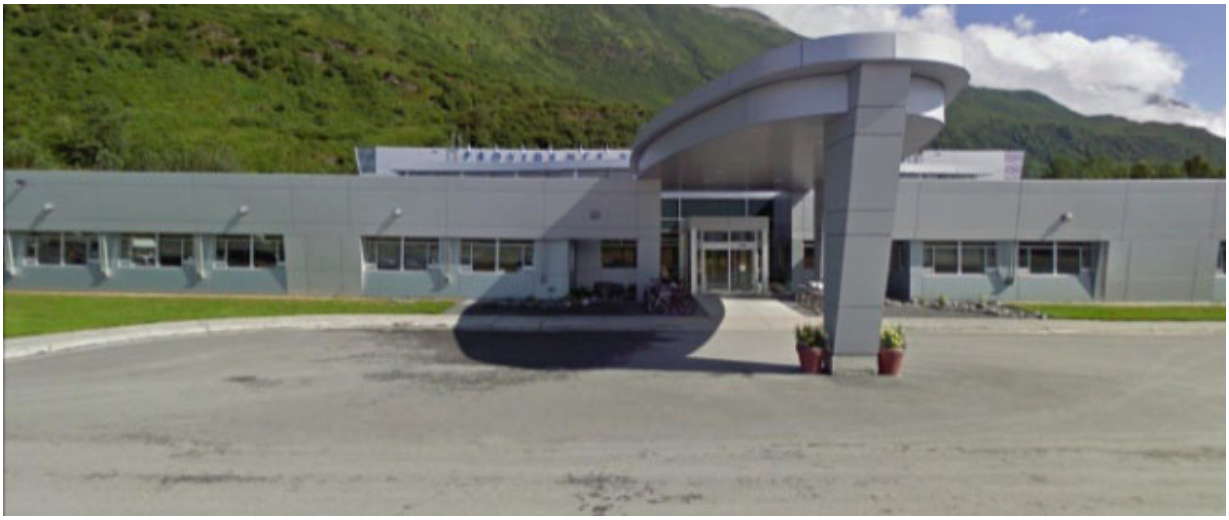
City of Valdez, Alaska

Valdez Medical Center



Medical Campus Expansion (MRI)

Design Build

Request for Proposals

City of Valdez Project Number 13-310-9192

Prepared by: Architects Alaska
Date: September 4, 2013

Table of Contents

A. General Information and Instructions

1. RFP Information

The City of Valdez wants to provide a new modular MRI unit adjacent to their existing Valdez Medical Center. This unit will be connected to and provide additional functionality to the Medical Center service to the community. This unit will supplement the existing inpatient and outpatient services. They are therefore requesting proposals for design-build services to provide for a completed and functional addition to their facility.

2. Project overview

a. The Modular unit will need to be placed such that access is available from the interior and exterior in order to accommodate inpatient and outpatient access. Inpatient access will include emergency as well as general in-patient access. Outpatient access will be the hospital main entry. The corridor used for access also serves as an emergency egress route. The Modular MRI Unit may consist of one or more units as decided upon by the successful proposer. The existing medical center shall remain open and operational during all stages of the work. Unit installers will be required to meet all hospital infection control and interim life safety and disruption notice requirements.
b. This RFP is for work associated with Contract 1 for the design, manufacture, delivery and placement of the Modular MRI Unit. Contract 2 will be issued and performed under separate agreements.
c. This work is to be completed in three stages.

	CONTRACT 1 MODULAR MRI UNIT CONTRACT	CONTRACT 2 SITE ADAPTATION CONTRACT	CONTRACT 3 MRI EQUIPMENT CONTRACT
RFP	COST PROPOSAL FOR DESIGN OF MODULAR UNIT AND CONSULTING FOR DESIGN OF SITE ADAPTATION COST PROPOSAL FOR MANUFACTURE, DELIVERY, AND PLACMENT OF MODULAR UNIT STATEMENT OF QUALIFICATIONS		
STAGE 1	DESIGN	DESIGN AND BID	PRICING AND SELECTION OF VENDOR
STAGE 2	CONSTRUCTION, PROJECT DELIVERY FROM POINT OF ORIGIN, AND PLACMENT OF THE MODULAR MRI UNIT.	CONSTRUCTION OF SITE ADAPTATION WORK AND COMPLETION OF FINAL CONNECTIONS TO MODULAR UNIT	
STAGE 3	SUPPORT CONSULTATION FOR MRI EQUIPMENT INSTALLATION WITHIN THE MODULAR MRI UNIT.	MRI EQUIPMENT SUPPORT CONSTRUCTION	MRI EQUIPMENT INSTALLATION, TESTING AND CERTIFICATION

Scope of work Outline

i. Stage 1
Will include the design of the modular MRI unit and design consulting services for the separate design of the necessary site adaptation and connection portion of the project. The goal of this Stage is to have the modular MRI unit manufacturer work with the Owner, Users, and Design team to assure a functional and complete MRI unit and its connection and interface with the existing medical center. It is planned to have the MRI equipment selected during this stage so that the Modular MRI manufacturer can more specifically design the Modular MRI Unit to fit specific needs. This stage will also include design, and bidding of all required site adaptation work to assure the modular unit can be placed and connected upon delivery. Lump Sum bids will also be received for the site adaptation portion of the project under a separate contract.

ii. Stage 2
Upon approval of Stage 1. The Manufacturer will be authorized for the manufacturing, delivery, placement and connection of the modular unit. Under the separate Contract 2, all construction and improvements required for site adaptation, placement and connection from the existing facility to the Modular unit shall be performed by an Alaska Licensed General Contractor. Before delivery commences the Owners Representative shall inspect and approve the modular unit. Prior to placement the modular unit manufacturers on site representative shall inspect and approve all completed site adaptation work and connections.

iii. Stage 3

Under Contract 1 the manufacturer shall be available to provide support and consultation to the MRI equipment installation team. Under Contract 3 the MRI equipment will be delivered, installed, tested and certified.

3. Project Schedule

a. RFP
- Design and Construction of Modular MRI Unit Out for Proposal - September 27th, 2013
- Non-mandatory pre-proposal meeting October 14th, 2013
- Proposer questions due October 21st, 2013
- Proposal Opening October 31st, 2013, 2:00 pm AKST
- Interview with top two qualifiers November 7th, 2013
- Notice of Intent to Award November 19th, 2013

b. Stage 1 Schedule
- Contract Signed for design portion of Modular MRI and Site adaptation – December 1st, 2013

- Modular MRI Manufacturer, Owner, Users and Design team interaction for site adaptation portion of project – December 1st through December 31st, 2013
- Selection made of MRI to be provided at a TBD date.
- Design of Modular MRI Unit and Separate design for Site adaptation are completed.
- Site Adaptation Package released for Bid to Separate Contractor– December 20th, 2013
- Non-mandatory Pre-Proposal meeting for site adaptation January 6th, 2013
- Proposer questions due January 13th, 2014
- Bids for site adaptation opening – January 20th, 2014, 2:00pm AKDT
- **Stage 1 – Total Project Cost Accepted or Project Cancelled – January 21st, 2014**

c. Stage 2 Schedule
- Contract 1 - Signed and Notice of Intent to Award for manufacture, delivery, placement and connection of modular MRI unit. – February 4th, 2014
- Contract 2 - Signed for all Construction work related to site adaptation and connection improvements not a part of the Modular MRI Unit contract. – February 17th, 2014
- Contract 2 - Site adaptation construction work completed and ready for unit placement – July 30th, 2014
- Contract 1 - Modular MRI Unit Site Delivery Date – August 12th, 2014
- Contract 1 - Placement of the Modular MRI Unit. (Upon inspection and approval of the Site adaptation construction work by the Owner, Design Team, and Modular MRI Manufacturer's Representative).
- Contract 2 - Modular Unit tie into the existing building/site adaptation work by Site Adaptation Contractor. Completion of all project commissioning and closeout requirements. - October 10th, 2014

d. Stage 3 Schedule
- Contract 3 - Delivery of selected MRI Equipment – Anticipated completion - October 22nd, 2014
- Contract 3 -Installation of MRI Equipment, Contract 1 – provide consultation during installation process. Contract 2 – provide construction assistance where requested by the MRI Installers.
- Contract 1 Support Consultation with MRI Installer.

4. Contracting Agency and Site Adaptation Design Team

a. Owner and Contracting Agency:
City of Valdez
Capital Facilities
300 Airport Road, Suite 201
P. O. Box 307
Valdez, Alaska 99686
Project Manager: Laura Langdon

b. Site Adaptation Design Team

Architecture –	Architects Alaska, 900 West 5th Avenue, Suite 403, Anchorage, Alaska 1-907-272-3567
Structural Engineers –	BBFM Engineers, 510 'L' Street, Suite 200, Anchorage, Alaska 1-907-274-2236
Mechanical Engineers –	PDC Engineers, 2700 Gambell Street Suite 500, Anchorage Alaska 1-907-743-3200
Electrical Engineers –	PDC Engineers, 2700 Gambell Street, Suite 500, Anchorage, Alaska 1-907-743-3200

B. Instructions to Bidders

1. Solicitation

a. The City of Valdez and Valdez Medical Center are soliciting Lump Sum Fixed Fee proposals for Design-Build services to provide a Modular MRI Unit and Design Consultation Services for the Site Adaptation for with connection to the existing Medical Center. The Proposal will include two separate prices. One lump sum price will be for Design of the Modular MRI Unit and Design consultation services for the site adaptation required. The second lump sum price will be for manufacture, delivery to the project site from the point of origin and placement of the modular MRI Unit on its permanent foundation.

2. Evaluation and Selection

a. All proposals will be evaluated with the following issues:

Part A – Bid in sealed envelope

All bids shall be evaluated as follows

Low Bid		= maximum points
Other bids	Low Bid divided by Bid times maximum points available.	= xx points

Proposal Submittal Item	% of Total Score	Max Points	Max Possible. Score
Bid for Design Services and Manufacture, Delivery & Placement of Modular MRI Unit To include proposed concept design Floor plan, elevations, and section.	35%	10	350

Part B – Qualifications

a. Letter of Intent			
b. Business and Financial Information	10%	10	100
c. Experience and references	20%	10	200
d. Understanding of the project scope and management plan.	10%	10	100
e. Work Plan	15%	10	150
f. Warranties and Guarantees	10%	10	100
Total for Part B	65%		650
Total point for Full Proposal	**100%**		**1,000**

3. **Proposals**

a. Proposal must be delivered to the Contracting Agency by 2:00 pm Alaska local time on October 31st, 2013.
b. Incomplete proposals will not be accepted.
c. Proposals must include all deliverables.
d. Final selection of a Design-Build Contractor will be made on the basis of the Proposal submitted by the Proposers and final interviews with the Top 2 proposers. Proposals must include designs that meet or exceed the minimum requirements of this RFP. **City of Valdez intends to select a Design-Build Team based on a "Best Value" evaluation.** The City of Valdez reserves the right to select the Modular MRI Manufacturer whom, in its judgment, provides the "Best Value" for Valdez Medical Center and the City of Valdez.

e. A final interview will be conducted by the Selection Committee from Valdez, Alaska via a web conferencing software to be determined, for the top two scoring proposals. Evaluation by the team shall be as indicated below. Final determination of the selected Proposer shall be based on the results of the RFP and Interview.

f. The following shall be the responsibility of the Bidder and will not be reimbursed: Costs of Proposal, Bid Preparation, Bid Delivery, costs of transportation and accommodations to and from the project site.

Summary of Interview Scores

Project:	Medical Center Expansion (MRI)		
Date:			
Time:			
Project No.:	13-310-9192		
	Evaluator:		
	Company:		
	Representative(s) at Interview:		
Item	Description	Score	Score
RFP related items	Project management		
	Qualifications		
	Scope of work		
Project considerations	Approach to project scope		
	Adequate effort proposed		
	Realistic understanding of design and manufacturing schedules		
	Understanding of existing facility considerations		
	Design concepts and considerations		
Experience	Clarity of explanations and examples of modular unit related experience		
	Clarity of explanations and examples of Modular MRI Unit Specific experience		
	Clarity of explanations and examples of cold environment experience		
	Clarity of explanations and examples of marine environment experience		
	Clarity of explanations and examples of seismic zone experience		
	Related experience of project personnel		
	Experience in Alaska		
	Experience in Valdez		
Totals			
	I hereby certify that the above is a true and correct summary of proposals.		
	Scores have been reviewed _____		

Revision: 11/10

4. Evaluation Team

a. Selection Committee:
   i. A Selection Committee appointed by the Contracting Agency for the purpose of reviewing the proposals, will make a selection recommendation. The identities of the Selection Committee members will remain confidential.
b. City of Valdez Project Management Team:
   i. The Selection Committee may discuss any and all Proposals with, and receive and consider comments from the City of Valdez Project Management Team or any member thereof, in connection with the selection process.
c. Contact with Selection Committee is prohibited:

i. Proposers are prohibited from communicating with or discussing the RFP and the Project with any member of the Selection Committee, Project Management Team, or the Contracting Agency or consultants, during the Proposal preparation and evaluation period, except as provided for in this RFP. Any inappropriate contact may, at the sole discretion of the Contracting Agency, be grounds for disqualification.

e. The Contracting Agency may conduct such other investigations as it deems necessary to assist in the evaluation of any proposal and to establish the responsibility, qualifications, and financial ability of Proposers, proposed design professionals, subcontractors, suppliers, and other individuals and entities to perform the work in accordance with the Contract Documents.

5. Terms and Procedures

a. Copies of Documents:
Complete sets of Documents may be obtained from the Contracting Agency.
   i. This RFP document is available for download on our website "www.ci.valdez.ak.us". Click "Bids" in the lower right-hand corner.
   ii. Complete sets of RFP Documents must be used in preparing proposals. Neither the Contracting Agency nor any consultant of the Contracting Agency who might have been involved in the preparation of the RFP Documents assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of RFP Documents.
   iii. The Contracting Agency makes copies of the RFP Documents available on the above terms only for the purpose of obtaining proposals for the work and does not confer or grant any license for any other use.

b. Requests for Information (RFI):
All questions about the meaning or intent of the RFP Documents are to be directed to the Contracting Agency's Construction Coordinator by the Proposer, using the RFI form included herein.
   i. Interpretations or clarifications considered necessary by the Contracting Agency in response to such questions will be issued by Addenda. Any proposer is allowed to be on the plan holders list. When addenda are issued, all plan holders will be automatically notified. If a proposer is not on the plan holders list, it is their responsibility to acknowledge all addenda.
   ii. Questions received after the deadline for receipt of RFI, as indicated in the Project Schedule, may not be answered.
   iii. Only questions answered by formal written Addenda will be binding; oral and other interpretations or clarifications will be without legal effect.
   iv. Addenda may also be issued to modify the RFP Documents as deemed necessary by the Contracting Agency.

c. Pre-Proposal Conference:
Representatives of the Contracting Agency will be present to discuss the Project.
   i. Contracting Agency will transmit addenda it considers necessary in response to questions that arose at the conference.
   ii. Oral statements made at the conference may not be relied upon and will not be binding or legally effective.

d. Examination of RFP Documents and Site: It is the responsibility of each Proposer, before submitting a Proposal, to:
   i. Examine thoroughly all RFP documents.
   ii. Visit the site to become familiar with the general, local, and site conditions that may affect cost, progress, or performance of the work.
   iii. Consider federal, state, and local laws and regulations that may affect cost, progress, and performance of the work.
   iv. Study and carefully correlate the Proposer's knowledge and observations with the RFP and other related data.
   v. Promptly notify the Contracting Agency of all conflicts, errors, ambiguities, and discrepancies that the Proposer has discovered in the RFP.

e. Information Available to Proposers:
   i. Additional reports and other documents that may pertain to the Project or to the site have been distributed to the Proposers as attachments the RFP. Unless such additional reports, information, etc. are included in the RFP, they shall not be considered “Contract Requirements”, and the Proposer may not rely on their accuracy or completeness.

f. Information Relating to Existing Surface and Subsurface Conditions and Structures: The Contracting Agency has identified certain reports and/or tests, which have been utilized by the Contracting Agency in preparation of the RFP.
   i. The Proposer may rely on the general accuracy of the technical data contained in such reports but not on other data, interpretations, extrapolations, or opinions contained neither in such reports, nor upon the comprehensiveness thereof for the purposes of preparing their Proposal, either for design or for construction.
   ii. These reports are part of the Contract Documents; however, the Proposer is responsible for any interpretation or conclusion that it draws from such reports.

g. Supplementary Investigations:
   i. Before submitting a Proposal each Proposer is responsible for identifying potential additional or supplementary examinations, investigations, explorations, tests, studies, or data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the site or otherwise, which may affect cost, progress, or performance of the work, or which relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by the Proposer. If the City of Valdez deems that additional or supplementary information is required, City of Valdez may elect to conduct such examinations, investigation, explorations, tests or studies to provide the necessary information requested.

h. Access to Site:
   i. On request, the Contracting Agency will provide each Proposer additional access to the site as necessary for submission of a proposal. The Proposer must clean and (or) restore the site to its former condition upon the completion of site observations if proposer disturbs the site.

i. Work at the Site by Others:

i. If the Site Adaptation Contractor and possibly other shall perform work on the site, or utilizes separate contractors, the Contracting Agency will identify such work and contracts. The Contracting Agency will further describe the general nature of work that is to be performed at the site by the Contracting Agency or others (such as utility companies) that relate to the work for which a Proposal is to be submitted. On request, the Contracting Agency will provide copies of the contract documents for such work (other than portions thereof related to price) to the Proposers.

j. Hazardous Materials:
See the General Conditions of the Contract for provisions that apply to asbestos, PCB's, petroleum, radioactive materials, and other hazardous wastes.

k. Sales and Taxes:
   i. All applicable sales and taxes shall be included in the Lump Sum Price.
   ii. See Agreement and General Conditions of the Contract for additional information.

l. Contract Time: The time within which the work is to be completed will be incorporated into the Agreement.
   i. See Project Schedule and Proposal Form for interim milestones relating to design, construction and completion.
   ii. The selected Proposer will be required to satisfy the Contracting Agency that it will be able to achieve Substantial Completion and Final Completion within the designated or proposed times.

6. Request for Information

Valdez Medical Center Modular MRI RFP
Project No.: 13-310-9192

Request # _____Item: _____
Ref. Narrative Section; Drawing. and/or Specification Section:

Description:

Approved:_____Date: _____

Response

Remarks:

By:
Approved:_____ Disapproved:_____

C. Proposal Submittal Requirements

1. General Information

a. Submittal:
   i. Proposals shall be enclosed in an opaque sealed envelope or box, addressed to the Contracting Agency as per Instruction to Proposer marked with the Project Title, Project Number and identified as Design-Build Proposals. The proposal package shall also be clearly marked identifying the name and address of the Proposer. The Lump Sum Proposal Form, Alternates Pricing Data, Bid Security Bond and Non-collusion Affidavit shall be in a separate sealed envelope clearly identified as Price Proposal.

   ii. The Proposal shall be delivered to the location identified in the Instructions to Proposer. Do not send Proposals via the US Postal Service. If the Proposal is required to be sent from outside Alaska, a courier service shall be utilized to assure direct delivery to the location identified. The City of Valdez and Valdez Medical Center assume no responsibility for loss, tardiness or damage to Proposals delivered to the main reception desk, administration, mail distribution department or any location other than the location indicated.

b. Withdrawal or Modification after Submission:
   i. Proposals may not be modified after submission. Withdrawal of a Proposal after submission will result in forfeiture of the proposal deposit and proposal security.

2. Proposal Submittal Requirements

Part A – Bid (in sealed envelope)

a. Items Required:

   i. Bid form completed
   ii. Bid bond form completed
   ii. Non-collusion affidavit completed.
   iv. Preliminary proposed concept design drawings to include
      1) Floor plan
      2) Exterior Elevations
      3) Section

Part B – Qualifications

a. Narrative shall include all information noted below for Statement Qualifications, Financial information, experience on similar projects, design build experience, capacity to complete the project, safety and quality control plans.
b. Resumes for each key personnel
c. Work Plan
d. Letter of commitment
e. Statement of Qualification
   i. Proposals should only address the evaluation criteria listed above. Submittals should include all of the following and adhere to the specified criteria.

Letter of Intent:	1 page maximum
Business and Financial Information	10 pages maximum
Experience	16 page maximum
Understanding of the project scope and management plan	10 pages
Work Plan:	10 pages
Warrantees and Guarantees	2 pages

   ii. One page is defined as one side of a standard 8 ½" x 11" sheet of paper.

3. Proposal Deliverables

Part A - Bid

a. Bid Proposal:
   i. Bid for Modular MRI Unit Design Services and Site Adaptation Design Consulting Services.
      1) Modular MRI Unit design services to include all time and expenses related to project meetings, design and preparation of shop drawings reviews, preparation of final shop drawings signed and sealed by State of Alaska registered engineers and architect, air fares to meetings and other reimbursable items necessary for completion of the task. Also to include all time and expenses related to design consultation and review of site adaptation design and final drawings and documents related to separate site adaptation design.
      2) Bid for Manufacture, Delivery to Project Site from Point of Origin, and Placement of the Modular MRI Unit. Cost shall include all materials and labor, all taxes, tags and approvals by regulatory authorities, shipping costs, insurance costs, road closures and traffic control, and all other related expenses noted or otherwise.

b. Bid Bond:
   i. Completed bid bond for the value of both bid numbers noted above combined.

c. Non-Collusion Affidavit:
   i. Completed, signed and notarized.

Part B - Qualifications

a. Letter of Intent:
   i. Company Name
   ii. Location
   iii. Valid Business License
   iv. Insurance

b. Business and Financial Information
   i. Years as a company
   ii. Financial Capability to complete the project
   iii. Any outstanding litigation related to projects.
   iv. Capacity: Provide a summary of your firm's current and anticipated workload from September 2013–November 2014. Include a brief description of projects, dollar values of design and construction for which you are responsible and bonding capacity available for the referenced period.
   v. Safety and Quality Control Procedures: Summarize your safety and construction quality control procedures

c. Experience
   i. Experience on Similar Projects: Provide a summary of recent projects similar in size and complexity to be completed as part of this project including the following
      1) Years of experience constructing Modular Medical Units and types of modular units manufactured
      2) Modular MRI Unit specific experience. (minimum of 3)
         a) Locations
         b) Types of units
         c) Size of units
         d) References
         e) Years in Place
         f) Contact name, phone number, and addresses
      3) Cold weather environment experience (minimum of 1)
         a) Locations
         b) Types of units
         c) Years in place
         d) References
         e) Contact name, phone number, and address
      4) Marine Environment experience (minimum of 1)
         b) Types of units
         c) Years in place
         d) References
         e) Contact name, phone number, and address
   ii. Design–Build Experience: Provide a summary of recent design–build projects for the prime contractor, all major subcontractors and all primary design sub-consultants. Indicate the degree to which the proposed team has worked together

before on design-build projects. Provide proof of licensure to practice architecture and engineering in Alaska for the primary design sub-consultants.

iii. Key Personnel Experience and Availability: Provide a one page resume for the key personnel that will be assigned to this project and what their position will be within the project. Highlight each individual's experience on similar projects. Summarize projected time allocated to this project and all other anticipated projects between September 2013 and November 2014. Include references with contact names and telephone numbers for the two most recent relevant projects for each key individual. If certain individuals will be performing multiple functions then explain this as appropriate for the management structure being proposed by your team.

d. Understanding of Project Scope and Management Plan:
   i. Summarize how your team will be organized and how you will staff this project. Include specific information on how you intend to manage the design and manufacturing phases for the different elements of the project. Outline what work will likely be accomplished via subcontract versus your own forces and how you will select subcontractors and vendors.
      1) Provide general information and comments regarding the project schedule. Comment on any significant issues based on your review of the overall goals summarized herein.
      2) Innovative Ideas: Summarize any unique design, construction, and/or scheduling concepts that your team may bring to this project that will benefit the City of Valdez or Valdez Medical Center and/or their prospective clients and visitors.

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e. Work plan: Describe your work plan either through written description or graphics.
   i. Describe how your company will work with the Owner, Site Adaptation Design Team, and Medical center to assure the most cost effective, innovative design for the Modular MRI Unit.
   ii. Describe how you will obtain all required approvals from governing authorities for the design of your Modular MRI Unit including but not limited to State of Alaska and City of Valdez Alaska laws, ordinances, regulations, codes and amendments.
   ii. Describe your company's manufacturing process with regards to assuring the Owner and Medical Center that all work meets required standards and the best quality product.
   iii. Describe your proposed shipping process. Include all routes and how you will provide for all fees, licenses, taxes, tags and other requirements for delivery to the project site form the point of origin.
   iv. Describe how you will minimize impact on the City of Valdez during the delivery process.
   v. Describe your site storage and safety requirements and how you will meet them.
   vi. Describe how your work plan for placement will assure the hospital and its existing facilities safety and compatibility.

f. Warranties and Guarantees:
   i. A minimum 10 year warrantee is required.

ii. Provide a complete copy of standard warrantees and/or guarantees provided for the Modular MRI Unit.
iii. Provide a complete list of any preconditions and limitations on warrantees and/or guarantees.

D. Contract Information

In addition to the RFP Submittal Requirements and Performance Standard Requirements the following are hereby incorporated as Agreement and Conditions of the Contract:

1. AGREEMENT AND CONDITIONS OF THE CONTRACT

a. The form of agreement between the Owner and the Design-Builder will be as per the sample, which has been modified by the Owner and as indicated therein.
   1. DBIA 525, Standard Form of Agreement between Owner and Design-Builder-Lump Sum, 1998 Edition as provided in Appendix A.

b. The Contract Definitions are hereby incorporated into the contract by reference.

c. The General Conditions are hereby incorporated by reference, with copy attached, and are DBIA 535, Standard Form of General Conditions of Contract between Owner and Design Builder, 1998 Edition as provided in Appendix A.

d. Supplemental General Conditions Requirements to "The Standard Form of General Conditions of the Contract between the Owner and Design-Builder as provided in Appendix C.

e. Bid Bond –Sample copy provided in the attached Appendices

e. Performance Bond and Labor and Payment Bond – Sample copies provided in the attached Appendices.

f. Bonds and Insurance – See Article 3.5 of Division 10, City of Valdez Standard Specifications and Standard Details Dated 4/7/03. Reference copy provide in the attached Appendices.

g. Contractor Certificate of Substantial Completion Sample copy provided for reference in the attached Appendices.

h. Contract Release – See City of Valdez Contract Release. Sample copy provided for reference in the attached Appendices.

2. CONTRACT DEFINITIONS

a. Applicability: These definitions are integral to the agreement documents
   i. Contract Documents: Those documents identified in the Agreement, between Owner and Design-Builder and Standard Form of General Conditions.
   ii. Conceptual Documents (Request for Proposals Documents):
      1) The Contracting Requirements
      2) The Program Requirements
      3) The Performance Requirements.
      4) The Product Specifications.
      5) The Design and Construction Procedures.

b. Proposal: The Proposal Form and Exhibits, which comprise the information prepared by the Prospective Proposers to show their method of complying with the project requirements.
   i) The Proposal period is the time frame during which Prospective Proposers prepare their Proposals.
   ii) Substantiation submittals specified to occur during the Proposal period are intended to accompany the Proposal.

c. Design and Construction Phases
   i. Preliminary Shop Drawings: The process of determining the form, arrangement,

size, and materials of the work or a portion of the work, as described in the Conditions of the Contract and the Design and Construction Procedures.

1) The preliminary shop drawings will provide adequate detail and information to assure site adaptation requirements for the site adaptation design team to complete the design for Contract 2 bidding.

ii.. Final Shop Drawings: The process of preparing working drawings, specifications, and other documents describing the work or a portion of the work in sufficient detail to allow accurate and complete construction, as described in the Design and Construction Procedures.

1) The end of Construction Documents for the project as a whole is a Milestone.
2) The end of Construction Documents is the time at which all portions of the Construction Documents are complete.

d. Construction:
   i. The Construction period is the time from the beginning of work on the project site until final payment as defined by the Conditions of the Contract.
e. Substantial Completion: As defined in the Conditions of the Contract; prerequisites are:
   i. Design-Builder's complete punchlist of items to be completed.
   ii. Owner's complete punchlist of items to be completed.
   iii Compliance with requirements of governing authorities, for submittals, inspections, and permits.
   iv. Compliance with Owner's and Valdez Medical Center requirements for access to areas occupied by the Valdez Medical Center.
   v. Commissioning.
   vi. Final cleaning.
   vii. Operations and Maintenance manuals.
   viii. Warranties.
   ix. Specialized Maintenance supplies and tools.
   x. Project record documents.
   xi. Training of Owner's personnel.
   xii. Maintenance plan.
   xiii. Occupancy certificate from authorities having jurisdiction.
f. Closeout: The process of completing all details of construction.
   i. The Closeout period is the time from the Date of Substantial Completion until final payment, both as defined by the Conditions of the Contract.
   ii. Before and during the Closeout period, the Owner will ascertain whether the completed project complies with the Contract Documents.
g. Occupancy: The period during which the project is occupied for its intended purpose.
   i. The Occupancy period begins at the Date of Substantial Completion, as defined by the Conditions of the Contract.
   ii. Owner is responsible for operation and maintenance of the project during Occupancy, unless specifically indicated otherwise for certain items.
h. Correction Period: Function and time frame as defined by the Conditions of the Contract

3. MANAGEMENT AND COORDINATION

a. Access to and Use of the Site

i. The Modular Manufacturer shall coordinate with the Owner's Representative, Medical Center Team and to assure an adequate area for storage of all times necessary for all materials and items.
ii. The Modular Manufacturer shall be responsible for the safety and security of all items associated with their portion of the work.

b. Change in the Work
   i. See Standard Form of General Conditions of Contract for procedures and
   ii. Request for Information or Clarification of Owner's RFP: Owner's Representative.
   iii. Requests for Substitution from Approved Construction Documents: Owner's Representative.
   iv. Request for Modifications to Approved Construction Documents: Owner's Representative.

c. Progress Schedule
   i. Submit updated schedule whenever adjustments that change the Contract Times or Milestones are approved, but not less than monthly.

d. Progress Documentation for Owner Information
   i. During Design Periods: Graphic displays sufficiently detailed to allow Owner to identify the status of the design.

4. CONSTRUCTION PHASE SERVICES

a. Construction Phase Services shall consist of manufacturing, delivering to the project site from the point of origin and placement of the Modular MRI unit. It shall include inspection of the site adaptation portion of the work to assure that placement, connection and accommodation of the future MRI unit are acceptable. Provide assistance to the Owner as requested in its oversight of the construction, commencing with the notice to proceed with construction and terminating following final acceptance of the Project and Owner approval of the Design-Builder's final invoice for all services throughout the construction phase.

b. The Design-Builder shall respond to Owner initiated requests through the Owner's Representative for clarifications of the Construction Documents including any inadequacies in the documents. The Design-Builder shall prepare appropriate instructions or modifications to the Construction Documents for field use. Design-Builder shall advise the Owner on those matters, which may affect the utilization of the project, or extra cost or additional time associated with Owner's change directives.

c. The Design-Builder's Design Consultants shall certify in each Application for Payment that the Consultant has personally inspected the Work, and that the Work represented by the Application has been constructed in accordance with the intent of the Design Consultant's Construction Documents.

d. Upon notice of Substantial Completion, the Design-Builder shall participate in a detailed final construction inspection with the Owner's Representative of all architectural, structural, mechanical, and electrical aspects of the Project. The Design-Builder and its Design Consultants shall assist the Owner's Representative in the preparation of a list identifying any deficiencies or items to be accomplished and may be required to participate in final re-inspection of the Project with the Owner's Representative to ascertain that the corrections have been made.

5. SUBSTANTIAL SUBMITTAL PROCEDURES

a. Time Frames: As specified. If there is a conflict between the degree of detail or completion specified and the progress of the design or construction, obtain a clarification before submitting.
b. Recipient: Owner's Representative.
c. Number of Copies: 3 hardcopies, plus copy on electronic media for Owner's use and records; Owner will return not more than one hardcopy.
d. For time periods that constitute Milestones, all substantiation submittals required during that period must be complete and accepted before the Milestone can be considered achieved.
e. Submit complete sets of documents containing all substantiation at end of the following periods:
   i. Preliminary Shop Drawings period.
   ii. Final Shop Drawings period.
f. Resubmissions: Clearly identified as such, with all changes made since the original submittal clearly marked.

7. CHECK LIST OF DELIVERABLES

Item This document is to assist the Contractor/Project Manager with tracking submittal information only. Contractor should not construe this as a complete list and be released from other proposal or submittal requirements.	Stage	Required						Waived
		At Proposal	At Award	Allotted Time After Award	During The Work	Prior To Substantial Completion	Prior to Final Payment	
Proposal Information(summary & exhibits)	RFP	X						
Proposal Form (Sealed)	RFP	X						
Proposal Bond	RFP	X						
Valid Business License Copy	RFP	X						
Non-Collusion Affidavit	RFP	X						
Performance Bond	Stage 1		X					
Payment Bond	Stage 1		X					
Subcontractor List	Stage 1	X						
Certified Duplicate Copies of Insurance Policies	Stage 1		X					
Executed Copies of Contract	Stage 1		X					
Substitution Requests	Stage 2	X						
Schedule of Values per CSI Division	Stage 2		X					
Submittal Log	Stage 2			X				
CPM Schedule/ Updates	Stage 1			X				
Safety Work Plan/ Updates	Stage 2	X						
Preliminary Shop Drawings	Stage 1			X				
Submittals/Samples/Product Data	Stage 2			X				
Manufacturer's Punch List	Stage 2				X			
Request for Substantial Completion Status	Stage 2					X		

Item This document is to assist the Contractor/Project Manager with tracking submittal information only. Contractor should not construe this as a complete list and be released from other proposal or submittal requirements.	Stage	Required						Waived
		At Proposal	At Award	Allotted Time After Award	During The Work	Prior To Substantial Completion	Prior to Final Payment	
Certificate of Occupancy	Stage 2					X		
As Built Construction Drawings (Electronic disk – AutoCad)	Stage 2					X		
As Built Technical Specifications	Stage 2					X		
Approved Stamped Drawings from Authority Having Jurisdiction	Stage 2				X			
Set of Approved Submittals	Stage 2				X			
Material and Equipment Data Manuals (Five sets)	Stage 2	X			X			
Operation Test Records	Stage 2				X			
Affidavit of Payment of Debts and Claims	Stage 2						X	
Affidavit of Release of Liens	Stage 2						X	
Certificate of Final Completion and Compliance	Stage 2						X	
Warranty of Work	Stage 2						X	
Consent of Surety Company to Final Payment	Stage 2						X	
Certificate of Final Payment	Stage 2						X	

E. Design Criteria

1. BASIC DESIGN CRITERIA

a. Referenced Codes and Standards
In addition to the codes noted below all work shall comply with all other applicable federal, state and local laws, regulations, ordinances, standards and amendments.

i. Architectural
International Building Code (IBC) – 2009 Edition
International Fire Code (IFC) – 2009 Edition
International Energy Conservation Code (IECC) – 2006 Edition
National Fire Protection Association (NFPA) L101 Life Safety Code – 2000 edition
AIA Design Guidelines for Health Care Facilities – 2010 Edition
ICC ANSI 117.1 ADA Accessibility Guidelines – 2009 Edition

ii. Structural
International Building Code (IBC) – 2012 Edition
Minimum Design Loads for Buildings and Other Structures – ASCE 7-10
Building Code Requirements for Structural Concrete - ACI 318-09
Specification for Structural Steel Buildings – ANSI/AISC 360-10
Seismic Provisions for Structural Steel Buildings – ANSI/AISC 341-10
Design of Cold-Formed Steel Structural Members – AISI S100-07 with Supplement S2-10
Steel Deck Institute

iii. Mechanical
International Building Code (IBC) – 2012 Edition
International Mechanical Code (IMC) – 2012 Edition
Uniform Plumbing Code (UPC) – 2009 Edition
NFPA 13
NFPA 99C
Facility Guidelines Institute “Guidelines for Design and Construction of Health Care Facilities (FGI) – 2010 Edition
ANSI/ASHRAE/ASHE Standard 170-2008, “Ventilation of Health Care Facilities”.

iv. Electrical
International Building Code (IBC) – 2012 Edition
NFPA 70 – National Electrical Code (NEC)
NFPA 72 – National Fire Alarm Code
ASHRAE 90.1
Facility Guidelines Institute “Guidelines for Design and Construction of Health Care Facilities (FGI) – 2010 Edition
Illumination Engineering Society of North America (IESNA) Handbook 10.
BICSI Telecommunications Distribution Methods Manual, Twelfth Edition

v. Other

American Association of State Highway Transportation Officials Materials and Methods of Sampling and Testing.(AASHTO)
All non-listed City of Valdez, State of Alaska, and US Federal laws, regulations, codes and ordinances, affecting all aspects of the project outlined in this RFP

vi. City of Valdez
City of Valdez standard specifications Article 10

2. APPLICABLE EXISTING CONDITIONS

a. Architectural

i. Existing Building - Code Data

Occupancy Group:	I2
	Hospital per NFPA 101
Construction Type:	Type IB – non-combustible per IBC
	Type II(000) per NFPA 101
Basic Allowable Area:	Unlimited, 4 Stories
Smoke Compartments:	4

All Storage Areas protected by 1 hour separation
Designed in 2003 and occupied in 2005 the Providence Valdez Medical Center is a new building that replaced the aging hospital dating from the 1970's

ii. Foundation:
The building has a composite concrete on-grade floor system supported on insulated concrete perimeter walls and interior concrete piers.

iii. Exterior Walls:
The hospital building is enclosed by pre-finished aluminum panels on 8" heavy gage metal studs.

iv. Roof Assembly:
The existing medical center roof is a flat trussed roof. The roof assembly consists of a metal pan deck on bar joists covered by a layer of gypsum board and a minimum of 4" of closed-cell rigid insulation for an average R-value of 25, The roof is protected by an exposed 60 mil EPDM roof membrane.
The roof system incorporates two significant clerestory windows over the main Lobby and the Day Room in the Long Term Care wing.

v. Windows:
All the windows are a custom aluminum frame assembly with most of the windows incorporating a small awning type operable slot for air transfer

vi. Finishes:
Tile floors in the main lobby and primary east west circulation corridor provide a durable long lasting surface.

b. Structural

i. The existing Valdez Medical Center (VMC) is a steel framed building originally constructed in 2004. It is purportedly designed to the 2000 International Building

Code but the Structural General Notes refer to Seismic Zone 4, which ceased to exist as a designation with that code.

ii. Roof System:
The roof framing is steel deck (either 1-1/2" or 3" deep depending on the zone) spanning between steel joists and wide flange steel beams. The joists and beams are supported by joists girders, wide flange steel girders, and hollow structural steel columns.

iii. Floor System:
The floor framing at the elevated mechanical room is a concrete slab on composite steel deck. It is supported by wide flange steel beams. The beams are supported by wide flange steel girders and hollow structural steel columns.

iv. Seismic:
The lateral load resisting system is ordinary braced frames using hollow structural sections, rods, and single angles for braces. The braces are chevrons, inverted chevrons, and two-story x-braces. There have been significant changes in the detailing requirements for braced frames in the recent past. It is unlikely that these frames meet those requirements.

v. Foundation:
The foundations system is concrete spread and strip footings. The slab on grade is 4" concrete, except in three areas, where a 6" concrete slab was used.

vi. Structural Limitations:
The existing framing of the PVMC does not have sufficient capacity to support new vertical or lateral loads without modification. Thus, any additions placed adjacent to the existing facility should be kept seismically separate. In addition, the newer structure should not be allowed to cause snow drifting to occur on the existing structure, as that might overstress the existing framing. Any doors, hallways, or mechanical ductwork between the new and existing structures should be placed in bays that do not have bracing or should be located and sized to not interfere with the existing bracing.

c. Mechanical

i. The mechanical systems within the PVMC facility were constructed in 2003.

ii. City of Valdez utilities that serve the building include water, sanitary sewer, and stormwater.

iii. The hospital has two water service entries. One of the water service entrances comes into the building near proposed module location. It is a combined domestic cold water and sprinkler system entrance.

iv. The hospital roof is flat and is provided with roof drains with scuppers provided for overflow.

v. The hospital has central oxygen, medical gas, and medical vacuum.

vi. The hospital is heated through a central oil fired, hydronic firetube boiler heating plant. Heating medium is water and is distributed at 180 degrees F. This system has available capacity to heat the module.

vii. The hospital is cooled with central chilled water system. This system is at capacity and cannot be used for the module.

viii. The existing ventilation system is at maximum capacity and cannot be used for the module.
ix. The facility is protected throughout with a wet sprinkler system. Dry sprinkler service is provided for the main entry canopies.
x. The hospital has an existing Barber Coleman System 8000 Invensys DDC system.

d. Electrical
   i. The electrical systems within the PVMC facility were constructed in 2003. The electrical systems and spaces around them are well maintained.
   ii. Electrical Service and Power Distribution
      1) The Hospital's power is distributed from the maintenance building at 480Y/277V to distribution panels located in the penthouse. Utilization (208Y/120V) power is supplied through distributed transformers supplying local panelboards such as in the nursing wing. The electrical connections are routed to the north of the utilidor under the proposed MRI modular building expansion.
      2) Distribution equipment is manufactured by Siemens.
   iii. Heat trace at the roof drains has been provided for freeze protection as shown at right.
   iv. Telecommunications systems
      1) The hospital's telecommunication connections are like the power system connected to the utilities at the Maintenance building.
      2) There are copper and fiber backbone cables from the MDF to the maintenance building.
   v. Nurse Call. A TekTone Tek-Care system was installed within the hospital as part of the original construction.
   vi. Fire Detection and Alarm within the hospital is a Notifier addressable system. The system includes visual and audible alarm devices, manual pull stations, duct smoke detectors, sprinkler flow and tamper switches, and automatic smoke/heat detectors in the corridors, patient rooms and at other specific locations.

3. New Modular MRI Unit Requirements

a. Architectural

   i. Proposed Modular MRI Unit Code Data
      - Occupancy Group: I2 per IBC
Hospital per NFPA 101
      - Construction Type: Type IB non-combustible per IBC
Type II(000) per NFPA 101
   ii. Exterior Envelope:
      1) Exterior Finish – Prefinished Aluminum to match existing
      2) Exterior Fenestration – Fenestration pattern to match existing building.
      3) Insulation
         a) Minimum above grade wall R value –R-19 with R5.6 continuous insulation
         b) Minimum below grade wall R value with R7.5 continuous insulation
         c) Minimum roof R-value – R-25 continuous insulation
         d) Minimum glazed opening R-2 value
         e) Minimum floor R-value – R-15 for 24 inches below

f) Minimum Exterior Door R value – R-2

4) Roof System:

a) Preferred: Exposed fully adhered EPDM membrane roof system.

b) Internally drained with overflow provisions to be connected to underground roof drain system.

iii. Typical Interior basis of design finishes:

a) Gypsum wallboard: 5/8" Type 'X' - Finish 4.

b) Floors

i) Carpet: Collins and Aikman Caledonia carpet tiles 18"x18", vinyl backing, patterned

ii) Resilient Wall Base: Johnsonite: 4" carpet wall base.

iii) Ceramic tile: Daltile Diamante ColorBody Porcelain Tile 12"x12":

iv) Sheet Vinyl: Armstrong Medintech – 0.80 in wear layer, homogenous, 750 psi pressure rating, UV cured urethane coating, Heat welded seams.

c) Paint: ICI Dulux paint, Acrylic Satin finish.

d) Acoustical Tile Ceiling:

Ceiling Tiles: Armstrong Non-directional fissured 24x24x5/8" white tegular edge

Grid: 15/16" double web galvanized, heavy duty, white finish.

e) Vinyl wallcovering: Provide fiber reinforced.

iv. FAA requirements related to MRI.

1) Markings may be required on the unit to notify pilots of MRI location as required by the US Department of Transportation Federal Aviation Administration regulations and guidelines for Helipads and Heliports.

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iii. Modular MRI Unit - Functional Space Requirements:

1) MRI Room

a) Room finished dimensions shall be capable of accommodating a 1.5 T MRI unit from an as yet unknown Manufacturer. As well as all other required or noted appurtenances.

b) Provide RF shielding system and supports as well as active or passive magnetic shielding as required to accommodate a 1.5 T MRI unit from an as yet unknown manufacturer and existing site conditions and adjacencies.

c) Provide removable exterior wall side panels on the easterly wall to allow for future installation of MRI unit. (Refer to attached architectural concept drawing.)

d) Provide sheet vinyl.

e) Provides painted gypsum wallboard wall.

f) Provide suspended acoustical tile ceiling.

g) Provide plastic laminate casework to accommodate patient support. This will include but may not be limited to pads, pillows, sheets, blankets, and other necessary equipment.

H) Provide in wall medical gas connections for oxygen and suction. (Refer to mechanical portion of the RFP)

i) Accommodate all venting necessary for purging of the MRI unit. (To be determined)

j) Above ceiling space shall be adequate for accommodation of RF shielding, magnetic shielding and all ductwork, conduit, piping and other infrastructure needs for completion of the completely functional MRI suite.
k) Provide acoustic panels as required to minimize impact on adjacent hospital spaces.
l) RF shielded door(s) into the MRI room shall have a door opening width of 5 feet to accommodate bed access.

2) Equipment Room
   a) Provide adequate space required to accommodate all mechanical and electrical equipment necessary for proper function of the MRI unit and planned equipment. Adequate floor area and height shall be provided to assure clearances needed for all ductwork, piping and conduits, MRI equipment penetrations, and required maintenance and access clearances. Equipment shall include but not limited to the following:
      - All controllers and equipment to be provided and installed by MRI manufacturer.
      - Passive magnetic shielding equipment and controllers
      - MRI Chiller control equipment and controllers.
      - Equipment and controllers necessary from change over from Chiller MRI cooling to City Water emergency cooling.
      - Electrical equipment and panels as necessary for power and control of all equipment items. (refer to mechanical and electrical portion of RFP).
   b) Floor finish shall be sheet vinyl.
   c) Walls shall be gypsum.
   d) Ceiling finish shall be at manufacturer's discretion.
   e) Door access shall be from the exterior side aligned for access from the east side. Doors shall be insulated as required to meet International
3) Control Room
   a) Floor finish shall be sheet vinyl.
   b) Wall finish shall be gypsum wallboard with FRP wainscot to 4'-0" height above finish floor.
   c) Ceiling shall be suspended acoustical ceiling tile.
   d) Casework shall be provided to allow for the MRI control station, remote infuser, and three additional computer work stations, storage of paperwork, file cabinets (under-counter), music player and open countertop workstation space.
   e) Patient Access doors shall be solid core wood with a door opening size of 5'-0". Door shall be smoke gasketed and automatic operation with badge access from the corridor side and hands-free slam switch or IR access from the interior side.
4) Toilet
   a) Shall be ADA accessible compliant.
   b) Shall include water closet, sink, 1 locker for storage of patient personal effects, mirror soap dispenser, paper towel dispenser, waste-receptacle.
   c) Floor finish shall be sheet
   d) Wall finish shall be gypsum wallboard with FRP wainscot on all walls with or adjacent to plumbing fixtures to 4'-0" above finish floor.
   e) Ceiling shall be gypsum wallboard painted.
5) Vestibule

a) Shall provide ADA compliant access to and from the exterior to the hospital interior.
b) Floor finish shall be ceramic tile.
c) Wall finishes shall be gypsum wallboard with a fiber reinforced plastic wainscot. Color to match existing hospital
d) Ceiling shall be gypsum wallboard.
e) Interior opening to the Corridor extension (see below) shall be through an aluminum storefront with a 4'-0" wide door. Existing may be reused if possible.
f) Vestibule Interior walls not a part of the glazed aluminum storefront shall be painted gypsum wallboard.
g) Exterior: Glazed Aluminum Storefront to match existing or reuse of existing

5) Corridor Extension
a) Provide an extension of the existing corridor to allow for inpatient access to the MRI Suite and connection to the vestibule. Walls into adjacent spaces shall be smoke partitions as required by the 2009 IBC and the 2000 NFPA 101 Life Safety Code.
b) Floor finish shall be sheet.
c) Walls shall be gypsum wallboard with FRP wainscot and hand/bumper rail to match existing and continue the aesthetic of the hospital corridor.
d) Wood trim and paint colors of walls shall be continued.
e) Existing soffit cove lighting shall be extended to match existing.
f) Ceiling shall be suspended acoustical tile . All exit lights and other fire alarm and protection devices shall be extended and relocated as required.

b. Structural

i. Structural loads for use in the design of the modular MRI unit and any site adaptation shall be as follows:

1) SNOW — Pg = 160 PSF, Pf = 120 PSF
Ce = 0.8, Ct = 1.0, I = 1.2

2) FLOORS:
a) OFFICE — 60 PSF
b) EQUIPMENT WEIGHT — MRI UNIT 23,000 LB

3) WIND — BUILDING OCCUPANCY CATEGORY IV
120 MPH 3-SECOND GUST
I = 1.15 EXPOSURE C
(GCpi) = 0.18, qh = 31 PSF

4) SEISMIC — BUILDING OCCUPANCY CATEGORY IV
SEISMIC DESIGN CATEGORY D
SOIL SITE CLASS C, I = 1.5
Ss = 1.845,
S1 = 0.687,
Sds =1.23,
Sd1=.595

c. Mechanical

i. Design Criteria
   1) Location
      a) Latitude 61.13N
      b) Longitude 146.35W
      c) Elevation 23

ii. Design conditions for all new and renovated work are as follows:
   1) Heating Degree Days 9,711
   2) Winter Design Temperature: -2 Degrees F
   3) Summer Design Temperatures: 70 Degrees F DB
      56 Degrees F WB
   4) Design Room Temperature: 72 Degrees F
   5) Equipment Room Temperature: 85 Degrees F
   6) Precipitation: 1 inch per hour.
   7) Sound Criteria
      a) MRI Equipment Room: NC 35 (with MRI off)
      b) Operator Room: NC 35

ii. General Mechanical
   1) Unless specifically noted otherwise, provisions shall be made within the addition for adaptation to any model of 1.5T MRI. This includes, but not limited to:
      a) Access for piping/duct distribution systems.
      b) Cooling and ventilation requirements.
   2) Mechanical equipment installation and maintenance access.
      a) No equipment requiring maintenance shall be located on the roof.
         Locations of air inlets and outlets, and other devices or equipment should be mindful of 8 foot high snow drifts against the side of the module
      b) Maintenance access shall be readily available to all equipment, valves, filters, controls, and appurtenances that require regular (at least once every two years) maintenance.
      c) Highly recommended that equipment access be at floor level.
      d) If equipment is located at the ceiling, provisions for installing a ladder of adequate height, and in accordance with OSHA safety standards, shall be provided.
      e) Provide NEC clearances for all equipment.
   3) Provide RF shielding of all systems in accordance with the MRI manufacturer's installation guidelines.
   4) All piping and duct terminations shall be sealed for transportation.
   5) Valdez is coastal, exterior components are to be corrosion resistant.
   6) All equipment, piping, and ductwork are to be seismically braced. System to be designed by a professional engineer licensed in the State of Alaska.

iii. Insulation
   1) Piping Insulation to be as follows:
      a) All domestic hot, cold, and hot water recirc piping to be minimum 1 inch.
      b) All rainleader and overflow piping to be minimum 1 inch.
      c) Plumbing Vent Through Roof (VTR) is to be insulated within 3 feet of roof penetration, minimum 1 inch thick insulation.
   2) Hydronic Piping
      All hydronic heating supply and return piping to be minimum 1 inch thick.
   3) Chiller Piping

All chilled glycol supply and return piping to be minimum 1 inch thick.

4) Ductwork
   a) Outside air ducts to be minimum 2 inches of insulation.
   b) Exhaust air and relief air ducts, within 10 feet of exterior penetration to be minimum 1 inch.
   c) Mechanically cooled supply duct to be minimum 1 inch thick insulation.

iv. Plumbing
1) Plumbing Fixtures
   a) Provide wall mounted ADA water closet, wall carrier, 1.6 gpf manual flush valve, open front seat with no cover.
   b) Provide wall mounted ADA lavatory, wall carrier, ADA manual faucet, point of use tempering valve, ADA insulation kit.
   c) Provide condensate drain for mechanical cooling equipment.
   d) Provide code compliant receptacle for domestic water emergency cooling system.
   e) Fixtures shall not be installed on the exterior walls. Plumbing chases inside of the vapor barrier or interior walls shall be used.
2) Sanitary Waste and Vent
   a) Route waste main to below module. for below grade connection.
   b) Provide cleanout inside of facility that protects the main leaving the module. Waste main to be cast iron.
   c) Provide indirect waste connection at the MRI cooling equipment for the outfall of the emergency domestic water cooling system.
3) Domestic Water
   a) Provide domestic cold water, hot water, and hot water recirc-system within the module for all equipment and fixtures.
   b) Provide water hammer arrestors for restroom.
   c) Piping materials in the MRI module are to comply with the MRI manufacturer's recommendations. Joints are highly discouraged. We recommend pre-insulated PEX tubing for water piping routed through the MRI equipment room.
   d) Provide emergency domestic cold water cooling for the MRI chiller. Size to accommodate any MRI manufacture's equipment. For bidding purposes, assume two inch domestic cold water.
   e) Connection point to existing facility to be through the vestibule. Refer to sketch M1. Provide accessible isolation valves in new addition.
4) Storm Water
   a) Internal roof drains and overflow drains to be provided. Piping material to be cast iron.
   b) Slope roof so that drains are located near restroom. Do not route piping through Equipment Room, MRI Suite or Operator Room.
   c) Rainleader main to be routed below module for underground connection.
   d) Overflow to be piped separately to the exterior and discharge to concrete splash blocks via a spout. Discharge point approximately 24 inches above finished grade.

e) Note that existing roof scuppers from the hospital discharge onto the MRI module roof. Roof drains and means of overflow protection are to include an additional 9,200 SQ FT of roof from the adjacent hospital roof in the calculations.

5) Medical Gas
   a) Provide medical gas system in accordance with NFPA 99C.
   b) Medical gas system is to be third party certified.
   c) Provide oxygen and medical vacuum to the MRI equipment room, at a location that can be applied to the patient.
   d) Provide new zone valve box in MRI Module.
   e) Connection point to existing facility to be through the vestibule. Refer to sketch M2. Provide accessible isolation valves in new addition.
6) Heating
   a) Module is to be heated through the use of the existing hospital hydronic heating system. Electric heat is not allowed.
   b) Heating system is to be sized assuming that the MRI, supporting equipment, lights, and computers are off.
   c) Piping materials in the MRI module are to comply with the MRI manufacturer's recommendations. Joints are highly discouraged. Pre-insulated PEX tubing for water piping routed through the MRI equipment room is recommended..
   d) Connection point to existing facility to be through the vestibule. Refer to sketch M3. Provide accessible isolation valves in new addition.
7) Cooling
   a) Stand-alone cooling is to be provided for the MRI and module.
   b) Provide cooling in the module for all normally occupied portions of the MRI module including the operating station.
   c) Assume 6 computer stations in the operator station.
   d) For bidding purposes, assume a chiller capacity of 90,000 BTU.
   e) MRI cooling is to be provided per the manufacturer's recommended installation guidelines. Make provisions for all 1.5T models.
   f) MRI chiller to be located inside of a structure with a roof to protect it from the extreme snow loads. The chiller shall be located such that air cooling vents are not covered by snow. Recommend locating chiller so that at least two sides of the structure are accessible for snow removal from heavy equipment.
      i) If providing cooling fluid based systems, provide minimum 30% propylene or ethylene glycol mixture.
      ii) Chilled glycol/refrigeration lines are to be routed within a pre-insulated, buried piping between the chiller pad and MRI module equipment room. Piping to be installed by others, but provisions for the distribution of the fluid are to be provided
8) Ventilation
   a) Provide stand-alone ventilation system to provide ventilation to the new addition.

b) Provide exhaust for the bathroom, minimum 10 ACH in accordance with ASHRAE 170 guidelines.
c) Ventilation air is to be tempered, minimum 55 degrees F discharge air, but capable of discharging at least 70 degrees F.
d) Select diffusers/grilles so that discharge does not create a draft on the patient or staff.
e) Heat recovery units are recommended. Plate type air-to-air heat exchangers are recommended for this environment as opposed to energy wheel type units.
f) Due to the significant snow conditions in Valdez, sidewall outside air and exhaust/relief air terminations are required. Roof penetrations are highly discouraged.
g) Provide MRI cryogen vent pipe in accordance with manufacturer's recommendations. Provide sidewall termination as high as possible.

9) Fuels
a) Natural gas is not available at this location.
b) Propane is not located on the campus near the proposed site, though is locally available in Valdez.
C) No work is anticipated that would impact the existing fuel oil system.

10) Controls
a) Provide full Direct Digital Controls system for the HVAC components within the module.
b) Direct Digital Controls are to be provided with a BACNet system interface.
c) Controls are to include the following systems at a minimum:
i) All room temperatures and setpoints, alarm on high and low temperature.
ii) Status and alarm condition for all MRI equipment.
iii) Control, status, and alarms of space heating, ventilation, and cooling systems.
d) Provide all software licenses.
e) Connections to the hospital system are to be made through the vestibule. Integration of controls into the hospital will be completed by others.

11) Fire Suppression
a) Provide full coverage fire suppression system in accordance with NFPA 13.
b) Connection point to existing facility to be through the vestibule. Connection to be completed by others.

d. Electrical
i. Electrical Service & Distribution.
1) This facility is an expansion to the main building and will be connected to the equipment branch. A 480V 3-ph, 3-wire electrical feeder will serve the MRI equipment and coiling equipment from second floor distribution equipment branch power supply. Provide a single point connection as part at the modular vestibule

2) MRI Modular building shall include space for an approximate UPS with power distribution unit must be maintained in the equipment room, including manual bypass switch. Distribution to MRI PDU, Chiller equipment monitoring equipment will be provided from the UPS
3) Provide a 3-phase 208Y/120V panelboard to serve normal lighting, power, heat-trace within the modular building. Provide a minimum 2400 VA UPS within the control space to supply workstations and communications rack. Provide separate junction box connection point for normal power feeder in the modular vestibule.
4) Exterior lighting for modular building will have a separate connection point within the modular vestibule.
5) Emergency lighting in vestibule and areas outside of the magnet area will be supplied from Panel "EHLS" by extending existing circuit from the connecting corridor B140. Provide a single separate connection point in the modular vestibule.
6) Interface between building systems will be accomplished with connections at the corridor B140 and the modular building vestibule junction boxes.

ii. Lighting
1) New exterior lighting including entrance will be required. Fixtures shall use LED lighting source fixtures. Provide rough-in to relocate 3 existing fixtures from hospital which will be covered by the new modular building Egress lighting will be connected to emergency lighting circuit. Exterior lighting will be connected through existing exterior lighting controls.
2) Interior Lighting
a) Will need to meet the requirements of ASRAE 90.1. and comply with provisions of the NEC, IES, and MRI specific lighting requirements.
b) Lighting within the MRI structure shall be recessed. Lighting in the expanded vestibule shall include 4' staggered strip fixtures within an architectural cove to match existing corridor B140 as shown in upper left of photo.
c) The magnet area will be illuminated with LED acceptable for use with MRI equipment. Other areas will be illuminated with fluorescent or LED luminaries suitable for the area and application.
d) Emergency lighting will be provided to comply with the NEC and other codes. Quantity and distribution of emergency lighting will be selected to meet NFPA 101 Life Safety Codes. Exit signs will be the energy-saving LED type.

iii. Power Utilization.
- Devices include general and special purpose receptacles and other components required to provide convenient points for connection of appliances and equipment. Receptacles will be provided for specific uses as required for the application. GFCI receptacles will be provided where required by NEC.

iv. Grounding. Modular building will include three ground systems.
- Power system ground bar located in the equipment room for connection of external power distribution system's equipment grounding system.
- Communications ground bar located within the communications rack to be inserted to the main telecommunications ground bar.

- Isolated ground bar in the equipment room to be used by the MRI system vendor for shielding, wave guide and related connections.

v. Fire Alarm.
- The existing Notifier (or replacement) fire alarm system will be extended to the MRI expansion.
- Provide smoke detection within the control and toilet spaces.
- Provide combination rate-of-rise and fixed 135 degree heat sensor in the vestibule.
- Provide alarm/strobe device in the control room and vestibule.

vi. Nurse Call. Provide TekTone equipment including:
- Code and staff station within the control area.
- Provide an emergency pull-cord station in the toilet room.
- Provide nurse call dome light in the vestibule at height visible from main corridor B140.

vii. Telecommunications.
- Modular building shall include a wall mounted 12U equipment rack with fiber optic tray and 48 port minimum Category 6 patch panel in the equipment/monitoring area. The tray and patch panel shall incorporate a new 6-strand 62.5 um fiber and a 12 pair Category 3 teleco cable will be extended from the main telecom room to the modular building fiber tray and patch panel.
- Terminate all modular building telecom outlets to the wall rack. Assume 4 each 4-port outlets will be provided at the work station area.

viii. Access Control.
- Provide a 4” square junction box with single gang mud-ring on exterior at latch side of vestibule door with blank gasketed cover for future card reader installation.
- Contract 2 (by others) shall provide ¾” conduit from future card reader junction box, exterior door frame to space above Corridor B140 for future installation of access control equipment.

ix. CCTV.
- Provide junction box flush in ceiling with conduit to corridor B140 for future IP camera.
- Patient monitoring system.
- Provide flush 4” octagonal junction box with cover near center of control room with conduit to corridor B140 for future monitoring antenna.

x. CATV will not be included.

xi. Wanderguard system is required.