§ 3.1.13.1 The Design-Builder shall pay all royalties and license fees for designs, processes, or products, required by the Design-Build Documents.

§ 3.1.13.2 The Design-Builder shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and its Separate Contractors and consultants harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Owner, or where the copyright violations are contained in the Owner's Criteria. However, if an infringement of a copyright or patent is discovered by, or made known to, the Design-Builder, the Design-Builder shall be responsible for the loss unless such information is promptly furnished to the Owner. If the Owner receives notice from a patent or copyright owner of an alleged violation of a patent or copyright, attributable to the Design-Builder, the Owner shall give prompt notice to the Design-Builder.

§ 3.1.14 Indemnification

§ 3.1.14.1 To the fullest extent permitted by law, the Design-Builder shall indemnify and hold harmless the Owner,

Owner's Representative and the Owner's consultants, and agents and employees of any of them, from and against third-party claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, but only to the extent caused by the negligent acts or omissions of the Design-Builder, a Subcontractor, Architect, consultant, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.1.14. The Design-Builder's obligation to indemnify and hold the Owner, Owner's Representative and the Owner's consultants, and agents and employees of any of them, harmless does not include a duty to defend.

§ 3.1.14.2 In claims against any person or entity indemnified under this Section 3.1.14 by an employee of the Design-Builder, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.1.14 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Design-Builder or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

§ 3.1.15 Contingent Assignment of Agreements

§ 3.1.15.1 Each agreement for a portion of the Work is assigned by the Design-Builder to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Sections 14.1.4 or 14.2.2 and only for those agreements that the Owner accepts by notifying the Design-Builder and the Architect, Consultants, and Subcontractors whose agreements are accepted for assignment; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of an agreement, the Owner assumes the Design-Builder's rights and obligations under the agreement.

§ 3.1.15.2 Upon such assignment, if the Work has been suspended for more than 30 days, the compensation under the assigned agreement shall be equitably adjusted for increases in cost resulting from the suspension.

§ 3.1.15.3 Upon assignment to the Owner under this Section 3.1.15, the Owner may further assign the agreement to a successor design-builder or other entity. If the Owner assigns the agreement to a successor design-builder or other entity, the Owner shall nevertheless remain legally responsible for all of the successor design-builder's or other entity's obligations under the agreement.

§ 3.1.16 Design-Builder's Insurance and Bonds. The Design-Builder shall purchase and maintain insurance and provide bonds as set forth in Article 11 and AIA Document A141®–2024, Standard Form of Agreement Between Owner and Design-Builder for a Traditional Design-Build Project, Exhibit A, Insurance and Bonds.

ARTICLE 4 WORK PRIOR TO EXECUTION OF THE DESIGN-BUILD AMENDMENT

§ 4.1 General

§ 4.1.1 Any information submitted by the Design-Builder, and any interim decisions made by the Owner, shall be for the purpose of facilitating the design process and shall not modify the Owner's Criteria unless the Owner and Design-Builder execute a Modification.

§ 4.1.2 The Design-Builder shall advise and make recommendations to the Owner's Representative and Owner on proposed site use and improvements, selection of materials, building systems, and equipment, and temporary Project facilities. The Design-Builder shall also provide the Owner's Representative and Owner with recommendations, consistent with the Owner's Criteria, on constructability; availability of materials and labor; time requirements for procurement, installation, and construction; and factors related to construction cost including, but not limited to, costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions.

§ 4.2 Evaluation of the Owner's Concept Design Package

§ 4.2.1 The Design-Builder shall visit the Project site to become generally familiar with local conditions under which the Work is to be performed.

§ 4.2.2 The Design-Builder shall schedule and conduct meetings with the Owner's Representative and Owner and other

necessary individuals or entities to discuss and review the Owner's Concept Design Package as set forth in Section 1.1.

§ 4.2.3 The Design-Builder shall prepare and submit a written report to the Owner's Representative and Owner, summarizing the Design-Builder's evaluation of the Owner's Concept Design Package. The report shall also include:

- .1 Recommendations, if any, with regard to accelerated or fast-track scheduling, procurement, or phased construction;
- .2 An evaluation of the compliance of the Owner's Criteria with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, and, if necessary, recommendations to adjust the Owner's Criteria to conform with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities;
- .3 If necessary, recommendations to adjust the Owner's Criteria to conform to the Owner's schedule.

§ 4.2.4 The Owner and Owner's Representative shall review the Design-Builder's written report and, if acceptable, provide the Design-Builder with written consent to proceed to the development of the 35% Preliminary Design as described in Section 4.3.

§ 4.3 35% Preliminary Design

§ 4.3.1 Upon the Owner's issuance of a written consent to proceed under Section 4.2.4, the Design-Builder shall prepare and submit a 35% Preliminary Design and Cost Estimate to the Owner's Representative and Owner. The 35% Preliminary Design shall include a report identifying any deviations from the Owner's Concept Design Package, and shall include the following:

- .1 Confirmation of the allocations of program functions;
- .2 Site plan;
- .3 Building plans, sections, and elevations;
- .4 Structural system;
- .5 Selections of major building systems, including but not limited to mechanical, electrical, and plumbing systems; and
- .6 Outline specifications or sufficient drawing notes describing construction materials.
- .7 A preliminary estimate of the Contract Sum, and, if necessary, recommendations to adjust the Owner's Criteria to conform to the Owner's budget for the Work;
- .8 A preliminary estimate of the compensation for Design Services to be performed after execution of the Design Build Amendment.
- .9 A Project schedule, which shall include proposed dates for (i) design milestones; (ii) receiving additional information from, or for work to be completed by, the Owner; (iii) submission of the Design-Builder's Proposal; (iv) the Owner's review and approval of Design Phase submissions; and (v) review and approval of submissions by authorities having jurisdiction;

The Preliminary Design may include some combination of physical study models, perspective sketches, or digital modeling.

§ 4.3.2 The Owner and Owner's Representative shall review the Preliminary Design and, if acceptable, provide the Design-Builder with written consent to proceed to development of the Design-Builder's Proposal. The Preliminary Design shall not modify the Owner's Criteria unless the Owner and Design-Builder execute a Modification.

§ 4.4 Design-Builder's Proposal

§ 4.4.1 Upon the Owner's issuance of a written consent to proceed under Section 4.3.2, the Design-Builder shall prepare and submit the Design-Builder's Proposal to the Owner with a written statement of its basis, which shall include the following:

- .1 A list of the Drawings and Specifications, including all Addenda thereto;
- .2 A list of all Submittals that will be submitted to the Owner in accordance with Section 5.3.2;
- .3 A list of the clarifications and assumptions made by the Design-Builder in the preparation of the Design-Builder's Proposal;
- .4 The proposed Contract Sum, including the compensation method and, if based upon the Cost of the Work

plus a Fee, a written statement of estimated cost organized by trade categories, allowances, contingencies, Design-Builder's Fee, and other items that comprise the Contract Sum;

.5 The Design-Builder's Project schedule for the Work, showing the anticipated date of Substantial Completion upon which the Design-Builder's Proposal is based;

.6 A list of the Design-Builder's key personnel, Subcontractors, and suppliers; and

.7 A date by which the Owner must accept the Design-Builder's Proposal.

§ 4.4.2 The Design-Builder shall meet with the Owner and Owner's Representative to review the Design-Builder's Proposal. In the event that the Owner discovers any inconsistencies or inaccuracies in the information presented, the Owner shall promptly notify the Design-Builder, who shall make appropriate adjustments to the Design-Builder's Proposal, its basis, or both.

§ 4.4.3 Submission of the Design-Builder's Proposal shall constitute a representation by the Design-Builder that it has visited the site and become familiar with local conditions under which the Work is to be completed.

§ 4.5 Design-Build Amendment

§ 4.5.1 If the Owner and Design-Builder agree on the Design-Builder's Proposal, the Owner and Design-Builder shall execute the Design-Build Amendment setting forth the Contract Sum with the information and assumptions upon which it is based, the Contract Time, and the terms of their agreement.

§ 4.5.2 The Design-Builder shall not incur any cost to be paid as part of the Contract Sum prior to the execution of the Design-Build Amendment, unless the Owner provides prior written authorization for such costs.

§ 4.5.3 Any agreement to commence Early Release Work shall not waive the Owner's right to reject the Design-Builder's Proposal.

ARTICLE 5 WORK FOLLOWING EXECUTION OF THE DESIGN-BUILD AMENDMENT

§ 5.1 Construction Documents

§ 5.1.1 Upon the execution of the Design-Build Amendment, the Design-Builder shall prepare Construction Documents. The Construction Documents shall establish the quality levels of materials and systems required. The Construction Documents shall be consistent with the Design-Build Documents.

§ 5.1.2 The Design-Builder shall provide the Construction Documents to the Owner and Owner's Representative for the Owner's information. If the Owner or Owner's Representative discovers any deviations between the Construction Documents and the Design-Build Documents, the Owner and Owner's Representative shall promptly notify the Design-Builder of such deviations in writing. The Construction Documents shall not modify the Design-Build Documents unless the Owner and Design-Builder execute a Modification. The failure of the Owner or Owner's Representative to discover any such deviations shall not relieve the Design-Builder of the obligation to perform the Work in accordance with the Design-Build Documents.

§ 5.2 Construction Work

§ 5.2.1 Commencement. Except for any Early Release Work described in Section 5.2.2, the date of commencement of the Construction Work shall be the date identified in the Design-Build Amendment.

§ 5.2.2 Early Release Work

§ 5.2.2.1 The Design-Builder shall prepare, for the Owner's Representative and Owner's review and acceptance, a procurement proposal for Early Release Work which includes (a) portions of the Design Services or Construction Work that will be issued for procurement and construction in advance of the Design-Build Amendment, and (b) materials or equipment that must be procured prior to execution of the Design-Build Amendment.

§ 5.2.2.2 If the Owner accepts the Design-Builder's procurement proposal for Early Release Work, the Design-Builder shall prepare, for the Owner's Representative review and Owner's review and acceptance, an authorization to proceed with Early Release Work describing the scope, schedule for performance, compensation, payments, retainage, insurance and bonds, and other terms and conditions applicable to procurement and performance of the Early Release Work. The Design-Builder has no obligation to commence procurement and performance of Early Release Work until the Owner and Design-Builder execute such authorization.

§ 5.2.2.3 Following execution of the authorization, the Design-Builder shall expedite and coordinate the procurement and performance of Early Release Work in accordance with this Agreement and such authorization. Following execution of the Design-Build Amendment, compensation for the Early Release Work shall be included in the Contract Sum and the time for performing the Early Release Work shall be included in the Contract Time.

§ 5.2.2.4 Early Procurement of Materials or Equipment by Owner

§ 5.2.2.4.1 If the Owner agrees to procure any materials or equipment prior to execution of the Design-Build Amendment, the Owner shall procure the materials or equipment on terms and conditions mutually acceptable to the Owner and Design-Builder. After execution of the Design-Build Amendment, the Owner shall assign all contracts for these materials or equipment to the Design-Builder and the Design-Builder shall thereafter accept responsibility for them.

§ 5.2.3 Supervision. The Design-Builder shall supervise and direct the Construction Work, using the Design-Builder's best skill and attention. The Design-Builder shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Construction Work under the Contract, unless the Design-Build Documents provide other specific instructions concerning these matters.

§ 5.3 Submittals

§ 5.3.1 Submittals consist of Shop Drawings, Product Data, and Samples.

- .1 Shop Drawings.** Shop Drawings are drawings, diagrams, schedules, calculations, and other data specially prepared for the Construction Work by the Design-Builder or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor, to illustrate some portion of the Construction Work.
- .2 Product Data.** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Design-Builder to illustrate materials or equipment for some portion of the Construction Work.
- .3 Samples.** Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Construction Work will be judged.

§ 5.3.1.4 Submittals are not Design-Build Documents. Their purpose is to demonstrate how the Design-Builder proposes to conform to the information given and the design concept expressed in the Design-Build Documents for those portions of the Construction Work for which the Design-Build Documents require submittals. Review by the Owner's Representative and Owner is subject to the limitations of Section 5.3.3.1. Informational submittals upon which the Owner is not expected to take responsive action may be so identified in the Design-Build Documents. Submittals that are not required by the Design-Build Documents may be returned by the Owner without action.

§ 5.3.1.5 Submittal Schedule. If the Design-Build Documents require the Design-Builder to submit Submittals to the Owner during performance of the Construction Work, the Design-Builder, prior to submitting any submittals, and thereafter as necessary to maintain a current submittal schedule, shall provide a submittal schedule for the Owner's approval. The Owner's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Design-Builder's construction schedule, and (2) allow the Owner reasonable time to review submittals. If the Design-Builder fails to submit a submittal schedule or fails to provide submittals in accordance with the approved submittal schedule, the Design-Builder shall not be entitled to any increase in the Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 5.3.1.6 Documents and Submittals at the Site

The Design-Builder shall make available, at the Project site, the Design-Build Documents, including Change Orders, Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during performance of the Construction Work, and the approved Submittals. These shall be in electronic form or paper copy, available to the Owner, and delivered to the Owner upon completion of the Work as a record of the Construction Work as constructed.

§ 5.3.2 Design-Builder's Submittal Responsibilities

§ 5.3.2.1 The Design-Builder shall review for compliance with the Design-Build Documents, approve, and submit to the Owner, Submittals required by the Design-Build Documents, in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Construction Work or in the activities of the Owner or of Separate Contractors.

§ 5.3.2.2 By submitting Submittals, the Design-Builder represents to the Owner that the Design-Builder has (1) reviewed and approved them, (2) determined and verified materials, field measurements, and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Construction Work and of the Design-Build Documents.

§ 5.3.2.3 The Design-Builder shall perform no portion of the Construction Work for which the Design-Build Documents require submittal and review of Submittals, until the respective submittal has been approved by the Owner.

§ 5.3.2.4 The Construction Work shall be in accordance with approved submittals except that the Design-Builder shall not be relieved of responsibility for deviations from the requirements of the Design-Build Documents by the Owner's approval of Submittals, unless the Design-Builder has specifically notified the Owner of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Change Directive has been issued authorizing the deviation. The Design-Builder shall not be relieved of responsibility for errors or omissions in Submittals by the Owner's approval thereof.

§ 5.3.2.5 The Design-Builder shall direct specific attention, in writing or on resubmitted Submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such notice, the Owner's approval of a resubmission shall not apply to such revisions.

§ 5.3.3 Owner's Submittal Responsibilities

§ 5.3.3.1 The Owner's Representative will review and Owner will review, approve, or take other appropriate action upon, the Design-Builder's Submittals, but only for the limited purpose of checking for conformance with the information and design concept expressed in the Design-Build Documents. The Owner's Representative and Owner's action will be taken in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Design-Builder as required by the Design-Build Documents. The Owner's review of the Design-Builder's Submittals shall not relieve the Design-Builder of the obligations under Sections 3.1.3, 3.1.11, and 5.3.2. The Owner's Representative and Owner's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Owner's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 5.3.3.2 Upon review of the submittals required by the Design-Build Documents, the Owner's Representative and Owner shall notify the Design-Builder of any non-conformance with the Design-Build Documents the Owner discovers.

§ 5.3.3.3 The persons or entities, in addition to the Owner's representative, who are required to review the Design-Builder's Submittals are as follows:

(List name, address, and other information.)

Owner's Representative

§ 5.4 Services Necessary to Support Construction Work

§ 5.4.1 The Design-Builder shall provide the services required to complete the Construction Work including services required to carry out the Design-Builder's responsibilities for construction means, methods, techniques, sequences, and procedures. The Design-Builder shall perform such services in compliance with applicable law.

§ 5.4.2 If the Design-Build Documents require services, certifications, or approvals by a licensed design professional during Construction, the drawings, calculations, specifications, certifications, Shop Drawings, and other Submittals prepared under the Design-Build Documents shall be signed and sealed by such design professional.

§ 5.4.3 The Owner and Owner's Representative shall be entitled to rely upon the services, certifications, and approvals provided by the design professionals under Section 5.4.2. The Owner and Owner's Representative shall provide prompt notice to the Design-Builder if the Owner or Owner's Representative observes or otherwise becomes aware of any errors, omissions, or inconsistencies in such services or information. The Owner and Owner's Representative are not required to ascertain that the services, certifications, and approvals performed or provided by the Design-Builder or the licensed design professional in connection with the Construction Work are in accordance with applicable laws, statutes,

ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Owner's Representative or Owner shall promptly report to the Design-Builder any nonconformity discovered by, or made known to, the Owner's Representative or Owner.

§ 5.5 Labor and Materials

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

§ 5.5.2 When a material or system is specified in the Design-Build Documents, the Design-Builder may make substitutions only with the consent of the Owner and in accordance with a Change Order or Change Directive.

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

§ 5.6 Taxes

The Design-Builder shall pay sales, consumer, use and similar taxes, for the Construction Work provided by the Design-Builder, that are legally enacted when the Design-Build Amendment is executed, whether or not yet effective or merely scheduled to go into effect.

§ 5.7 Permits, Fees, Notices and Compliance with Laws

§ 5.7.1 Unless otherwise provided in the Design-Build Documents, the Design-Builder shall secure and pay for the building permit as well as any other permits, fees, licenses, and inspections by government agencies, necessary for proper execution of the Construction Work and Substantial Completion of the Project.

§ 5.7.2 The Design-Builder shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, applicable to performance of the Construction Work.

§ 5.7.3 Concealed or Unknown Conditions. If the Design-Builder encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Design-Build Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Design-Build Documents, the Design-Builder shall promptly provide notice to the Owner and Owner's Representative before conditions are disturbed and in no event later than 14 days after the conditions are first observed. The Owner and Owner's Representative shall promptly investigate such conditions and, if the Owner in consultation with the Owner's Representative determines that they differ materially and cause an increase or decrease in the Design-Builder's cost of, or time required for, performance of any part of the Work, the Contract Sum or Contract Time, or both, shall be equitably adjusted. If the Owner in consultation with the Owner's Representative determines that the conditions at the site are not materially different from those indicated in the Design-Build Documents and that no change in the terms of the Contract is justified, the Owner shall promptly notify the Design-Builder, stating the reasons. If the Design-Builder disputes the Owner's determination, the Design-Builder may submit a Claim as provided in Article 15.

§ 5.7.4 If, in the course of the Construction Work, the Design-Builder encounters human remains, or recognizes the existence of burial markers, archaeological sites, or wetlands, not indicated in the Design-Build Documents, the Design-Builder shall immediately suspend any operations that would affect them and shall notify the Owner. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Design-Builder shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 5.8 Allowances

§ 5.8.1 The Design-Builder shall include in the Contract Sum all allowances stated in the Design-Build Documents. Items covered by allowances shall be supplied for such amounts, and by such persons or entities as the Owner may direct, but the Design-Builder shall not be required to employ persons or entities to whom the Design-Builder has

reasonable objection.

§ 5.8.2 Unless otherwise provided in the Design-Build Documents,

- .1 allowances shall cover the cost to the Design-Builder of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 the Design-Builder's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance items, shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 5.8.2.1 and (2) changes in Design-Builder's costs under Section 5.8.2.2.

§ 5.8.3 The Owner shall make selections of materials and equipment with reasonable promptness for allowances requiring Owner selection.

§ 5.9 Subcontracts and Other Agreements

§ 5.9.1 Those portions of the Construction Work that the Design-Builder does not customarily perform with the Design-Builder's own personnel shall be performed under subcontracts or other appropriate agreements with the Design-Builder. The Owner may designate specific persons from whom, or entities from which, the Design-Builder shall obtain bids. The Design-Builder shall obtain bids from subcontractors, and from suppliers of materials or equipment fabricated especially for the Construction Work, who are qualified to perform that portion of the Construction Work in accordance with the requirements of the Design-Build Documents. The Design-Builder shall deliver such bids to the Owner with an indication as to which bids the Design-Builder intends to accept. The Owner then has the right to review the Design-Builder's list of proposed subcontractors and suppliers and, subject to Section 5.9.1.1, to object to any subcontractor or supplier. Any approval or objection by the Owner shall not relieve the Design-Builder of its responsibility to perform the Construction Work in accordance with the Design-Build Documents. The Design-Builder shall not be required to contract with anyone to whom the Design-Builder has reasonable objection.

§ 5.9.1.1 When a specific subcontractor or supplier (1) is recommended to the Owner by the Design-Builder; (2) is qualified to perform that portion of the Construction Work; and (3) has submitted a bid that conforms to the requirements of the Design-Build Documents without reservations or exceptions, but the Owner requires that another bid be accepted, then the Design-Builder may require that a Change Order be issued to adjust the Contract Sum by the difference between the bid of the person or entity recommended to the Owner by the Design-Builder and the amount of the subcontract or other agreement actually signed with the person or entity designated by the Owner.

§ 5.9.2 Subcontracts or other agreements shall conform to the applicable payment provisions of this Agreement and shall not be awarded on the basis of cost plus a fee without the Owner's prior written approval. If a subcontract is awarded on the basis of cost plus a fee, the Design-Builder shall provide in the Subcontract for the Owner to receive the same audit rights with regard to the Subcontractor as the Owner receives with regard to the Design-Builder in Article 9.

§ 5.10 Use of Site

The Design-Builder shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Design-Build Documents, and shall not unreasonably encumber the site with materials or equipment.

§ 5.11 Cutting and Patching

The Design-Builder shall not cut, patch, or otherwise alter fully or partially completed construction by the Owner or a Separate Contractor except with written consent of the Owner and Separate Contractor. Consent shall not be unreasonably withheld. The Design-Builder shall not unreasonably withhold, from the Owner or Separate Contractor, its consent to cutting or otherwise altering the Construction Work.

§ 5.12 Cleaning Up

§ 5.12.1 The Design-Builder shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Construction Work, the Design-Builder shall remove waste materials, rubbish, the Design-Builder's tools, construction equipment, machinery and surplus materials from and about the Project.

§ 5.12.2 If the Design-Builder fails to clean up as provided in the Design-Build Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Design-Builder.

§ 5.13 Access to Construction Work

The Design-Builder shall provide the Owner, Owner's Representative and its Separate Contractors and consultants with access to the Construction Work in preparation and progress wherever located. The Design-Builder shall notify the Owner's Representative and Owner regarding Project safety criteria and programs, which the Owner, , Owner's Representative and its Separate Contractors and consultants, shall comply with while at the site.

§ 5.14 Construction Work by Owner or by Separate Contractors

§ 5.14.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 5.14.1.1 The term "Separate Contractor(s)" shall mean contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under provisions substantially similar to those of this Agreement. The Owner will identify in the Design-Build Amendment the extent of construction or operations related to the Project that will be performed by Separate Contractors, and will notify the Design-Builder promptly after execution of any agreement with a Separate Contractor.

§ 5.14.1.2 The Owner shall coordinate the activities of the Owner's own forces, and of each Separate Contractor, with the Construction Work of the Design-Builder, who shall cooperate with them. The Design-Builder shall participate in a joint review of the construction schedules of the Owner and any Separate Contractors and after mutual agreement the Design-Builder shall revise its construction schedule. The construction schedules shall then constitute the schedules to be used by the Design-Builder, Separate Contractors, and the Owner until subsequently revised.

§ 5.14.1.3 Unless otherwise provided in the Design-Build Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Design-Builder has under the Contract.

§ 5.15 Owner's Right to Clean Up

If a dispute arises among the Design-Builder, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and will allocate the cost among those responsible.

§ 5.16 Mutual Responsibility

§ 5.16.1 The Design-Builder shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Design-Builder's construction and operations with theirs as required by the Design-Build Documents.

§ 5.16.2 If part of the Design-Builder's Construction Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Design-Builder shall, prior to proceeding with that portion of the Construction Work, promptly notify the Owner and Owner's Representative of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Design-Builder's Construction Work. Failure of the Design-Builder to notify the Owner and Owner's Representative of apparent discrepancies or defects prior to proceeding with the Construction Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction or operations is fit and proper to receive the Design-Builder's Construction Work. The Design-Builder shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 5.16.3 The Design-Builder shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Design-Builder's delays, improperly timed activities, or defective Construction Work. The Owner shall be responsible to the Design-Builder for costs the Design-Builder incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Construction Work or defective Construction Work.

§ 5.16.4 The Design-Builder shall promptly remedy damage that the Design-Builder causes to completed or partially completed Construction Work or to property of the Owner or Separate Contractors as provided in Section 10.2.5.

§ 5.16.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching the

Construction Work as the Design-Builder has with respect to the Construction Work of the Owner or Separate Contractors in Section 5.11.

§ 5.16.5.1 The Owner shall be responsible for failures by its Separate Contractors to comply with the obligations in this Agreement.

ARTICLE 6 CHANGES IN THE WORK

§ 6.1 General

§ 6.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order or Change Directive, subject to the limitations stated in this Article 6 and elsewhere in the Design-Build Documents.

§ 6.1.2 A Change Order shall be based upon agreement between the Owner and Design-Builder. The Owner may issue a Change Directive without agreement by the Design-Builder.

§ 6.1.3 Changes in the Work shall be performed under applicable provisions of the Design-Build Documents. The Design-Builder shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order or Change Directive.

§ 6.2 Change Orders

A Change Order is a written instrument signed by the Owner and Design-Builder stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 6.3 Change Directives

§ 6.3.1 A Change Directive is a written order signed by the Owner directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation, Contract Time, or both. The Owner may by Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions. The Contract Sum or, if prior to execution of the Design-Build Amendment, the Design-Builder's compensation, or Contract Time, or both, shall be adjusted accordingly.

§ 6.3.2 A Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 6.3.3 If the Change Directive provides for an adjustment to the Contract Sum or, if prior to execution of the Design-Build Amendment, an adjustment in the Design-Builder's compensation, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Design-Build Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee. The Design-Builder shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data; or
- .4 As provided in Section 6.3.4.

§ 6.3.4 If the Design-Builder does not respond promptly or disagrees with the method for adjustment in the Contract Sum or, if prior to execution of the Design-Build Amendment, the method for adjustment in the Design-Builder's compensation, the Owner in consultation with the Owner's Representative shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase, an amount for overhead and profit as set forth in this Agreement, or if no such amount is set forth in this Agreement, a reasonable amount. In such case, the Design-Builder shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Design-Build Documents, costs for the purposes of this Section 6.3.4 shall be limited to the following:

- .1 Additional costs of professional services;

- .2 Costs of labor, applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Owner;
- .3 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .4 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Design-Builder or others;
- .5 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .6 Costs of supervision and field office personnel directly attributable to the change.

§ 6.3.5 Upon receipt of a Change Directive, the Design-Builder shall promptly proceed with the change in the Work involved and advise the Owner and Owner's Representative of the Design-Builder's agreement or disagreement with the method, if any, provided in the Change Directive for determining the proposed adjustment in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation, or Contract Time.

§ 6.3.6 A Change Directive signed by the Design-Builder prior to execution of the Design-Build Amendment indicates the Design-Builder's agreement therewith, including adjustment in compensation and schedule, or the method for determining them. A Change Directive signed by the Design-Builder after the execution of the Design-Build Amendment indicates the Design-Builder's agreement therewith, including adjustment in Contract Sum and Contract Time, or the method for determining them. Any such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 6.3.7 If the Design-Builder disagrees with the adjustment in Contract Time, the Design-Builder may make a Claim in accordance with the applicable provisions of Article 15.

§ 6.3.8 The amount of credit to be allowed by the Design-Builder to the Owner for a deletion or change that results in a net decrease in the Contract Sum or, if prior to execution of the Design-Build Amendment, in the Design-Builder's compensation, shall be actual net cost. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 6.3.9 Pending final determination of the total cost of a Change Directive to the Owner, the Design-Builder may request payment for Work completed under the Change Directive in Applications for Payment. The Owner in consultation with the Owner's Representative will make an interim determination for purposes of certification for payment for those costs deemed to be reasonably justified. The Owner's interim determination of cost shall adjust the Contract Sum or, if prior to execution of the Design-Build Amendment, the Design-Builder's compensation, on the same basis as a Change Order, subject to the right of Design-Builder to disagree and assert a Claim in accordance with Article 15.

§ 6.3.10 When the Owner and Design-Builder agree with a determination concerning the adjustments in the Contract Sum or, if prior to execution of the Design-Build Amendment, the adjustment in the Design-Builder's compensation and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Owner and Design-Builder shall execute a Change Order. Change Orders may be issued for all or any part of a Change Directive.

ARTICLE 7 OWNER'S RESPONSIBILITIES

§ 7.1 General

§ 7.1.1 The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization.

§ 7.1.2 The Owner shall render decisions in a timely manner and in accordance with the Design-Builder's schedule. The Owner shall furnish to the Design-Builder, within 15 days after receipt of a written request, information necessary and relevant for the Design-Builder to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 7.1.3 The Owner with the assistance of the Owner's Representative shall furnish and coordinate the services of the

Owner's consultants and Separate Contractors with those services provided by the Design-Builder. Upon the Design-Builder's request, the Owner or Owner's Representative shall furnish copies of the scope of services in the contracts between the Owner and the Owner's consultants or Separate Contractors. The Owner shall require that its consultants and contractors maintain insurance, including professional liability insurance, as appropriate to the services or work provided.

§ 7.1.4 The Owner shall furnish the services of consultants required by a material change in the Owner's Criteria or authorize the Design-Builder to furnish them pursuant to a Change Order or Change Directive.

§ 7.1.5 If the Owner identifies a Sustainable Objective, the Owner shall fulfill its responsibilities as required in AIA Document A141-2024 Exhibit C, attached to this Agreement.

§ 7.1.6 Except as otherwise provided in the Design-Build Documents or when direct communications have been specially authorized, the Owner shall communicate through the Design-Builder with persons or entities employed or retained by the Design-Builder, including the Architect and Subcontractors.

§ 7.1.7 The Owner shall purchase and maintain insurance as set forth in Article 11 and AIA Document A141-2024 Exhibit A.

§ 7.1.8 Visits to the site by the Owner's Representative and Owner shall not be construed to create an obligation on the part of the Owner's Representative and Owner to make on-site inspections to check the quality or quantity of the Work. The Owner's Representative and Owner shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work.

§ 7.1.9 The Owner and Owner's Representative shall not be responsible for the Design-Builder's failure to perform the Work in accordance with the requirements of the Design-Build Documents. The Owner and Owner's Representative shall not have control over or charge of, and will not be responsible for, acts or omissions of the Design-Builder, Architect, Consultants, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 7.1.10 The Owner and Owner's Representative may reject Work that does not conform to the Design-Build Documents. The Owner's Representative or Owner may require inspection or testing of the Construction Work in accordance with Section 16.5.2, whether or not the Construction Work is fabricated, installed, or completed. However, neither this authority of the Owner nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner to the Design-Builder.

§ 7.1.11 The Owner shall determine the date or dates of Substantial Completion in accordance with Section 9.8 and the date of final completion in accordance with Section 9.10.

§ 7.1.12 The Owner acknowledges that accelerated or fast-track design and construction, or phased construction, provides a benefit, but also carries with it associated risks. Such risks include the Owner incurring costs for the Design-Builder to coordinate and redesign portions of the Project affected by procuring or installing elements of the Project prior to the completion of all relevant Design-Build Documents, and costs for the Design-Builder to remove and replace previously installed Construction Work. If the Owner in consultation with the Owner's Representative approves accelerated or fast-track design and construction, or phased construction, the Owner agrees to include in the budget for the Work sufficient contingencies to cover such costs.

§ 7.2 Information and Services Required of the Owner

§ 7.2.1 The Owner shall furnish information or services required of the Owner by the Design-Build Documents with reasonable promptness.

§ 7.2.2 The Owner shall provide, to the extent under the Owner's control and if not required by the Design-Build Documents to be provided by the Design-Builder, the results and reports of prior tests, inspections, or investigations conducted for the Project involving structural or mechanical systems; chemical, air and water pollution; hazardous materials; or environmental and subsurface conditions and information regarding the presence of pollutants at the Project site.

§ 7.2.3 The Owner shall promptly obtain easements, zoning variances, and legal authorizations or entitlements regarding site utilization where essential to the execution of the Project.

§ 7.2.4 The Owner shall cooperate with the Design-Builder in securing building and other permits, licenses, and inspections.

§ 7.2.5 The services, information, surveys, and reports required to be provided by the Owner under this Agreement, shall be furnished at the Owner's expense. Except as otherwise specifically provided in this Agreement or elsewhere in the Design-Build Documents or to the extent the Owner advises the Design-Builder to the contrary in writing, the Design-Builder shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of, services, information, surveys, and reports furnished by the Owner.

§ 7.2.6 If the Owner or Owner's Representative observes or otherwise becomes aware of a fault or defect in the Work or non-conformity with the Design-Build Documents, the Owner or Owner's Representative shall give prompt notice thereof to the Design-Builder.

§ 7.2.7 Evidence of the Owner's Financial Arrangements

§ 7.2.7.1 Prior to execution of the Design-Build Amendment, the Design-Builder may request that the Owner furnish reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract.

§ 7.2.7.2 Following the execution of the Design-Build Amendment and upon written request by the Design-Builder, the Owner shall furnish to the Design-Builder reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Design-Builder as the Design-Build Documents require; (2) the Design-Builder identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Design-Builder's request, the Design-Builder may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Design-Builder may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 7.2.7, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Design-Builder's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Design-Build Documents.

§ 7.2.7.3 After the Owner furnishes evidence of financial arrangements under this Section 7.2.7, the Owner shall not materially vary such financial arrangements without prior notice to the Design-Builder.

§ 7.2.7.4 Where the Owner has designated information furnished under this Section 7.2.7 as "confidential," the Design-Builder shall keep the information confidential as set forth in Article 16.

§ 7.2.10 Unless required by the Design-Build Documents to be provided by the Design-Builder, the Owner shall, upon request from the Design-Builder, furnish the services of other consultants when such services are reasonably necessary to properly carry out the Design Services furnished by the Design-Builder. In such event, the Design-Builder shall identify the services required.

§ 7.2.11 The Owner shall furnish all legal, insurance, and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests.

§ 7.3 Owner's Right to Stop Construction Work

If the Design-Builder fails to correct Construction Work which is not in accordance with the requirements of the Design-Build Documents as required by Section 12.2 or persistently fails to carry out Construction Work in accordance with the Design-Build Documents, the Owner's Representative or Owner may issue a written order to the Design-Builder to stop the Construction Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Construction Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Design-Builder or any other person or entity, except to the extent required by

Section 5.14.1.2.

§ 7.4 Owner's Right to Carry Out the Construction Work

If the Design-Builder defaults or neglects to carry out the Construction Work in accordance with the Design-Build Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. The Owner may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies. If current and future payments are not sufficient to cover such amounts, the Design-Builder shall pay the difference to the Owner. If the Design-Builder disagrees with the actions of the Owner, or the amounts claimed as costs to the Owner, the Design-Builder may file a claim pursuant to Article 15.

ARTICLE 8 TIME

§ 8.1 Progress and Completion

§ 8.1.1 Time limits stated in the Design-Build Documents are of the essence of the Contract. By executing the Design-Build Amendment, the Design-Builder confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.1.2 The Design-Builder shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.2 Delays and Extensions of Time

§ 8.2.1 If the Design-Builder is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or consultant, or of a Separate Contractor; (2) changes ordered in the Work; (3) labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, unusual delays by public authorities related to permits, licenses, and inspections, or other causes beyond the Design-Builder's control; (4) delay authorized by the Owner pending mediation and binding dispute resolution; or (5) other causes that the Owner determines justify delay, then the Contract Time shall be extended for such reasonable time as the Owner may determine.

§ 8.2.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.2.3 This Section 8.2 does not preclude recovery of damages for delay by either party under other provisions of the Design-Build Documents.

ARTICLE 9 PAYMENT APPLICATIONS AND PROJECT COMPLETION

§ 9.1 Contract Sum

The Contract Sum is stated in the Design-Build Amendment.

§ 9.1.1 If unit prices are stated in the Design-Build Amendment or subsequently agreed upon, and if quantities set forth in the Design-Build Amendment are materially changed in a proposed Change Order or Change Directive, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values or Control Estimate

Where the Contract Sum is based on a stipulated sum or Guaranteed Maximum Price, the Design-Builder shall submit a schedule of values reasonably acceptable to the Owner prior to the first Application for Payment after execution of the Design-Build Amendment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Owner. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Design-Builder's Applications for Payment. Any changes to the schedule of values shall be submitted to the Owner and supported by such data to substantiate its accuracy as the Owner may require, and unless objected to by the Owner, shall be used as a basis for reviewing the Design-Builder's subsequent Applications for Payment.

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

§ 9.2.2 The Control Estimate shall include:

- .1 The documents enumerated in Article 17, including all Modifications thereto;
- .2 A list of the assumptions made by the Design-Builder in the preparation of the Control Estimate to supplement the information provided by the Owner and contained in the Design-Build Documents;
- .3 A statement of the estimated Cost of the Work organized by trade categories or systems and the Design-Builder's Fee;
- .4 A project schedule upon which the Control Estimate is based, indicating proposed architects, subcontractors, and consultants, activity sequences and durations, milestone dates for receipt and approval of pertinent information, schedule of shop drawings and samples, procurement and delivery of materials or equipment, the Owner's occupancy requirements, and the date of Substantial Completion; and
- .5 A list of any contingency amounts included in the Control Estimate for further development of design and construction.

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

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

§ 9.2.5 The Owner shall authorize the Design-Builder to prepare revisions to the Design-Build Documents that incorporate the agreed-upon assumptions contained in the Control Estimate. Based upon the Owner's authorization, the Design-Builder shall revise the Design-Build Documents to incorporate the agreed-upon assumptions contained in the Control Estimate.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Design-Builder shall submit to the Owner's Representative and Owner an itemized Application for Payment for completed portions of the Work. The Application for Payment shall be notarized, if required, and supported by all data substantiating the Design-Builder's right to payment that the Owner's Representative or Owner or Owner's Representative requires, including, all in form and substance satisfactory to the Owner: (i) a current Contractor's lien waiver with a duly executed and acknowledged sworn statement showing the amount requested for any Subcontractor and material supplier in the requested progress payment, and the amount to be paid to such subcontractor or material supplier from such progress payment, together with similar sworn statements from all such Subcontractors and material suppliers; (ii) duly executed conditional waivers of mechanics' and material suppliers' liens from all Subcontractors and, when appropriate, from material suppliers and lower tier Subcontractors, and establishing payment or satisfaction of payment of all amounts requested by the Contractor on behalf of such entities or persons in any previous Application for Payment; and (iii) all information and materials required to comply with the requirements of the Contract Documents or reasonably requested., The Application of Payment shall reflect retainage if provided for in the Design-Build Documents.

§ 9.3.1.1 As provided in Section 6.3.9, Applications for Payment may include requests for payment on account of changes in the Work that have been properly authorized by Change Directives, or by interim determinations of the Owner, but not yet included in Change Orders. As provided in Section 2.1, compensation for Work prior to execution of the Design-Build Amendment may include payment on account of changes in the Work that have been properly authorized by Change Directives, or by interim determinations of the Owner, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Design-Builder does not intend to pay the Architect, a Consultant, a Subcontractor, or a supplier, unless such Work has been performed by others whom the Design-Builder intends to pay.

§ 9.3.2 Unless otherwise provided in the Design-Build Documents, payments shall be made for services provided as well as materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Design-Builder with procedures satisfactory to the Owner to establish the Owner's

title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Design-Builder warrants that title to all Work, other than Instruments of Service, covered by an Application for Payment will pass to the Owner no later than the time of payment. The Design-Builder further warrants that, upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Design-Builder's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Design-Builder, Architect, Consultants, Subcontractors, suppliers, or any other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

The Owner shall, in consultation with the Owner's Representative, within seven days after receipt of the Design-Builder's Application for Payment, either (1) issue to the Design-Builder a Certificate for Payment in the full amount of the Application for Payment; (2) issue to the Design-Builder a Certificate for Payment for such amount the Owner determines is properly due, and notify the Design-Builder of the Owner's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Design-Builder of the Owner's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Owner may withhold a Certificate for Payment in whole or in part to the extent reasonably necessary to protect the Owner due to the Owner's determination that the Work has not progressed to the point indicated in the Design-Builder's Application for Payment, or the quality of the Work is not in accordance with the Design-Build Documents. If the Owner is unable to certify payment in the amount of the Application for Payment, the Owner will notify the Design-Builder as provided in Section 9.4. If the Design-Builder and Owner cannot agree on a revised amount, the Owner will promptly issue a Certificate for Payment for the amount that the Owner deems to be due and owing. The Owner may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued to such extent as may be necessary to protect the Owner from loss for which the Design-Builder is responsible because of

- .1 Failure to perform Work in accordance with the Design-Build Documents;
- .2 Third-party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Design-Builder;
- .3 Failure of the Design-Builder to make payments properly to the Architect, Consultants, Subcontractors, suppliers, or others, for services, labor, materials, or equipment;
- .4 Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 Damage to the Owner or a Separate Contractor; or
- .6 Reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay.
- .7 failure to update schedules in accordance with the Contract Documents.

§ 9.5.2 If the Design-Builder disputes the Owner's Representative or Owner's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, the Design-Builder may submit a Claim in accordance with Article 15.

§ 9.5.3 When the above reasons for withholding certification are removed, the Owner shall certify amounts previously withheld.

§ 9.5.4 If the Owner withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Design-Builder and to any other persons or entities providing Work for the Design-Builder to whom the Design-Builder failed to make payment for Work properly performed or material or equipment suitably delivered.

§ 9.6 Progress Payments

§ 9.6.1 After the Owner and Owner's Representative, has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Design-Build Documents.

§ 9.6.2 In taking action on the Design-Builder's Applications for Payment, the Owner's Representative and Owner shall

be entitled to rely on the accuracy and completeness of the information furnished by the Design-Builder, and such action shall not be deemed to be a representation that (1) the Owner's Representative and Owner has made a detailed examination, audit, or arithmetic verification, of the documentation submitted in accordance with Section 9.3.1 or other supporting data; (2) that the Owner's Representative and Owner has made exhaustive or continuous on-site inspections; or (3) that the Owner's Representative and Owner has made examinations to ascertain how or for what purposes the Design-Builder has used amounts previously paid on account of the Contract. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ 9.6.3 The Design-Builder shall pay each person or entity providing Work for the Design-Builder, no later than seven days after receipt of payment from the Owner. Payment shall be the amount to which the person or entity providing Work for the Design-Builder is entitled, reflecting percentages actually retained from payments to the Design-Builder on account of the portion of the Work performed by the person or entity. The Design-Builder shall, by appropriate agreement with each person or entity providing Work for the Design-Builder, require each person or entity providing Work for the Design-Builder to make payments to subconsultants and subcontractors in a similar manner.

§ 9.6.4 The Owner will, on request and if practicable, furnish to the person or entity providing Work for the Design-Builder, information regarding percentages of completion or amounts applied for by the Design-Builder and action taken thereon by the Owner on account of portions of the Work done by such person or entity providing Work for the Design-Builder.

§ 9.6.5 The Owner has the right to request written evidence from the Design-Builder that the Design-Builder has properly paid any other persons or entities providing Work for the Design-Builder, amounts paid by the Owner to the Design-Builder for the Work. If the Design-Builder fails to furnish such evidence within seven days, the Owner shall have the right to contact the other person or entity providing Work for the Design-Builder to ascertain whether they have been properly paid. The Owner shall have no obligation to pay, or to see to the payment of money to any other person or entity providing services or Work for the Design-Builder, except as may otherwise be required by law.

§ 9.6.6 The Design-Builder's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.3, 9.6.4 and 9.6.5.

§ 9.6.6.1 Except with the Owner's prior written approval, the Design-Builder shall not make advance payments to suppliers for materials or equipment.

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

§ 9.6.8 Unless the Design-Builder provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Design-Builder for Work properly performed by the Architect, Consultants, Subcontractors, and other persons or entities providing Work for the Design-Builder, shall be held by the Design-Builder for the Architect and those Consultants, Subcontractors, or other persons or entities. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Design-Builder, create any fiduciary liability or tort liability on the part of the Design-Builder for breach of trust, or entitle any person or entity to an award of punitive damages against the Design-Builder for breach of the requirements of this provision.

§ 9.6.10 The Owner and Design-Builder shall agree upon (1) a mutually acceptable procedure for review and approval of payments to the Architect, Consultants, and Subcontractors, and (2) the percentage of retainage held on agreements with the Architect, Consultants, and Subcontractors, and the Design-Builder shall execute subcontracts in accordance with those agreements.

§ 9.7 Failure of Payment

If, through no fault of the Design-Builder, the Owner fails to issue a Certificate for Payment or make payment of the certified amount within the time required by the Design-Build Documents, then the Design-Builder may, upon seven additional days' notice to the Owner, stop the Work until payment of the amount owing has been received. If the Contractor provides evidence that the Work stoppage resulted in increased costs or an overall schedule delay, then the Contractor may submit a Claim as provided for in Article 15.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Construction Work when both (i) the Construction Work or designated portion thereof is sufficiently complete in accordance with the Design-Build Documents so that the Owner can occupy or utilize the Construction Work for its intended use, (ii) portions of the Work ready for follow-on construction by others, and (iii) a certificate of occupancy or a certificate of conditional occupancy has been issued to the Owner by the appropriate public authority.

§ 9.8.2 When the Design-Builder considers that the Construction Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Design-Builder shall prepare and submit to the Owner's Representative and Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Design-Builder to complete all Work in accordance with the Design-Build Documents.

§ 9.8.3 Upon receipt of the Design-Builder's list, the Owner's Representative on behalf of the Owner shall make an inspection to determine whether the Construction Work or designated portion thereof is substantially complete. If the Owner's Representative inspection discloses any item, whether or not included on the Design-Builder's list, which is not sufficiently complete in accordance with the Design-Build Documents so that the Owner can occupy or utilize the Construction Work or designated portion thereof for its intended use, the Design-Builder shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Owner. In such case, the Design-Builder shall then submit a request for another inspection by the Owner's Representative to determine Substantial Completion.

§ 9.8.4 Prior to issuance of the Certificate of Substantial Completion under Section 9.8.5, the Owner and Design-Builder shall discuss and then determine the parties' obligations to obtain and maintain property insurance following issuance of the Certificate of Substantial Completion.

§ 9.8.5 When the Construction Work or designated portion thereof is substantially complete, the Design-Builder will prepare for the Owner's signature a Certificate of Substantial Completion that shall, upon the Owner's signature, establish the date of Substantial Completion; establish responsibilities of the Owner and Design-Builder for security, maintenance, heat, utilities, damage to the Construction Work, and insurance; and fix the time within which the Design-Builder shall finish all items on the list accompanying the Certificate. Warranties required by the Design-Build Documents shall commence on the date of Substantial Completion of the Construction Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.6 The Certificate of Substantial Completion shall be submitted by the Design-Builder to the Owner's Representative and Owner for written acceptance of responsibilities assigned to it in the Certificate. Upon the Owner's Representative and Owner's acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Payment shall be adjusted for Construction Work that is incomplete or not in accordance with the requirements of the Design-Build Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Construction Work at any stage when such portion is designated by separate agreement with the Design-Builder, provided such occupancy or use is consented to, by endorsement or otherwise, by the insurer providing property insurance and authorized by authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Design-Builder have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Construction Work, and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Design-Build Documents. When the Design-Builder considers a portion substantially complete, the Design-Builder shall prepare and submit a list to the Owner's Representative and Owner as provided under Section 9.8.2. Consent of the Design-Builder to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Construction Work shall be determined by written agreement between the Owner and Design-Builder.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner's Representative on behalf of the Owner and Design-Builder shall jointly inspect the area to be occupied, or portion of the Construction Work to be used, in order to

determine and record the condition of the Construction Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Construction Work shall not constitute acceptance of Construction Work not complying with the requirements of the Design-Build Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Design-Builder's notice that the Construction Work is ready for final inspection and acceptance, and upon receipt of a final Application for Payment, the Owner's Representative and Owner will promptly make such inspection. When the Owner's Representative and Owner finds the Construction Work acceptable under the Design-Build Documents and the Contract fully performed, the Owner will, subject to Section 9.10.2 and 9.10.3, promptly issue a final Certificate for Payment.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Design-Builder submits to the Owner (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Construction Work, for which the Owner or the Owner's property might be responsible or encumbered, (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Design-Build Documents to remain in force after final payment is currently in effect, (3) a written statement that the Design-Builder knows of no reason that the insurance will not be renewable to cover the period required by the Design-Build Documents, (4) consent of surety, if any, to final payment, (5) an as-constructed record copy of the Construction Documents marked to indicate field changes and selections made during construction, (6) documentation of any special warranties, such as manufacturer's warranties, product data, and maintenance and operations manuals, and (7) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, and releases and waivers of liens, claims, security interests, or encumbrances, arising out of the Contract, to the extent and in such form as may be designated by the Owner. If an Architect, Consultant, Subcontractor, or any other person or entity providing services, labor, materials, or equipment relating to the Construction Work, refuses to furnish a release or waiver required by the Owner, the Design-Builder may furnish a bond satisfactory to the Owner to indemnify the Owner against such liens, claims, security interests, or encumbrances. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Design-Builder shall refund to the Owner all money that the Owner may be compelled to pay in discharging such liens, claims, security interests, or encumbrances, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Construction Work, final completion thereof is materially delayed through no fault of the Design-Builder or by issuance of Change Orders affecting final completion, the Owner shall, upon application by the Design-Builder, and without terminating the Contract, make payment of the balance due for that portion of the Construction Work fully completed, corrected, and accepted. If the estimated cost to complete or correct the Construction Work is less than retainage stipulated in the Design-Build Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Construction Work fully completed and accepted shall be submitted by the Design-Builder to the Owner's Representative and Owner prior to issuance of payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

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

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

§ 9.10.5 Acceptance of final payment by the Design-Builder shall constitute a final waiver of claims by the Design-Builder except those previously made in writing and identified by the Design-Builder as unsettled at the time of final Application for Payment. Upon request by Owner at or before final payment, Contractor will provide Owner with an executed unconditional final release and waiver of all Claims and liens.

§ 9.10.6 After Contractor's acceptance of final payment, in the event a lien is filed against the Project in connection with any work by Contractor or its Subcontractors or suppliers, the Contractor shall satisfy such claim within ten (10) days from the filing date. In the event Contractor fails to satisfy such lien claim within such ten (10) day period, the Owner may do so and thereafter charge the Contractor all costs incurred by the Owner in connection with the satisfaction of such

lien, including attorneys' fees. In addition, the Contractor shall indemnify, defend and hold Owner harmless from and against any damage or loss incurred by Owner as a result of such lien or

§ 9.11 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

3.25 % per Year

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Design-Builder shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Construction Work.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Design-Builder shall be responsible for precautions for the safety of, and reasonable protection to prevent damage, injury, or loss to

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

§ 10.2.2 The Design-Builder shall comply with, and give notices required by, applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on the safety of persons or property, or their protection from damage, injury, or loss. The Contractor shall ensure that all its employees, subcontractors and vendors take reasonable precautions to avoid the spread of infectious diseases and comply with all personal protective equipment, vaccination and other requirements issued by the Owner or any public authority having jurisdiction over the Project.

§ 10.2.3 The Design-Builder shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods, are necessary for execution of the Construction Work, the Design-Builder shall exercise utmost care, and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Design-Builder shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Design-Builder Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3, caused in whole or in part by the Design-Builder, the Architect, a Consultant, a Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Design-Builder is responsible under Sections 10.2.1.2 and 10.2.1.3. The Design-Builder may make a Claim for the cost to remedy damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Owner's Representative or anyone directly or indirectly employed by the Owner, or by anyone for whose acts the Owner may be liable, and not attributable to the fault or negligence of the Design-Builder. The foregoing obligations of the Design-Builder are in addition to the Design-Builder's obligations under Section 3.1.14.

§ 10.2.6 The Design-Builder shall designate a responsible member of the Design-Builder's organization, at the site, whose duty shall be the prevention of accidents. This person shall be the Design-Builder's superintendent unless otherwise designated by the Design-Builder in writing to the Owner.

§ 10.2.7 The Design-Builder shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property. If the Owner or Design-Builder suffers injury or damage to person or property because of an act or omission of the other, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials

§ 10.3.1 The Design-Builder is responsible for compliance with any requirements included in the Design-Build Documents regarding hazardous materials or substances. If the Design-Builder encounters a hazardous material or substance not addressed in the Design-Build Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Design-Builder, the Design-Builder shall, upon recognizing the condition, immediately stop Construction Work in the affected area and notify the Owner's Representative and Owner, in writing, of the condition.

§ 10.3.2 Upon receipt of the Design-Builder's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Design-Builder and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Design-Build Documents, the Owner shall furnish in writing to the Design-Builder the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Design-Builder will promptly reply to the Owner in writing stating whether or not the Design-Builder has reasonable objection to the persons or entities proposed by the Owner. If the Design-Builder has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Design-Builder has no reasonable objection. When the material or substance has been rendered harmless, Construction Work in the affected area shall resume upon written agreement of the Owner and Design-Builder. If the Contractor provides evidence that and the Work stoppage resulted in an overall schedule delay, then the Contractor may submit a Claim as provided in Article 15.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Design-Builder, the Architect, Consultants, and Subcontractors, and employees of any of them, from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Construction Work in the affected area, if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to, or destruction of, tangible property (other than the Construction Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Design-Builder brings to the site unless such materials or substances are required by the Owner's Criteria.

§ 10.3.5 The Design-Builder shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Design-Builder brings to the site and negligently handles, or (2) where the Design-Builder fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Design-Builder, the Design-Builder is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Construction Work as required by the Design-Build Documents, the Owner shall reimburse the Design-Builder for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Design-Builder shall act, at the Design-Builder's discretion, to prevent threatened damage, injury, or loss.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Design-Builder's Insurance and Bonds

§ 11.1.1

See Indemnity and Insurance requirements attached to this Agreement as Exhibit C for insurance requirements.

§ 11.1.2 The Design-Builder shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Design-Build Documents. The Design-Builder shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located, and ensure the bonds remain valid until Final Completion

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

§ 11.1.4 Notice of Cancellation or Expiration of Design-Builder's Required Insurance. Within three (3) business days of the date the Design-Builder becomes aware of an impending or actual cancellation or expiration of any insurance required by the Design-Build Documents, the Design-Builder shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Design-Builder, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Design-Builder. The furnishing of notice by the Design-Builder shall not relieve the Design-Builder of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 Not Used.

§ 11.2.2 Failure to Purchase Required Property Insurance. Not Used.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Not Used.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Design-Builder waive all rights against (1) each other and any of their consultants, subcontractors, sub-subcontractors, agents, and employees, each of the other; and (2) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by this Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Design-Builder, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Separate Contractors, consultants, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 Not Used.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Design-Builder, Owner's Representative for loss of use of the Owner's property, due to fire or other hazards however caused.

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by this Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall be listed as the first named insured on the Builder's Risk policy. The Owner shall pay the Design-Builder its just share of insurance proceeds received by the Owner, and by appropriate agreement the Design-Builder shall make payments to its consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Design-Builder of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Design-Builder shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Design-Builder does not object, the Owner shall settle the loss, and the Design-Builder shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Design-Build Contract for convenience, the Owner and Design-Builder shall execute a Change Order for reconstruction of the damaged or destroyed Construction Work in the amount allocated for that purpose. If the Design-Builder timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Design-Builder arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Change Directive for the reconstruction of the damaged or destroyed Construction Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF CONSTRUCTION WORK

§ 12.1 Uncovering of Construction Work

The Owner's Representative in consultation with the Owner may request to examine a portion of the Construction Work that the Design-Builder has covered to determine if the Construction Work has been performed in accordance with the Design-Build Documents. If such Construction Work is in accordance with the Design-Build Documents, the Design-Builder shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Construction Work is not in accordance with the Design-Build Documents, the costs of uncovering the Construction Work, and the cost of correction, shall be at the Design-Builder's expense without change in the Contract Time or Contract Sum.

§ 12.2 Correction of Construction Work

§ 12.2.1 Before Substantial Completion. The Design-Builder shall promptly correct Construction Work rejected by the Owner's Representative or Owner or failing to conform to the requirements of the Design-Build Documents, discovered before Substantial Completion, and whether or not fabricated, installed, or completed. Costs of correcting such rejected Construction Work, including additional testing and inspections and the cost of uncovering and replacement, and compensation for any consultant employed by the Owner's Representative and Owner whose expenses and compensation were made necessary thereby, shall be at the Design-Builder's expense and shall not result in a change in the Contract Time except as otherwise permitted in this Agreement.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Design-Builder's obligations under Section 3.1.12, if, within one year after the date of Substantial Completion of the Construction Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Design-Build Documents, any of the Construction Work is discovered by the Owner or Owner's Representative not to be in accordance with the requirements of the Design-Build Documents, the Design-Builder shall correct it promptly after receipt of notice from the Owner to do so. If the Design-Builder fails to correct nonconforming or defectively designed Construction Work within a reasonable time during that period after receipt of notice from the Owner, the Owner may correct it in accordance with Section 7.4.

§ 12.2.2.2 The one-year period for correction of Construction Work shall be extended with respect to portions of Construction Work noted in the Substantial Completion Certificate by the period of time between Substantial Completion Final Completion.

§ 12.2.2.3 The one-year period for correction of Construction Work shall not be extended by corrective Construction Work performed by the Design-Builder pursuant to this Section 12.2.

§ 12.2.3 The Design-Builder shall remove from the site portions of the Construction Work that are not in accordance with the requirements of the Design-Build Documents and are neither corrected by the Design-Builder nor accepted by the Owner.

§ 12.2.4 The Design-Builder shall be liable for the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Design-Builder's correction or removal of Construction Work that is not in accordance with the requirements of the Design-Build Documents except as otherwise permitted in this Agreement.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Design-Builder has under the Design-Build Documents. Establishment of the one-year period for correction of Construction Work as described in Section 12.2.2 relates only to the specific obligation of the Design-Builder to correct the Construction Work, and has no relationship to the time within which the obligation to comply with the Design-Build Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Design-Builder's liability with respect to the Design-Builder's obligations other than specifically to correct the Construction Work.

§ 12.3 Acceptance of Nonconforming Construction Work

If the Owner prefers to accept Construction Work that is not in accordance with the requirements of the Design-Build Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 COPYRIGHTS AND LICENSES

§ 13.1 Drawings, specifications, and other documents furnished by the Design-Builder, including those in electronic form, are Instruments of Service. The Design-Builder, and the Architect, Consultants, Subcontractors, and any other person or entity providing Work for any of them, shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and shall retain all common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements, or for similar purposes in connection with the Project, is not to be construed as publication in derogation of the reserved rights of the Design-Builder and the Architect, Consultants, and Subcontractors, and any other person or entity providing Work for any of them.

§ 13.2 The Design-Builder and the Owner warrant that in transmitting Instruments of Service, or any other information, the transmitting party is the copyright owner of such information or has permission from the copyright owner to transmit such information for its use on the Project.

§ 13.3 The Design-Builder grants to the Owner a nonexclusive license to use the Design-Builder's Instruments of Service solely and exclusively for purposes of constructing, using, maintaining, altering, and adding to the Project. The license granted in this Section 13.3 shall terminate only if (1) the Design-Builder terminates this Agreement in accordance with Sections 14.1.1, 14.1.3, 14.1.4, or 14.2.1 or (2) the Owner terminates this Agreement for convenience as provided in Section 14.1.5 and does not compensate the Design-Builder as required under Sections 14.1.6 and 14.1.7. The license granted under this section permits the Owner to authorize the Owner's consultants to reproduce applicable portions of the Instruments of Service, subject to any protocols established pursuant to Section 1.1.5, solely and exclusively for use in performing services for the Project.

§ 13.3.1 In the event the Owner uses the Instruments of Service (1) for purposes inconsistent with Section 13.3, (2) after completion of the Project for purposes of altering or adding to the Project without retaining the authors of the Instruments of Service for such purposes, (3) after the Owner terminates this Agreement for convenience, or (4) after the Design-Builder terminates this Agreement in accordance with Sections 14.1.1, 14.1.3, 14.1.4, or 14.2.1, the Owner releases the Design-Builder from all claims and causes of action arising from such uses. The Owner, to the extent permitted by law, further agrees to indemnify and hold harmless the Design-Builder from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's use of the Instruments of Service under this Section 13.3.1. The terms of this Section 13.3.1 shall not apply if the Owner terminates this Agreement for cause under Section 14.1.4 or 14.2.2. The payment of a Termination Fee or Licensing Fee under Section 14.1.7 shall not relieve the Owner of the release or indemnity obligations of this Section 13.3.1.

§ 13.3.2 The Design-Builder shall obtain non-exclusive licenses from the Architect, Consultants, and Subcontractors, that will allow the Design-Builder to satisfy its obligations to the Owner under this Article 13. The Design-Builder's licenses from the Architect and its Consultants and Subcontractors shall also allow the Owner, in the event this Agreement is terminated for any reason other than the default of the Owner or in the event the Design-Builder's Architect, Consultants, or Subcontractors terminate their agreements with the Design-Builder for cause, to obtain a non-exclusive license solely and exclusively for purposes of constructing, using, maintaining, altering and adding to the Project, provided that the Owner (1) agrees to pay to the Architect, Consultant or Subcontractor all amounts due, and (2) provides the Architect, Consultant or Subcontractor with the Owner's written agreement to indemnify and hold

harmless the Architect, Consultant, or Subcontractor from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's alteration or use of the Instruments of Service.

§ 13.3.3 Except as otherwise stated in this Section 13.3, the provisions of this Article 13 shall survive the termination of this Agreement.

ARTICLE 14 TERMINATION OR SUSPENSION

§ 14.1 Termination or Suspension Prior to Execution of the Design-Build Amendment

§ 14.1.1 If the Owner fails to make payments to the Design-Builder for Work prior to execution of the Design-Build Amendment in accordance with this Agreement, such failure shall be considered substantial nonperformance and cause for termination under Section 14.1.4 or, at the Design-Builder's option, cause for suspension of performance of services under this Agreement. If the Design-Builder elects to suspend the Work, the Design-Builder shall give thirty days' notice to the Owner before suspending the Work. In the event of a suspension of the Work, the Design-Builder shall have no liability to the Owner for delay or damage caused by the suspension of the Work. Before resuming the Work, the Design-Builder shall be paid all sums due prior to suspension and any expenses incurred in the interruption and resumption of the Design-Builder's Work. The Design-Builder's compensation for, and time to complete, the remaining Work shall be equitably adjusted.

§ 14.1.2 If the Owner suspends the Project, the Design-Builder shall be compensated for the Work performed prior to notice of such suspension. When the Project is resumed, the Design-Builder shall be compensated for expenses incurred in the interruption and resumption of the Design-Builder's Work. The Design-Builder's compensation for, and time to complete, the remaining Work shall be equitably adjusted.

§ 14.1.3 If the Owner suspends the Project for more than 90 cumulative days for reasons other than the fault of the Design-Builder, the Design-Builder may upon twenty (20) days' notice and opportunity to cure to the Owner and Owner's Representative, terminate this Agreement.

§ 14.1.4 Either party may terminate this Agreement upon not less than seven days' notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

§ 14.1.5 The Owner may terminate this Agreement upon not less than seven days' notice to the Design-Builder for the Owner's convenience and without cause.

§ 14.1.6 In the event of termination not the fault of the Design-Builder, the Design-Builder shall be compensated for Work performed prior to termination, together with Reimbursable Expenses then due and any other expenses directly attributable to termination for which the Design-Builder is not otherwise compensated. In no event shall the Design-Builder's compensation under this Section 14.1.6 be greater than the compensation set forth in Section 2.1.

§ 14.1.7 In addition to any amounts paid under Section 14.1.6, if the Owner terminates this Agreement for its convenience pursuant to Section 14.1.5, or the Design-Builder terminates this Agreement pursuant to Sections 14.1.3 or 14.1.4, the Owner shall pay to the Design-Builder the following fees:

(Set forth below the amount of any termination or licensing fee, or the method for determining any termination or licensing fee.)

.1 Termination Fee:



.2 Licensing Fee if the Owner intends to continue using the Design-Builder's Instruments of Service:



§ 14.2 Termination or Suspension Following Execution of the Design-Build Amendment

§ 14.2.1 Termination by the Design-Builder

§ 14.2.1.1 The Design-Builder may terminate this Agreement if the Work is stopped for a period of 30 consecutive days

through no act or fault of the Design-Builder, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- .3 Because the Owner has not issued a Certificate for Payment and has not notified the Design-Builder of the reason for withholding certification as provided in Section 9.5.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Design-Build Documents; or
- .4 The Owner has failed to furnish to the Design-Builder reasonable evidence as required by Section 7.2.7.

§ 14.2.1.2 The Design-Builder may terminate this Agreement if, through no act or fault of the Design-Builder, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.2.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.2.1.3 If one of the reasons described in Section 14.2.1.1 or 14.2.1.2 exists, the Design-Builder may, upon seven days' notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, or the Design-Builder's Fee on Work not executed if the Contract Sum is based upon the Cost of the Work plus a Fee with or without a Guaranteed Maximum Price, and costs incurred by reason of such termination.

§ 14.2.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Design-Builder, or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Design-Build Documents with respect to matters important to the progress of the Work, the Design-Builder may, upon seven additional days' notice to the Owner, terminate the Contract and recover from the Owner as provided in Section 14.2.1.3.

§ 14.2.2 Termination by the Owner for Cause

§ 14.2.2.1 The Owner may terminate this Agreement if the Design-Builder:

- .1 fails to submit the Proposal by the date required by this Agreement, or if no date is indicated, within a reasonable time consistent with the date of Substantial Completion;
- .2 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .3 repeatedly refuses or fails to supply a qualified architect, consultant, or subcontractor, where required;
- .4 fails to make payment to the Architect, Consultants, Subcontractors, or suppliers in accordance with their respective agreements with the Design-Builder;
- .5 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .6 is otherwise in breach of a material provision of the Design-Build Documents.

§ 14.2.2.2 When any of the reasons described in Section 14.2.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Design-Builder and the Design-Builder's surety, if any, seven days' notice, terminate employment of the Design-Builder and may, subject to any prior rights of the surety:

- .1 Exclude the Design-Builder from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Design-Builder;
- .2 Accept assignment of the Architect, Consultant, and Subcontractor agreements pursuant to Section 3.1.15; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Design-Builder, the Owner shall furnish to the Design-Builder a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.2.3 When the Owner terminates this Agreement for one of the reasons stated in Section 14.2.2.1, the Design-Builder shall not be entitled to receive further payment until the Work is finished.

§ 14.2.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Design-Builder. If such costs and damages exceed the unpaid balance, the Design-Builder shall pay the difference to the Owner. The obligation for such payments shall survive termination of this Agreement.

§ 14.2.3 Suspension by the Owner for Convenience

§ 14.2.3.1 The Owner may, without cause, order the Design-Builder in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the Owner may determine.

§ 14.2.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.2.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Design-Builder is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.2.4 Termination by the Owner for Convenience

§ 14.2.4.1 The Owner may, at any time, terminate this Agreement for the Owner's convenience and without cause.

§ 14.2.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Design-Builder shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and,
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing Project agreements, including agreements with the Architect, Consultants, Subcontractors, and purchase orders, and enter into no further Project agreements and purchase orders.

§ 14.2.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Design-Builder for: Work properly executed; Termination and Licensing Fees set forth in Section 14.1.7; and any other costs incurred by reason of the termination, including costs attributable to termination of Subcontracts.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Design-Builder arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims. The Owner and Design-Builder shall commence all claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in Section 1.3, within the time period specified by applicable law, but, in any case, not more than 10 years after the date of Substantial Completion of the Work. The Owner and Design-Builder waive all claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Prior To Final Payment. Prior to final payment, Claims by either the Owner or Design-Builder must be initiated by notice to the other party within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims Arising After Final Payment. After final payment, Claims by either the Owner or Design-Builder that have not otherwise been waived pursuant to Sections 9.10.4 or 9.10.5, must be initiated by prompt notice to the other party. The notice requirement in Section 15.1.3.1 and the provisions for Initial Resolution of Claims in Section 15.2 shall not be required as a condition precedent to mediation in Section 15.3.

§ 15.1.4 Continuing Contract Performance. Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Design-Builder shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Design-Build Documents.

§ 15.1.5 Claims for Additional Cost. If the Design-Builder wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Design-Builder wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Design-Builder's Claim shall include an estimate of cost and of the probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Design-Builder and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business, and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Design-Builder for principal office expenses including the compensation of personnel stationed there, for losses of financing, business, and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Design-Build Documents.

§ 15.2 Initial Resolution of Claims

§ 15.2.1 Meet and Confer

§ 15.2.1.1 If the parties select Meet and Confer as the initial method of dispute resolution, the Owner and Design-Builder shall endeavor to resolve Claims subject to the meet and confer session. The meet and confer session shall be attended by representatives who have the authority to bind the Owner and Design-Builder. The Owner or Design-Builder may request senior representatives from the Architect, Subcontractors, or other interested parties to attend the meet and confer session. The meet and confer session shall take place within thirty (30) days after a request by either party to this Agreement unless the parties mutually agree otherwise.

§ 15.2.1.2 Discussions held during the meet and confer process shall be treated as settlement discussions and, as such, will be confidential.

§ 15.2.1.3 If the Owner and Design-Builder reach a mutually acceptable resolution, appropriate documentation memorializing the resolution shall be prepared. If the resolution results in a change to the Contract Sum or the Contract Time, the parties shall execute a Change Order.

§ 15.2.1.4 If the Owner and Design-Builder cannot reach a mutually acceptable resolution at the meet and confer session, or if the meet and confer session does not take place within the time specified in Section 15.2.1, either party may proceed to mediation in accordance with Section 15.3.

§ 15.2.2 Project Neutral

§ 15.2.2.1 If the parties select a Project Neutral to serve as an initial decision maker of Claims, the Owner and Design-Builder shall share the expense of the Project Neutral.

§ 15.2.2.2 The Project Neutral will review Claims and, within ten days of the receipt of a Claim, take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim in whole or in part, (4) suggest a compromise, or (5) advise the parties that the Project Neutral is unable to resolve the Claim if the Project Neutral lacks

sufficient information to evaluate the merits of the Claim or if the Project Neutral concludes that, in the Project Neutral's sole discretion, it would be inappropriate for the Project Neutral to resolve the Claim.

§ 15.2.2.3 In evaluating Claims, the Project Neutral may, but shall not be obligated to, consult with or seek information from persons with special knowledge or expertise who may assist the Project Neutral in rendering a decision. The retention of such persons shall be a shared expense of the Owner and Design-Builder.

§ 15.2.2.4 If the Project Neutral requests either party to provide a response to a Claim or to furnish additional supporting data, such party shall respond within ten days after receipt of the request and shall either (1) provide a response or the requested supporting data, (2) advise the Project Neutral when the response or supporting data will be furnished or (3) advise the Project Neutral that no response or supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Project Neutral will take one of the actions described in Section 15.2.2.2(2)-(5).

§ 15.2.2.5 Pursuant to Sections 15.2.2.2 through 15.2.2.4 the Project Neutral will render an initial decision approving or rejecting the Claim in whole or in part or indicating that the Project Neutral is unable to resolve the Claim. The initial decision shall (1) be in writing, (2) state the reasons therefore, and (3) identify any change in the Contract Sum or Contract Time or both. The initial decision shall be binding on the parties, but subject to mediation in accordance with the process set forth in Section 15.3 and, if the parties fail to resolve their dispute through mediation, subject to binding dispute resolution in accordance with Section 15.4.

§ 15.2.2.5.1 If an initial decision has not been rendered within 30 days after the Claim has been referred to the Project Neutral, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Project Neutral and all affected parties agree, the Project Neutral will not decide disputes between the Design-Builder and persons or entities other than the Owner.

§ 15.2.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.3.

§ 15.2.2.7 Either party may, within 30 days from the date of a Project Neutral's initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.3 In the event of a Claim against the Design-Builder, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Design-Builder's default, the Owner may, but is not obligated to, notify the surety, and request the surety's assistance in resolving the controversy.

§ 15.2.4 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, 15.1.7, and 15.2.2.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The Parties shall endeavor to resolve their Claims by mediation which, unless the Parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of this Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the Parties or court order. If an arbitration proceeding is stayed pursuant to this Section 15.3.2, the Parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either Party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the Party receiving the demand fails to file

for binding dispute resolution within 60 days after receipt thereof, then both Parties waive their rights to binding dispute resolution proceedings with respect to the initial decision rendered by the Project Neutral or with respect to Claims that were the subject of the Meet and Confer process.

§ 15.3.4 The Parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in Section 1.3, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of this Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations or statute of repose. For statute of limitations or statute of repose purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction.

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

§ 15.4.4 Consolidation or Joinder

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

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

§ 15.4.4.3 The Owner and Design-Builder grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Design-Builder under this Agreement.

§ 15.5 The provisions of this Article 15 shall survive the termination of this Agreement.

ARTICLE 16 MISCELLANEOUS PROVISIONS

§ 16.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located excluding that jurisdiction's choice of law rules

§ 16.2 Successors and Assigns

§ 16.2.1 The Owner and Design-Builder, respectively, bind themselves, their partners, successors, assigns, and legal

representatives to the covenants, agreements, and obligations contained in the Design-Build Documents. Except as provided in Section 16.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 16.2.2 The Owner may, without consent of the Design-Builder, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Design-Build Documents. The Design-Builder shall execute all consents reasonably required to facilitate the assignment.

§ 16.2.3 Certifications. If the Owner requests the Design-Builder to execute certificates, the proposed language of such certificates shall be submitted to the Design-Builder for review at least 21 days prior to the requested dates of execution. If the Owner requests the Design-Builder to execute consents reasonably required to facilitate assignment to a lender, the Design-Builder shall execute all such consents that are consistent with this Agreement, provided the proposed consent is submitted to the Design-Builder for review at least 21 days prior to execution. The Design-Builder shall not be required to execute any certificates or consents that would require knowledge, services, or responsibilities beyond the scope of this Agreement.

§ 16.3 The Design-Builder, Architect, Consultants, Subcontractors, or their agents, or any other persons or entities performing portions of the Work, shall have the right to include video, photographic, or artistic representations of the design of the Project among their respective promotional and professional materials. The Design-Builder, Architect, Consultants, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work, shall be given reasonable access to the completed Project to make such representations. However, such material shall not include the Owner's confidential or proprietary information if the Owner has previously advised the Design-Builder in writing of the specific information considered by the Owner to be confidential or proprietary. The Owner shall provide professional credit for the Design-Builder, Architect, Consultants, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work, in the Owner's promotional materials for the Project. This Section 16.3 shall survive the termination of this Agreement unless the Owner terminates this Agreement for cause pursuant to Section 14.2.2.

§ 16.4 Rights and Remedies

§ 16.4.1 Duties and obligations imposed by the Design-Build Documents, and rights and remedies available thereunder, shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 16.4.2 No action or failure to act by the Owner, Owner's Representative or Design-Builder shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 16.5 Tests and Inspections

§ 16.5.1 Tests, inspections, and approvals of portions of the Construction Work shall be made as required by the Design-Build Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. The Owner shall directly arrange and pay for independent tests, inspections, or approvals where building codes or applicable laws or regulations so require. The Design-Builder shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals, unless otherwise provided in the Design-Build Amendment. The Design-Builder shall give the Owner's Representative and Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures.

§ 16.5.2 If the Owner or Owner's Representative determines that portions of the Construction Work require additional testing, inspection, or approval not included under Section 16.5.1, the Owner's Representative will, upon written authorization from the Owner, instruct the Design-Builder to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Design-Builder shall give timely notice to the Owner's Representative of when and where tests and inspections are to be made so that the Owner's Representative may be present for such procedures. Such costs, except as provided in Section 16.5.3, shall be at the Owner's expense, unless the Contract should have reasonably anticipated such tests, inspections or approvals based on its required standard of care in the Agreement.

§ 16.5.3 If procedures for testing, inspection, or approval under Sections 16.5.1 and 16.5.2 reveal failure of the portions of the Construction Work to comply with requirements established by the Design-Build Documents, all costs made necessary by such failure shall be at the Design-Builder's expense, including those of repeated procedures and compensation for the Owner and Owner's Representative services and expenses, shall be at the Design-Builder's expense.

§ 16.5.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Design-Build Documents, be secured by the Design-Builder and promptly delivered to the Owner.

§ 16.5.5 If the Owner's Representative or Owner is to observe tests, inspections, or approvals required by the Design-Build Documents, the Owner's Representative or Owner will do so promptly and, where practicable, at the normal place of testing.

§ 16.5.6 Tests or inspections conducted pursuant to the Design-Build Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 16.6 Confidential Information

§ 16.6.1 If the Design-Builder or Owner receives information specifically designated as "confidential" or "business proprietary," the receiving party shall keep such information strictly confidential and shall not disclose it to any other person except as set forth in Section 16.6.2. The obligations in this Section 16.6 shall survive the termination of this Agreement.

§ 16.6.2 The receiving party may disclose "confidential" or "business proprietary" information after 7 days' notice to the other party, when required by law, arbitrator's order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the receiving party to defend itself in any dispute. The receiving party may also disclose such information to its employees, consultants, contractors, or subcontractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants, contractors, and subcontractors are subject to the restrictions on the disclosure and use of such information as set forth in this Section 16.6. In the event either party knows or reasonably believes that "confidential" or "business proprietary" information received from the other party has been subject to any circumstance where the security, integrity, or confidentiality of any of the "confidential" or "business proprietary" information has been compromised, damaged, lost, corrupted, destroyed, or the "confidential" or "business proprietary" information has been accessed, acquired, modified, used, disclosed, or rendered inaccessible, by any unauthorized person, by any person in an unauthorized manner, or for an unauthorized purpose, the party experiencing the breach will provide written notice to the other party as soon as reasonably possible after it becomes aware of any breach.

§ 16.6.3 "Confidential" or "business proprietary" information shall not include information:

- .1 in the public domain, or which later enters the public domain, through no action on the receiving party's part in violation of this Agreement;
- .2 already in the receiving party's possession and not marked as "confidential" or "business proprietary" when received;
- .3 obtained by the receiving party on a non-confidential basis from a third party not known by the receiving party to be under an obligation of confidentiality; or
- .4 that is independently developed by the receiving party without access to, or use of, any "confidential" or "business proprietary" information.

§ 16.7 Capitalization

Terms capitalized in the Contract include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other AIA Contract Documents.

§ 16.8 Interpretation

§ 16.8.1 In the interest of brevity the Design-Build Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 16.8.2 Unless otherwise stated in the Design-Build Documents, words which have well-known technical or

construction industry meanings are used in the Design-Build Documents in accordance with such recognized meanings.

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

§ 16.10 In accordance with Section 1.1.5, the Design-Builder shall coordinate with the Owner in establishing building information modeling and digital data protocols for the Project governing the development, use, transmission, and exchange of, and reliance on, digital data.

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

§ 13.6 Commissioning

The Contractor and its Subcontractors shall support and coordinate with the Owner's independent Commissioning Agent as required throughout construction of the Work, and during the formal Commissioning of building systems prior to Substantial Completion.

§ 13.7 Operation & Maintenance Manuals and Training

The Contractor and its Subcontractors shall prepare and submit operation and maintenance (O&M) manuals required by the Contract Documents, provided that each O&M manual shall also contain (i) a detailed description of how all individual components are supposed to function together as a system, and (ii) the following information for each system, subsystem, and piece of equipment not part of a system; source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information. The Contractor and Subcontractors shall provide Owner with one hard copy and one electronic copy of each O&M manual.

ARTICLE 17 SCOPE OF THIS AGREEMENT

§ 17.1 This Agreement is comprised of the following documents:

- .1 AIA Document A141®–2024, Standard Form of Agreement Between Owner and Design-Builder for a Traditional Design-Build Project
- .2 AIA Document A141®–2024, Exhibit A, Insurance and Bonds
- .3 AIA Document A141®–2024, Exhibit B, Design-Build Amendment, if executed
- .4 AIA Document A141®–2024, Exhibit C, Sustainable Projects Exhibit, if completed
- .5 Other documents, if any, listed below:

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

OWNER *(Signature)*

(Printed name and title)

DESIGN-BUILDER *(Signature)*

(Printed name and title)

DRAFT

EXHIBIT D TO OWNER and DESIGN-BUILDER FOR A TRADITIONAL DESIGN-BUILD PROJECT
(AIA A-141 (2024), as modified)
INSURANCE AND INDEMNITY REQUIREMENTS

DATE

1. INDEMNIFICATION

- A. To the fullest extent permitted by law, Construction Manager shall release, defend, indemnify and hold Owner, Architect, Program Manager and their subsidiaries, departments, directors, officers, agents, officials, employees and consultants (collectively, "Indemnified Parties") harmless from and against all claims or loss, including without limitation any and all demands, suits, expenses, damages, fines, charges, liens, actions or liability of any nature, kind or character whatsoever, and including without limitation, claims or loss resulting from injury, death, property damage, economic loss, violation of statutes, ordinances, constitutions or other laws, rules or regulations, contractual claims, attorneys' fees, costs or expenses or any other kind of loss (collectively, "claims or loss"), related to, resulting from or arising directly or indirectly out of the activities of Construction Manager, the performance, failure of performance or breach of any term of this Agreement by Construction Manager, or by any person or entity engaged, contracted, or employed by Construction Manager in the performance of this Agreement, regardless of whether such claim or loss is caused in part by Indemnified Parties.
- B. Construction Manager's responsibility for defense and indemnification extends to and includes any claim or loss alleging acts or omissions by Indemnified Parties that are said to have contributed to the claim or loss. However, Construction Manager shall not be required to indemnify an Indemnified Party for any claim or loss that results from the sole negligence or willful misconduct of the Indemnified Party.
- C. In any and all claims against the Indemnified Parties by any employee of Construction Manager, anyone directly employed by Construction Manager or anyone for whose acts the Construction Manager may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Construction Manager under workers' compensation acts, disability benefit acts or other employee benefit acts.
- D. Construction Manager agrees that as part of any subcontract, its subcontractor shall provide assurance of defense and indemnity in Indemnified Parties' favor that are identical in scope as those assumed by Construction Manager under the terms of this Agreement.
- E. The requirement of any insurance required of Construction Manager under this Agreement shall not limit Construction Manager's indemnification responsibilities in anyway.
- F. The Owner shall release any payments withheld due to a lien or claim of lien if the Construction Manager obtains security acceptable to the Owner or a lien bond that is (i) issued by a surety acceptable to the Owner, (ii) in form and substance satisfactory to the Owner, and (iii) in an amount as required by applicable law. By posting a lien bond or other acceptable security, however the Construction Manager shall not be relieved of any responsibilities or obligations under the Agreement, including, without limitation, the duty to defend and indemnify the Indemnitees. The cost of any premiums incurred in connection with such bonds and security shall be the responsibility of the Construction Manager and shall not be part of, or cause any adjustment to, the Contract Sum.

2. INSURANCE

- A. Without limiting the Construction Manager's indemnification responsibilities, it is agreed that Construction Manager shall purchase, at its own expense, and maintain in force at all times during the performance of services under this Agreement the following policies of insurance. It is agreed that all tiers of subcontractors

shall purchase and maintain in force at all times the following insurance policies at their own expense except for Builders Risk, Excess Liability, and Pollution Liability.

- B. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the Construction Manager's policy contains higher limits, Owner shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance and copies of the additional insured and waiver of subrogation endorsements must be furnished to Owner prior to fully executing the Agreement, and as a condition of payment, Construction Manager shall purchase and maintain insurance that will protect it from the claims arising out of its operations under the Agreement, whether the operations are by Construction Manager, or any of its consultants or subcontractors or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. This includes Worker's Compensation Insurance, Employer's Liability Insurance, Comprehensive General Liability Insurance, Automobile Liability Insurance, Contractors Pollution Insurance and Builders Risk Insurance.
- C. Construction Manager's and subcontractors insurance shall name Owner, Architect, and Program Manager as additional insured, except for Worker's Compensation. Additional insured coverage as required in this subparagraph shall include completed operations and shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to Owner. All insurance policies shall comply with and be issued by insurers licensed to transact the business of insurance under Alaska Statutes Title 21.
- D. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this Agreement and shall be grounds for termination of the Construction Manager's services. All insurance companies obligated under the following described policies must have a best rating of "A - VII" or better as identified in the *A.M. Best Insurance Rating Guide*, most recent edition.

E. Minimum Limits of Liability

During the term of the Agreement, Construction Manager shall maintain with a company satisfactory to Owner at least the limits of liability set forth below. The requirements below shall not limit Construction Manager's indemnification responsibilities as provided in the Agreement.

- 1. **Worker's Compensation and Employers' Liability:** The Construction Manager shall provide and maintain, for all employees engaged in work under this Agreement, coverage as required by AS 23.30.045; and, where applicable, any other statutory obligations. This policy must waive subrogation against Owner, Architect, and Program Manager.
 - 1. Workers Compensation - Statutory limits
 - 2. Employers Liability - \$1,000,000 Each Accident, \$1,000,000 Disease - Each Employee; \$1,000,000 Disease - Policy Limits
- 2. **Commercial General Liability Insurance:** Covering all business premises used by and operations conducted by the Construction Manager in the performance of services under this Agreement with minimum coverage limits of \$1,000,000 combined single limit per occurrence. This policy must waive subrogation against Owner, Architect and Program Manager.
 - 1. \$1,000,000 Each Occurrence
 - 2. \$2,000,000 General Aggregate
 - 3. \$2,000,000 Products/Completed Operations Aggregate
 - 4. \$1,000,000 Personal and Advertising Injury
 - 5. \$50,000 Damage to Premises Rented to You
 - 6. \$5,000 Medical Expense (any one person)
- 3. **Commercial Automobile Liability Insurance:** Covering all vehicles, owned, hired or non-owned, used by the Construction Manager in the performance of services under this Agreement with minimum coverage limits of \$1,000,000 combined single limit of bodily and property damage. This policy must waive subrogation against the Owner, Architect, and Program Manager.

4. Excess Commercial General Liability, Employers Liability and Automobile Liability Insurance: Minimum coverage limits of \$1,000,000 per occurrence and in the aggregate. This policy must waive subrogation against the Owner, Architect and Program Manager.
5. Contractors Pollution Liability Insurance: Construction Manager shall maintain in force for the full period of this Agreement insurance covering losses caused by pollution incidents that arise from the operations of the contractor described under the scope of services of this Agreement.

Insurance as required shall apply to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims. The policy of insurance affording these required coverages shall be written in an amount of at least \$1,000,000 per claim, with an annual aggregate of at least \$2,000,000.

The policy of insurance as required in the above paragraph, shall include as an insured the Owner, its subsidiaries, officers, and employees.

If coverage as required is written on a claims-made basis, the Construction Manager warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Agreement; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 3 years beginning from the time that work under the Agreement is completed.

If the Services as defined in this Agreement includes the disposal of any hazardous or nonhazardous materials from the job site, the Construction Manager must furnish to the Owner evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this contract. Coverage certified to the Owner under this paragraph must be maintained in minimum amounts of \$1,000,000 per loss, with an annual aggregate of at least \$2,000,000.

6. Builders Risk Insurance: Construction Manager shall purchase and maintain in force builders risk insurance on the entire work. Such insurance shall be written on a completed value form and in an amount equal to the initial Contract Sum plus subsequent modifications of the Contract Sum. The insurance shall apply on a replacement cost basis, will not contain a coinsurance clause and will allow partial occupancy.

The insurance shall name the Owner as the first named insured and as required shall name as insureds the Construction Manager, and all subcontractors and sub-subcontractors in the work. The insurance policy shall contain a provision that the insurance will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to Owner.

The insurance as required shall cover the entire work at the site, including reasonable compensation for Architects' services and expenses made necessary by an insured loss. Insured property shall include portions of the work located away from the site but intended for use at the site, and shall also cover portions of the work in transit. The policy shall cover the cost of removing debris, including demolition as may be made legally necessary by the operation of any law, ordinance, or regulation. The insurance as required shall, at a minimum, cover the causes of loss insured under the ISO special causes of loss form (CP 10 30) and shall be endorsed as needed to provide full coverage for loss or damage from collapse, including collapse resulting from design error, include testing. Such collapse and earthquake coverage shall provide coverage of \$10,000,000.

7. Equipment and Machinery: Construction Manager shall purchase and maintain course of construction equipment breakdown insurance, covering insured objects during installation, testing, commissioning, and operations until final acceptance by Owner. This insurance shall name as insureds Owner, Construction Manager, and all subcontractors and sub-subcontractors in the work. Equipment breakdown can be included on the builders risk policy in lieu of a separate policy.

Any deductible applicable to the insurance purchased in compliance with the above subparagraphs shall be identified and responsibility for paying the part of any loss not covered because of the operation of such deductibles shall be the

responsibility of the Construction Manager.

The insurance as required shall be maintained in effect, unless otherwise provided for in the Contract Documents, until the earliest of the following dates:

- (a) the date on which all persons and organizations who are insureds under the policy agree that it shall be terminated;
- (b) the date on which final payment, as provided for in Section 11.2 of this Agreement, has been made;
- (c) the date on which the insurable interests in the property of all insureds other than _____ have ceased.

Before the commencement of Work, Construction Manager shall provide to Owner a copy of the insurance policy obtained in compliance with the above subparagraphs.

Owner and Construction Manager waive all rights against each other and each of their subcontractors, sub-subcontractors, officers, directors, agents, and employees, for recovery for damages caused by fire and other perils to the extent covered by builders risk insurance purchased pursuant to the requirements of this agreement, or any other property insurance applicable to the work. If the builders risk insurance and other property insurance policies purchased as required above do not allow the insured to waive rights of recovery against others prior to loss, Construction Manager shall cause them to be endorsed with a waiver of subrogation as required above.

If Owner is damaged by the failure of Construction Manager to maintain insurance as required in the above subparagraphs, then Construction Manager shall bear all reasonable costs properly attributable to that failure.

F. Cancellation, Renewal and Modification

Construction Manager and Subcontractors shall maintain in effect all insurance coverage's required under the Agreement at Construction Manager's sole expense and with insurance companies acceptable to the Owner. All policies shall contain a provision that coverage will not be cancelled or not renewed until at least thirty (30) days prior written notice has been given to the Owner. Certificates of insurance showing required coverage to be in force shall be filed with Owner prior to commencement of the Work. In the event Construction Manager fails to obtain or maintain insurance coverage required under the Agreement, Owner may purchase such coverage as desired for Owner's benefit and charge the expense to the Construction Manager, or terminate the Agreement for default.

G. Continuation of Coverage

Commercial General Liability and Excess Commercial General Liability including completed operations coverage shall be maintained in effect for the benefit of Owner for a period of 2 years following the completion of the work specified in this contract.

If any of the required liability insurance is on a claims made basis, "tail" coverage will be required at the completion of this contract for twelve (12) months, or the maximum time period reasonably available in the marketplace. Construction Manager shall furnish certification of "tail" coverage as described or continuous "claims made" liability coverage for twelve (12) months following Agreement completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage provided its retroactive date is on or before the effective date of this Agreement. If Continuous "claims made" coverage is used, Construction Manager shall be required to keep the coverage in effect for not less than twelve (12) months from the end of the Agreement. This will be a condition of the final acceptance of work or services.

End of Exhibit B

_____(Construction Manager's initials)

_____(Owner's initials)


AIA® Document A141® – 2024 Exhibit B

Design-Build Amendment

This Amendment dated the [REDACTED] day of [REDACTED] in the year [REDACTED] (the "Amendment") is incorporated into, and amends, AIA Document A141®–2024, Standard Form of Agreement Between Owner and Design-Builder for a Traditional Design-Build Project dated the [REDACTED] day of [REDACTED] in the year [REDACTED] (the "Agreement")
(In words, indicate day, month, and year.)

for the following **PROJECT**:

(Name and location or address)



THE OWNER:

(Name, legal status, and address)



THE DESIGN-BUILDER:

(Name, legal status, and address)



The Owner and Design-Builder hereby amend the Agreement as follows.

TABLE OF ARTICLES

- B.1 CONTRACT SUM**
- B.2 CONTRACT TIME**
- B.3 INFORMATION UPON WHICH AMENDMENT IS BASED**
- B.4 DESIGN-BUILDER'S KEY PERSONNEL, CONSULTANTS, SUBCONTRACTORS, AND SUPPLIERS**
- B.5 OWNER'S SEPARATE CONTRACTORS**
- B.6 COST OF THE WORK**

ARTICLE B.1 CONTRACT SUM

§ B.1.1 The Owner shall pay the Design-Builder the Contract Sum in current funds for the Design-Builder's performance of the Agreement after the execution of this Amendment. The Contract Sum shall be the amount to be paid to the Design-Builder for performance of the Work after execution of the Design-Build Amendment. The Contract Sum shall

ADDITIONS AND DELETIONS:

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

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

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located.

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include Early Release Work but shall not include any other compensation the Owner paid the Design-Builder for Work performed prior to execution of this Amendment. The Contract Sum shall be one of the following:
(Check the appropriate box.)

[] Stipulated Sum, in accordance with Section B.1.2 below

[] Cost of the Work plus the Design-Builder's Fee, in accordance with Section B.1.3 below

[] Cost of the Work plus the Design-Builder's Fee with a Guaranteed Maximum Price, in accordance with Section B.1.4 below

(Based on the selection above, complete Section B.1.2, B.1.3 or B.1.4 below.)

§ B.1.2 Stipulated Sum

§ B.1.2.1 The Stipulated Sum shall be [] (\$ []), subject to authorized adjustments as provided in the Design-Build Documents.

§ B.1.2.2 The Stipulated Sum is based upon the following alternates, if any, which are described in the Design-Build Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the Owner is permitted to accept other alternates subsequent to the execution of this Amendment, attach a schedule of such other alternates showing the change in Stipulated Sum for each and the deadline by which the alternate must be accepted.)

§ B.1.2.3 Unit prices, if any:

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

Item	Units and Limitations	Price per Unit (\$0.00)
[]	[]	[]

§ B.1.2.4 Allowances, if any, included in the stipulated sum:

(Identify each allowance.)

Item	Price
[]	[]

§ B.1.3 Cost of the Work Plus Design-Builder's Fee

§ B.1.3.1 The Cost of the Work is as defined in Article B.6, Cost of the Work.

§ B.1.3.2 The Design-Builder's Fee:

(State a lump sum, percentage of Cost of the Work or other provision for determining the Design-Builder's Fee, and the method for adjustment to the Fee for changes in the Work.)

§ B.1.4 Cost of the Work Plus Design-Builder's Fee With a Guaranteed Maximum Price

§ B.1.4.1 The Cost of the Work is as defined in Article B.6, Cost of the Work.

§ B.1.4.2 The Design-Builder's Fee:

(State a lump sum, percentage of Cost of the Work or other provision for determining the Design-Builder's Fee and the method for adjustment to the Fee for changes in the Work.)

§ B.1.4.3 Guaranteed Maximum Price

§ B.1.4.3.1 The sum of the Cost of the Work and the Design-Builder's Fee is guaranteed by the Design-Builder not to exceed (\$), subject to additions and deductions by changes in the Work as provided in the Design-Build Documents. This maximum sum is referred to in the Design-Build Documents as the Guaranteed Maximum Price. The Guaranteed Maximum Price shall include all sales, consumer, use and similar taxes for the Work provided by the Design-Builder that are legally enacted, whether or not yet effective, at the time this Amendment is executed. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Design-Builder without reimbursement by the Owner.
(Insert specific provisions if the Design-Builder is to participate in any savings.)

§ B.1.4.3.2 Itemized Statement of the Guaranteed Maximum Price

Provided below is an itemized statement of the Guaranteed Maximum Price organized by trade categories, allowances, contingencies, alternates, the Design-Builder's Fee, and other items that comprise the Guaranteed Maximum Price, including Design Services to be performed after execution of the Design-Build Amendment and Early Release Work.
(Provide itemized statement below or reference an attachment.)

§ B.1.4.3.3 Alternates

§ B.1.4.3.3.1 Alternates, if any, included in the Guaranteed Maximum Price:

Item	Price

§ B.1.4.3.3.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Exhibit B. Upon acceptance, the Owner shall issue a Modification to the Agreement.

(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance

§ B.1.4.3.4 Unit prices, if any:

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

Item	Units and Limitations	Price per Unit (\$0.00)

§ B.1.4.3.5 Allowances, if any:

(Identify each allowance.)

Item	Price

§ B.1.4.3.6 Assumptions and clarifications, if any, on which the Guaranteed Maximum Price is based:

(Identify each assumption and clarification.)

Item	Price

§ B.1.4.3.7 To the extent that the Design-Build Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Design-Build Documents and

reasonably inferable therefrom. Such further development does not include changes in scope, systems, kinds and quality of materials, finishes, or equipment, all of which, if required, shall be incorporated by Change Order.

§ B.1.5 Payments

§ B.1.5.1 Progress Payments

§ B.1.5.1.1 Based upon Applications for Payment submitted to the Owner by the Design-Builder, the Owner shall make progress payments on account of the Contract Sum to the Design-Builder as provided below and elsewhere in the Design-Build Documents.

§ B.1.5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ B.1.5.1.3 Provided that an Application for Payment is received not later than the [] day of the month, the Owner shall make payment of the amount certified to the Design-Builder not later than the [] day of the [] month. If an Application for Payment is received by the Owner after the application date fixed above, payment of the amount certified shall be made by the Owner not later than [] ([]) days after the Owner receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ B.1.5.1.4 With each Application for Payment where the Contract Sum is based upon the Cost of the Work, or the Cost of the Work with a Guaranteed Maximum Price, the Design-Builder shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner to demonstrate that payments already made by the Design-Builder on account of the Cost of the Work equal or exceed progress payments already received by the Design-Builder plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Design-Builder's Fee.

§ B.1.5.1.5 With each Application for Payment where the Contract Sum is based upon a Stipulated Sum or Cost of the Work with a Guaranteed Maximum Price, the Design-Builder shall submit the most recent schedule of values in accordance with the Design-Build Documents. The schedule of values shall allocate the entire Contract Sum among: (1) the various portions of the Work; (2) any contingency for costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order; and (3) the Design-Builder's Fee.

§ B.1.5.1.6 The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. The schedule of values shall be used as a basis for reviewing the Design-Builder's Applications for Payment.

§ B.1.5.1.7 The allocation of the Guaranteed Maximum Price under this Section B.1.5.1 shall not constitute a separate guaranteed maximum price for the Cost of the Work of each individual line item in the schedule of values.

§ B.1.5.1.8 When the Design-Builder allocates costs from a contingency to another line item in the schedule of values, the Design-Builder shall submit supporting documentation to the Owner.

§ B.1.5.1.9 In taking action on the Design-Builder's Applications for Payment, the Owner shall be entitled to rely on the accuracy and completeness of the information furnished by the Design-Builder and shall not be deemed to have made a detailed examination, audit or arithmetic verification of the documentation submitted in accordance with Sections B.1.5.1.4 or B.1.5.1.5, or other supporting data; to have made exhaustive or continuous on-site inspections; or to have made examinations to ascertain how or for what purposes the Design-Builder has used amounts previously paid. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ B.1.5.1.10 Except with the Owner's prior approval, the Design-Builder shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ B.1.5.2 Progress Payments—Stipulated Sum

§ B.1.5.2.1 Applications for Payment where the Contract Sum is based upon a Stipulated Sum shall indicate the percentage of

completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ B.1.5.2.2 In accordance with AIA Document A141®–2024, Standard Form of Agreement Between Owner and Design-Builder for a Traditional Design-Build Project, and subject to other provisions of the Design-Build Documents, the amount of each progress payment shall be computed as follows:

§ B.1.5.2.2.1 The amount of each progress payment shall include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Change Directives that the Owner determines to be reasonably justified.

§ B.1.5.2.2.2 The amount of each progress payment shall be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Owner has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A141–2024;
- .3 Any amount for which the Design-Builder does not intend to pay a Subcontractor, sub-subcontractor, or material supplier, unless the Work has been performed by others the Subcontractor intends to pay;
- .4 Any amount for which the Owner may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A141–2024; and
- .5 Retainage withheld pursuant to Section B.1.5.2.3.

§ B.1.5.2.3 Retainage

§ B.1.5.2.3.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

§ B.1.5.2.3.2 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as Design Services, general conditions, bonds, insurance, etc.)

§ B.1.5.2.3.3 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section B.1.5.2.3.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section B.1.5.2.3.4, insert provisions for such modifications.)

§ B.1.5.2.3.4 Upon Substantial Completion of the Work, the Design-Builder may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment, except as follows:

(Insert any conditions precedent to the release of all or a portion of the retainage, such as correction of the Construction Work, consent of surety, etc.)

§ B.1.5.2.3.5 Except with the Owner's prior approval, the Design-Builder shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ B.1.5.3 Progress Payments—Cost of the Work Plus a Fee

§ B.1.5.3.1 Where the Contract Sum is based upon the Cost of the Work plus a fee without a Guaranteed Maximum Price, Applications for Payment shall show the Cost of the Work actually incurred by the Design-Builder through the end of the period covered by the Application for Payment and for which Design-Builder has made or intends to make actual payment prior to the next Application for Payment.

§ B.1.5.3.2 In accordance with AIA Document A141–2024, and subject to other provisions of the Design-Build Documents, the amount of each progress payment shall be computed as follows:

§ B.1.5.3.2.1 The amount of each progress payment shall include:

- .1 The Cost of the Work as described in Article B.6;
- .2 That portion of Change Directives that the Owner determines to be reasonably justified; and
- .3 The Design-Builder's Fee computed upon the Cost of the Work described in Section B.1.5.3.2.1.1 at the rate stated in Section B.1.3.2; or if the Design-Builder's Fee is stated as a fixed sum in Section B.1.3.2 an amount which bears the same ratio to that fixed-sum Fee as the Cost of the Work included in Section B.1.5.3.2.1.1 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ B.1.5.3.2.2 The amount of each progress payment shall be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Owner has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A141–2024;
- .3 Any amount for which the Design-Builder does not intend to pay a Subcontractor, sub-subcontractor, or material supplier, unless the Work has been performed by others the Design-Builder intends to pay;
- .4 Any amount for which the Owner may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A141–2024;
- .5 The shortfall, if any, indicated by the Design-Builder in the documentation required by Section B.1.5.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- .6 Retainage withheld pursuant to Section B.1.5.3.3.

§ B.1.5.3.3 Retainage

§ B.1.5.3.3.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

§ B.1.5.3.3.2 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as Design Services, general conditions, bonds, insurance, etc.)

§ B.1.5.3.3.3 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section B.1.5.3.3.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section B.1.5.3.3.4, insert provisions for such modification.)

§ B.1.5.3.3.4 Upon Substantial Completion of the Work, the Design-Builder may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment except as follows:

(Insert any conditions precedent to the release of all or a portion of the retainage, such as correction of the Construction

§ B.1.5.4 Progress Payments—Cost of the Work Plus a Fee with a Guaranteed Maximum Price

§ B.1.5.4.1 Applications for Payment where the Contract Sum is based upon the Cost of the Work Plus a Fee with a Guaranteed Maximum Price shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed; or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Design-Builder on account of that portion of the Work for which the Design-Builder has made payment or intends to make payment prior to the next Application for Payment, by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

§ B.1.5.4.2 In accordance with AIA Document A141–2024, and subject to other provisions of the Design-Build Documents, the amount of each progress payment shall be computed as follows:

§ B.1.5.4.3 The amount of each progress payment shall include:

- .1 That portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the most recent schedule of values;
- .2 That portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction or, if approved in writing in advance by the Owner, suitably stored off the site at a location agreed upon in writing;
- .3 That portion of Change Directives that the Owner determines to be reasonably justified; and
- .4 The Design-Builder's Fee, computed upon the Cost of the Work described in Sections B.1.5.4.3.1 and B.1.5.4.3.2 at the rate stated in Section B.1.4.2 or, if the Design-Builder's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work included in Sections B.1.5.4.3.1 and B.1.5.4.3.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ B.1.5.4.4 The amount of each progress payment shall be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Owner has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A141–2024;
- .3 Any amount for which the Design-Builder does not intend to pay a Subcontractor, sub-subcontractor, or material supplier, unless the Work has been performed by others the Design-Builder intends to pay;
- .4 Any amount for which the Owner may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A141–2024;
- .5 The shortfall, if any, indicated by the Subcontractor in the documentation required by Section B.1.5.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and
- .6 Retainage withheld pursuant to Section B.1.5.4.5.

§ B.1.5.4.5 Retainage

§ B.1.5.4.5.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

§ B.1.5.4.5.2 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as Design Services, general conditions, bonds, insurance, etc.)

§ B.1.5.4.5.3 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section B.1.5.4.5.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section B.1.5.4.5.4, insert provisions for such modification.)

§ B.1.5.4.5.4 Upon Substantial Completion of the Work, the Design-Builder may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment, except as follows:

(Insert any conditions precedent to the release of all or a portion of the retainage, such correction of the Construction Work, consent of surety, etc.)

§ B.1.5.5 Final Payment

§ B.1.5.5.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Design-Builder not later than 30 days after:

- .1 the Design-Builder has fully performed the Agreement, except for the Design-Builder's responsibility to correct Construction Work as provided in Article 12 of AIA Document A141–2024, and to satisfy other requirements, if any, which extend beyond final payment;
- .2 the Design-Builder has submitted a final Application for Payment and, if the Contract Sum is based on the Cost of the Work, a final accounting for the Cost of the Work;
- .3 a final Certificate for Payment has been issued by the Owner in accordance with Article 9 of AIA Document A141–2024;
- .4 other conditions precedent to the Owner's obligations to issue final payment to the Design-Builder:
(Insert any other conditions precedent to final payment.)

§ B.1.5.5.2 If the Contract Sum is based on the Cost of the Work, within 30 days of the Owner's receipt of the Design-Builder's final accounting for the Cost of the Work, the Owner shall conduct an audit of the Cost of the Work or notify the Design-Builder that it will not conduct an audit.

§ B.1.5.5.2.1 If the Owner conducts an audit of the Cost of the Work, the Owner shall, within 10 days after completion of the audit, submit a written report based upon the auditors' findings to the Design-Builder.

§ B.1.5.5.2.2 Within seven days after receipt of the written report described in Section B.1.5.5.2.1, or receipt of notice that the Owner will not conduct an audit, and provided that the other conditions of Section B.1.5.5.1 have been met, the Owner will either issue a final Certificate for Payment to the Design-Builder, or notify the Design-Builder in writing of the Owner's reasons for withholding a certificate. The time periods stated in this Section B.1.5.5.2.2 supersede those stated in Article 9 of AIA Document A141–2024. The Owner is not responsible for verifying the accuracy of the Design-Builder's final accounting.

§ B.1.5.5.2.3 If the Owner's auditors' report concludes that the Cost of the Work, as substantiated by the Design-Builder's final accounting, is less than the amount claimed by the Design-Builder, the Design-Builder shall be entitled to request mediation of the disputed amount pursuant to Article 15 of the AIA Document A141–2024, without seeking an initial resolution of the claim pursuant to Article 15 of AIA Document A141–2024. A request for mediation shall be made by the Design-Builder within 30 days after the Design-Builder's receipt of a copy of the Owner's final Certificate for Payment. Failure to request mediation within this 30-day period shall result in the substantiated amount reported by the Owner's auditors becoming binding on the Design-Builder. Pending a final resolution of the disputed amount, the Owner shall pay the Design-Builder the amount substantiated by the Owner's auditors within 30 days or such shorter period required by law.

§ B.1.5.5.3 If, subsequent to final payment, and at the Owner's request, the Design-Builder incurs costs, described in Sections B.6.2, and not excluded by Section B.6.3, to correct defective or nonconforming Construction Work, the Owner shall reimburse the Design-Builder for such costs, and the Design-Builder's Fee applicable thereto, on the same basis as if such costs had been incurred prior to final payment, but not in excess of the Guaranteed Maximum Price, if the Contract Sum is based on the Cost of the Work subject to a Guaranteed Maximum Price. If adjustments to the Contract Sum are provided for in Section B.1.4, the amount of those adjustments shall be recalculated, taking into account any reimbursements made pursuant to this Section B.1.5.5.3 in determining the net amount to be paid by the Owner to the Design-Builder.

ARTICLE B.2 CONTRACT TIME

§ B.2.1 The date of commencement of the Construction Work shall be:

(Check one of the following boxes.)

The date of execution of this Amendment.

Established as follows:

(Insert a date or a means to determine the date of commencement of the Construction Work.)

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

§ B.2.1.1 Unless otherwise provided, the Contract Time is the period of time, including authorized adjustments, allotted in the Design-Build Documents for Substantial Completion of the Work. The Contract Time shall be measured from the date of commencement of the Construction Work.

§ B.2.2 Substantial Completion

§ B.2.2.1 Subject to adjustments of the Contract Time as provided in the Design-Build Documents, the Design-Builder shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

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

By the following date:

§ B.2.2.2 Subject to adjustments of the Contract Time as provided in the Design-Build Documents, if portions of the Work are to be Substantially Complete prior to Substantial Completion of the entire Work, the Design-Builder shall achieve Substantial Completion of such portions by the following dates:

Portion of Work

Substantial Completion Date

§ B.2.2.3 Other:

(Insert provisions for bonus, shared savings, cost savings, or other incentives, if any, that might result in a change to the Contract Sum or Guaranteed Maximum Price.)

ARTICLE B.3 INFORMATION UPON WHICH AMENDMENT IS BASED

§ B.3.1 The Contract Sum and Contract Time set forth in this Amendment are based on the following:

§ B.3.1.1 The following Supplementary and other Conditions of the Agreement:

Document	Title	Date	Pages
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§ B.3.1.2 The following Specifications:

(Either list the Specifications here or refer to an exhibit attached to this Amendment.)

Section	Title	Date	Pages
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§ B.3.1.3 The following Drawings:

(Either list the Drawings here or refer to an exhibit attached to this Amendment.)

Number	Title	Date
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§ B.3.1.4 The Sustainability Plan, if any:

(If the Owner identified a Sustainable Objective, identify the document or documents that comprise the Sustainability Plan by title, date, and number of pages, and include other identifying information. The Sustainability Plan identifies and describes the Sustainable Objective; the targeted Sustainable Measures; implementation strategies selected to achieve the Sustainable Measures; the Owner's and Design-Builder's roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews, testing or metrics to verify achievement of each Sustainable Measure; and the Sustainability Documentation required for the Project, as those terms are defined in Exhibit C to the Agreement.)

Title	Date	Pages
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Other identifying information:

§ B.3.1.5 Assumptions and clarifications, if any:

(Identify each assumption and clarification.)

§ B.3.1.6 Deviations from the Owner's Criteria as adjusted by a Modification:

§ B.3.1.7 To the extent the Design-Builder shall be required to submit any Submittals to the Owner for review, indicate any such submissions below:

(List any Submittals that the Design-Builder is required to submit to the Owner for review.)

§ B.3.1.8 Owner's Intended BIM Uses

The Owner intends to utilize Building Information Modeling ("Model") on the Project for the following post construction uses. Any use in addition to those identified below shall be at the Owner's sole risk:

(Examples include building system maintenance, building system analysis, asset management, space management and

tracking, disaster planning, and record modeling.)

§ B.3.1.8.1 The Owner agrees that the extent of its reliance on any Model, or a portion thereof, shall be in accordance with a BIM Execution Plan agreed to by the Parties. If the Parties do not agree to a BIM Execution Plan, the Owner's reliance on any Model shall be at the Owner's sole risk.

ARTICLE B.4 DESIGN-BUILDER'S KEY PERSONNEL, CONSULTANTS, SUBCONTRACTORS, AND SUPPLIERS

§ B.4.1 The Design-Builder's key personnel are identified below:
(Identify name, title, and contact information.)

.1 Superintendent



.2 Project Manager



.3 Others



§ B.4.2 In addition to the persons or entities identified in the Agreement, the Design-Builder shall retain the following Consultants, Subcontractors, and suppliers, identified below:

(List name, discipline, address, and other information.)

ARTICLE B.5 OWNER'S SEPARATE CONTRACTORS

§ B.5.1 The Owner shall retain the following Separate Contractors to perform construction or operations related to the Project:
(List name, discipline, address, and other information for each Separate Contractor and identify the construction or operations to be performed by such Separate Contractor.)

ARTICLE B.6 COST OF THE WORK

§ B.6.1 The term Cost of the Work shall mean costs necessarily incurred by the Design-Builder in the proper performance of the Work. The Cost of the Work shall include only the items set forth in Section B.6.2.

§ B.6.1.2 Where, pursuant to the Design-Build Documents, any cost is subject to the Owner's prior approval, the Design-Builder shall obtain such approval in writing prior to incurring the cost.

§ B.6.1.3 Costs shall be at rates not higher than the standard rates paid at the place of the Project, except with prior approval of the Owner.

§ B.6.2 Cost to Be Reimbursed as Part of the Contract

§ B.6.2.1 Labor Costs

§ B.6.2.1.1 Wages or salaries of construction workers directly employed by the Design-Builder to perform the Construction Work at the site or, with the Owner's prior approval, at off-site workshops.

§ B.6.2.1.2 Wages or salaries of the Design-Builder's supervisory and administrative personnel when stationed at the site and

performing Construction Work, with the Owner's prior approval.

§ B.6.2.1.3 Wages or salaries of the Design-Builder's supervisory and administrative personnel when performing Construction Work and stationed at a location other than the site, but only for that portion of time required for the Construction Work, and limited to the personnel and activities listed below:

(Identify the personnel, type of activity and, if applicable, any agreed upon percentage of time to be devoted to the Construction Work.)

§ B.6.2.1.4 Wages and salaries of the Design-Builder's supervisory or administrative personnel engaged at factories, workshops or while traveling, in expediting the production or transportation of materials or equipment required for the Construction Work, but only for that portion of their time required for the Construction Work.

§ B.6.2.1.5 Costs paid or incurred by the Design-Builder, as required by law or collective bargaining agreements, for taxes, insurance, contributions, assessments and benefits and, for personnel not covered by collective bargaining agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations, and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Section B.6.2.1.

§ B.6.2.1.6 If agreed rates for labor costs, in lieu of actual costs, are provided in this Agreement, the rates shall remain unchanged throughout the duration of this Agreement, unless the parties execute a Modification.

§ B.6.2.2 Consultant and Subcontract Costs. Payments made by the Design-Builder to the Architect, Consultants, Subcontractors, and suppliers in accordance with the requirements of their subcontracts or similar agreements.

§ B.6.2.3 Costs of Materials and Equipment Incorporated in the Completed Construction

§ B.6.2.3.1 Costs, including transportation and storage at the site, of materials and equipment incorporated, or to be incorporated, in the completed construction.

§ B.6.2.3.2 Costs of materials described in the preceding Section B.6.2.3.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become the Owner's property at the completion of the Construction Work or, at the Owner's option, shall be sold by the Design-Builder. Any amounts realized from such sales shall be credited to the Owner as a deduction from the Cost of the Work.

§ B.6.2.4 Costs of Other Materials and Equipment, Temporary Facilities and Related Items

§ B.6.2.4.1 Costs of transportation, storage, installation, maintenance, dismantling, and removal of materials, supplies, temporary facilities, machinery, equipment, and costs of hand tools not customarily owned by construction workers that are provided by the Design-Builder at the site and fully consumed in the performance of the Construction Work. Costs of materials, supplies, temporary facilities, machinery, equipment, and tools that are not fully consumed shall be based on the cost or value of the item at the time it is first used on the Project site less the value of the item when it is no longer used at the Project site. Costs for items not fully consumed by the Design-Builder shall mean fair market value.

§ B.6.2.4.2 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by the Design-Builder at the site, and costs of transportation, installation, dismantling, minor repairs, and removal of such temporary facilities, machinery, equipment, and hand tools. Rates and quantities of equipment owned by the Design-Builder, or a related party as defined in Section B.6.2.7 shall be subject to the Owner's prior approval. The total rental cost of any such equipment may not exceed the purchase price of any comparable item.

§ B.6.2.4.3 Costs of removal of debris from the site of the Construction Work and its proper and legal disposal.

§ B.6.2.4.4 Costs of the Design-Builder's site office, including general office equipment and supplies.

§ B.6.2.4.5 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, with the Owner's prior approval.

§ B.6.2.5 Miscellaneous Costs

§ B.6.2.5.1 Premiums for that portion of insurance and bonds required by the Design-Build Documents that can be directly attributed to the Contract.

§ B.6.2.5.1.1 Costs for self-insurance, for either full or partial amounts of the coverages required by the Design-Build Documents, with the Owner's prior approval.

§ B.6.2.5.1.2 Costs for insurance through a captive insurer owned or controlled by the Design-Builder, with the Owner's prior approval.

§ B.6.2.5.2 Sales, use, or similar taxes, imposed by a governmental authority, that are related to the Work and for which the Design-Builder is liable.

§ B.6.2.5.3 Fees and assessments for the building permit, and for other permits, licenses, and inspections, for which the Design-Builder is required by the Design-Build Documents to pay.

§ B.6.2.5.4 Fees of laboratories for tests required by the Design-Build Documents; except those related to defective or nonconforming Construction Work for which reimbursement is excluded under Article 12 of the Agreement or by other provisions of the Design-Build Documents, and which do not fall within the scope of Section B.6.2.6.3.

§ B.6.2.5.5 Royalties and license fees paid for the use of a particular design, process, or product, required by the Design-Build Documents.

§ B.6.2.5.5.1 The cost of defending suits or claims for infringement of patent rights arising from Owner-imposed requirements in the Design-Build Documents, payments made in accordance with legal judgments against the Design-Builder resulting from such suits or claims, and payments of settlements made with the Owner's consent, unless the Design-Builder had reason to believe that the required design, process, or product was an infringement of a copyright or a patent, and the Design-Builder failed to promptly furnish such information to the Owner as required by Article 3 of AIA Document A141–2024. The costs of legal defenses, judgments, and settlements shall not be included in the Cost of the Work used to calculate the Design-Builder's Fee or subject to the Guaranteed Maximum Price.

§ B.6.2.5.6 Costs for communications services, electronic equipment, and software, directly related to the Work and located at the site, with the Owner's prior approval.

§ B.6.2.5.7 Costs of document reproductions and delivery charges.

§ B.6.2.5.8 Deposits lost for causes other than the Design-Builder's negligence or failure to fulfill a specific responsibility in the Design-Build Documents.

§ B.6.2.5.9 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between the Owner and Design-Builder, reasonably incurred by the Design-Builder after the execution of this Agreement in the performance of the Work and with the Owner's prior approval, which shall not be unreasonably withheld.

§ B.6.2.5.10 Expenses incurred in accordance with the Design-Builder's standard written personnel policy for relocation and temporary living allowances of the Design-Builder's personnel required for the Work, with the Owner's prior approval.

§ B.6.2.5.11 That portion of the reasonable expenses of the Design-Builder's supervisory or administrative personnel incurred while traveling in discharge of duties connected with the Work.

§ B.6.2.6 Other Costs and Emergencies

§ B.6.2.6.1 Other costs incurred in the performance of the Work, with the Owner's prior approval.

§ B.6.2.6.2 Costs incurred in taking action to prevent threatened damage, injury, or loss, in case of an emergency affecting the safety of persons and property, as provided in Article 10 of AIA Document A141-2024.

§ B.6.2.6.3 Costs of repairing or correcting damaged or nonconforming Construction Work executed by the Design-Builder, Subcontractors, or suppliers, provided that such damaged or nonconforming Construction Work was not caused by the negligence of, or failure to fulfill a specific responsibility by, the Design-Builder, and only to the extent that the cost of repair or correction is not recovered by the Design-Builder from insurance, sureties, Subcontractors, suppliers, or others.

§ B.6.2.6.4 Costs of implementation of, and compliance with, protective safeguards that may be required under the Design-Builder's or Owner's builder's risk policy.

§ B.6.2.7 Related Party Transactions

§ B.6.2.7.1 For purposes of this Section B.6.2.7, the term "related party" shall mean (1) a parent, subsidiary, affiliate, or other entity having common ownership of, or sharing common management with, the Design-Builder; (2) any entity in which any stockholder in, or management employee of, the Design-Builder holds an equity interest in excess of ten percent in the aggregate; (3) any entity which has the right to control the business or affairs of the Design-Builder; or (4) any person, or any member of the immediate family of any person, who has the right to control the business or affairs of the Design-Builder.

§ B.6.2.7.2 If any of the costs to be reimbursed arise from a transaction between the Design-Builder and a related party, the Design-Builder shall notify the Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If the Owner, after such notification, authorizes the proposed transaction in writing, then the cost incurred shall be included as a cost to be reimbursed, and the Design-Builder shall procure the Work, equipment, goods, or service, from the related party, as a Subcontractor, according to the terms of Section B.6.5. If the Owner fails to authorize the transaction in writing, the Design-Builder shall procure the Work, equipment, goods, or service from some person or entity other than a related party according to the terms of Section B.6.5.

§ B.6.3 Costs Not to Be Reimbursed as Part of this Contract

The Cost of the Work shall not include the items listed below:

- .1 Salaries and other compensation of the Design-Builder's personnel stationed at the Design-Builder's principal office or offices other than the site office, except as specifically provided in Section B.6.2.1 or as may be provided elsewhere in the Agreement;
- .2 Bonuses, profit sharing, incentive compensation, and any other discretionary payments, paid to anyone hired by the Design-Builder or paid to any Subcontractor or vendor, unless the Owner has provided prior approval;
- .3 Expenses of the Design-Builder's principal office and offices other than the site office;
- .4 Overhead and general expenses, except as may be expressly included in Section B.6.2;
- .5 The Design-Builder's capital expenses, including interest on the Design-Builder's capital employed for the Work;
- .6 Except as provided in Section B.6.2.6.3 of this Amendment, costs due to the negligence of, or failure to fulfill a specific responsibility of the Agreement by, the Design-Builder, Contractors, and suppliers, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable;
- .7 Any cost not specifically and expressly described in Section B.6.2; and
- .8 Costs, other than costs included in Modifications approved by the Owner, that would cause the Guaranteed Maximum Price to be exceeded.

§ B.6.4 Discounts, Rebates, and Refunds

§ B.6.4.1 Cash discounts obtained on payments made by the Design-Builder shall accrue to the Owner if (1) before making the payment, the Design-Builder included the amount to be paid, less such discount, in an Application for Payment and received payment from the Owner, or (2) the Owner has deposited funds with the Design-Builder with which to make payments; otherwise, cash discounts shall accrue to the Design-Builder. Trade discounts, rebates, refunds, and amounts received from sales of surplus materials and equipment shall accrue to the Owner, and the Design-Builder shall make provisions so that they can be obtained.

§ B.6.4.2 Amounts that accrue to the Owner in accordance with Section B.6.4.1 shall be credited to the Owner as a deduction from the Cost of the Work.

§ B.6.5 Other Agreements

§ B.6.5.1 Those portions of the Construction Work that the Design-Builder does not customarily perform with the Design-Builder's own personnel shall be performed under subcontracts or other appropriate agreements with the Design-Builder. The Owner may designate specific persons from whom, or entities from which, the Design-Builder shall obtain bids. The Design-Builder shall obtain bids from Subcontractors, and from suppliers of materials or equipment fabricated especially for the Construction Work, who are qualified to perform that portion of the Construction Work in accordance with the requirements of the Design-Build Documents. The Design-Builder shall deliver such bids to the Owner with an indication as to which bids the Design-Builder intends to accept. The Owner then has the right to review the Design-Builder's list of proposed Subcontractors and suppliers and, subject to Section 5.9.1.1 of the Agreement, to object to any Subcontractor or supplier. Any approval or objection by the Owner shall not relieve the Design-Builder of its responsibility to perform the Construction Work in accordance with the Design-Build Documents. The Design-Builder shall not be required to contract with anyone to whom the Design-Builder has reasonable objection.

§ B.6.5.1.1 When a specific Subcontractor or supplier (1) is recommended to the Owner by the Design-Builder; (2) is qualified to perform that portion of the Construction Work; and (3) has submitted a bid that conforms to the requirements of the Design-Build Documents without reservations or exceptions, but the Owner requires that another bid be accepted, then the Design-Builder may require that a Change Order be issued to adjust the Guaranteed Maximum Price by the difference between the bid of the person or entity recommended to the Owner by the Design-Builder and the amount of the Subcontract or other agreement actually signed with the person or entity designated by the Owner.

§ B.6.5.2 Subcontracts or other agreements shall conform to the applicable payment provisions of the Design-Build Documents and shall not be awarded on the basis of cost plus a fee without the Owner's prior written approval. If a subcontract is awarded on the basis of cost plus a fee, the Design-Builder shall provide in the Subcontract for the Owner to receive the same audit rights with regard to the Subcontractor as the Owner receives with regard to the Design-Builder in this Amendment.

§ B.6.6 Accounting Records

The Design-Builder shall keep full and detailed records and accounts related to the Cost of the Work and exercise such controls, as may be necessary for proper financial management under the Agreement and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Design-Builder's records and accounts, including complete documentation supporting accounting entries, books, job cost reports, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, Subcontractor invoices, purchase orders, vouchers, memoranda, and other data relating to this Agreement. The Design-Builder shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law.

§ B.6.7 Relationship of the Parties

If the basis of payment to the Design-Builder is the Cost of the Work plus a Fee without a Guaranteed Maximum Price or the Cost of the Work plus a Fee with a Guaranteed Maximum Price, the Design-Builder accepts the relationship of trust and confidence established by the Agreement and covenants with the Owner to exercise the Design-Builder's skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Design-Builder and to make payments to the Design-Builder in accordance with the requirements of the Design-Build Documents.

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

OWNER (Signature)

(Printed name and title)

DESIGN-BUILDER (Signature)

(Printed name and title)