

ALATNA Health Clinic



Alaska Rural Primary Care Facility Code and Condition Survey Report

July 23, 2001



I. EXECUTIVE SUMMARY

Overview

This code and condition inventory evaluates the community building which houses the 154 s.f. exam room that serves as the current Alatna clinic. It also provides some information about the site proposed for the currently funded Multipurpose Building which will incorporate a new clinic. The exam room is clean and the limited supplies are well organized, but the lack of space for supplies and equipment in the building make it of limited value. The new clinic facility which is being incorporated into the Multipurpose Building will be a valuable improvement in local health care.

Renovation and Addition

The existing clinic occupies a space of approximately 14' x 11'. The new clinic planned for the new Multipurpose Building will occupy about 915 s.f. of the building and will share use of the toilet and bathing facilities in the washeteria. An addition of 585 s.f. would be required to bring the new clinic up to the 1500 s.f. minimum area recommended by the Alaska Rural Primary Care Facility study for Small clinics. Although a 585 s.f. addition to the proposed new clinic space is justified from the ARPCF guidelines, it is recommended that no addition be constructed at this time. The new clinic is designed to accommodate easy expansion should a larger clinic be required or desired in the future.

New Clinic

Because the cost of an addition to the newly planned clinic would be less than 75% of the cost of new construction, and because the current clinic is still under construction, a new clinic is not recommended for this community.

II. GENERAL INFORMATION

A. The Purpose of the Report

ANTHC has entered into a cooperative agreement with the Denali Commission to provide management of the small clinic program under the Alaska Rural Primary Care Facility (ARPCF) assessment, planning, design, and construction. The purpose of the Code and Condition Survey Report is to validate the data provided by the community in the Alaska Rural Primary Care Facility Needs Assessment and to provide each community with a uniform standard of evaluation for comparison with other communities to determine the relative need among the communities of Alaska for funding assistance for the construction of new or remodeled clinic facilities. The information gathered will be tabulated and analyzed according to a set of fixed criteria that will yield a priority list for funding. Additionally, the relative costs of new construction vs. remodel/addition will be evaluated to determine the most practical and cost effective means to bring the clinics up to a uniform standard of program and construction quality. The information provided in this report is one component of the scoring for the small clinic RFP that the Denali Commission sent to communities in priority Groups 1 and 2.

B. The Assessment Team

The survey was conducted on June 8, 2001. The focus of the survey was two-fold; a survey of the 154 s.f. existing clinic and a review of the proposed site for the new Multipurpose Building. The field inspection for this village was completed by John Crittenden, AIA, Architects Alaska and Ralph DeStefano, PE, RSA Engineering. Don Antrobus met the survey team in Allakaket and escorted them across the river to Alatna. Team members who assisted in the preparation of the report included Stephen Schwicht and Ian VanBlankenstein of NANA/DOWL, project managers for the survey team, and Jay Lavoie of Estimations, Inc.

C. The Site Investigation

The format adopted is similar to the “Deep Look”, a facility investigation and condition report used by both ANTHC and the Public Health Service, in maintaining an ongoing database of facilities throughout the country. Facilities are evaluated with respect to the requirements of the governing building codes and design guidelines. Building code compliance, general facility condition, and program needs have been evaluated. This written report includes a floor plan of the clinic and a site plan indicating the existing clinic site. Additional information gathered during the site investigation that is referred to in the report, which includes sketches of building construction details, a building condition checklist, and proposed plans for village utility upgrades, are not included with this report. This information is available for viewing at ANTHC’s Anchorage offices and will be held for reference.

III. CLINIC INSPECTION SUMMARY

A. Community Information

The community of Alatna has a current population of 35 as published in the 2000 U.S. Census. It is located 190 air miles northwest of Fairbanks in the Fairbanks Recording District. It is a part of the Doyon Regional Corporation. Refer to the attached Alaska Community Database prepared by the Alaska Department of Community and Economic Development in Appendix C for more information on the community.

B. General Clinic Information

The Alatna Clinic consists of a single 154 s.f. room in the new log community building. It occupies this space on a temporary basis because there is no other place for it. The exam room is furred, insulated, and finished with gypsum board. The deficiencies written pertain only to the existing building that houses the clinic. Because the proposed new clinic has not yet been constructed, it does not have any deficiencies.

C. Program Deficiency Narrative

The health care program is severely limited by the available space in the community building. The new clinic being planned has an area of about 915 gross square feet, much larger than the current minimal space, however, still below the ARPCF guidelines for a “Small Clinic” of 1500 s.f. When construction is completed on the new clinic it will have about 585 s.f. less than the ARPCF recommendations.

D. Architectural/Structural Condition

The existing community building is a carefully planned and constructed log structure. The large forward community room has exposed logs inside and out with windows angled for views to the river. The back rooms, one of which includes the exam room, are furred, insulated and covered with gypsum board. This provides a solid, warm and comfortable structure.

For reference, the new clinic is based on a prototype design for a 1500 s.f. clinic. It is to be constructed using 6” thick insulated foam plywood skin wall panels and 12” thick roof and wall panels. The building will house the clinic, a washeteria and bathhouse, and a water treatment plant. The clinic will be heated by the boiler serving the water treatment plant. The building will be sided in log siding to provide an appearance similar to other structures in the community. It will be served by a ramped walkway.

E. Site Considerations

The existing community building sits on an elevated post and pad foundation on a thick gravel building pad. The site for a new clinic/multipurpose building has been selected. It is on cleared ground near the existing community building where the current exam room is located. The site

is currently covered with geotextile fabric and 12 inches of classified fill. The new building foundation pads will sit on an additional 24 inches of classified fill. The site has good access to planned sewer and water delivery systems and has adjacent electrical power. There is discontinuous permafrost at this site so foundations have been planned to include a triodetic foundation and thermoprobes under the gravel building pad. Foundation preparations are underway for this building.

F. Mechanical Condition

Heating and Fuel Oil: The community building is heated by a Monitor stove located in the community office. The facility also has a wood stove to supplement the Monitor stove during cold periods. Wall fans are located throughout the building to distribute heat to various rooms in the facility. The heating system is inadequate for a clinic. The transfer air fans required to distribute the heating do not allow privacy required by a clinic. Fuel for the Monitor stove is stored in a 150-gallon tank on wood cribbing. The tank needs to be relocated at least 5 feet away from the building.

Ventilation: The building has no mechanical ventilation. The only source of ventilation for the occupied spaces is through operable windows. The clinic needs to be provided with a mechanical ventilation system and should not rely on operable windows alone.

Plumbing: The clinic has no running water or sewer.

G. Electrical Condition

Power: 120/240-volt single-phase power is provided to the clinic's electrical meter through an overhead service. The meter base is grounded from a grounding rod located below the meter. A 100-amp breaker is located between the meter and the electrical panel located in the building. The number of receptacles in the building appeared to be adequate. There were no receptacles on the outside of the building. The electrical system is in good condition.

Lighting and Emergency Fixtures: Florescent fixtures provide interior lighting. Lighting levels appear to be adequate throughout the clinic. An incandescent fixture at the front entrance provides exterior lighting. Although emergency exit signs were installed in the facility, emergency lights were not.

Telecommunications: The telecommunication system includes one phone line serving the clinic. Internet service is not available and a Telemed system had not been installed.

H. Existing Facility Floor Plan

See following sheet for the floor plan of the existing clinic.

J. Community Plan

Refer to the attached community plan for location of the existing clinic and the proposed location for the new clinic. If the existing clinic site is the preferred location or if a new site has not yet been selected, only the existing clinic location will be shown.

IV. DEFICIENCY EVALUATION AND COST ASSESSMENT

The attached deficiency reporting forms are based on Public Health Service form AK H SA-43. The forms are numbered sequentially for each discipline starting with **A01** for Architectural and structural deficiencies, **M01** for Mechanical deficiencies and **E01** for Electrical deficiencies.

A. Deficiency Codes

Deficiencies are further categorized according to the following PHS Deficiency codes to allow the work to be prioritized for federal funding, should that apply. Deficiency codes used in this survey include:

- 02 Fire and Life Safety:** These deficiencies identify areas where the facility is not constructed or maintained in compliance with provisions of the state mandated building codes including the International Building Code, The Uniform Fire Code, NFPA 101, The Uniform Mechanical and Plumbing Codes and The National Electrical Code.
- 03 Safety:** These deficiencies identify miscellaneous safety issues.
- 04 Environmental Quality:** This addresses DEC regulations, hazardous materials and general sanitation.
- 05 Program Deficiencies:** These are deficiencies which show up as variations from space guidelines established in the Alaska Primary Care Facility Facility Needs Assessment Project and as further evaluated through observation at the facility site and documented in the facility floor plans.
- 07 Disability Access Deficiencies:** The items with this category listing are not in compliance with the Americans with Disabilities Act.
- 08 Energy Management:** These deficiencies address the efficiency of heating systems/fuel types and the thermal enclosures of buildings.
- 11 Structural Deficiencies:** These are deficiencies with the fabric of the building. It may include the foundations, the roof or wall structure, the materials used, the insulation and vapor retarders, the attic or crawl space ventilation and the general condition of interior finishes. Foundation systems are included in this category.
- 12 Mechanical Deficiencies:** These are deficiencies in the plumbing, heating, ventilating, air conditioning, or medical air systems.
- 13 Electrical Deficiencies:** These are deficiencies with electrical generating and distribution systems, fire alarm systems and communications systems.
- 14 Utilities:** This category is used for site utilities, as opposed to those within the building and may include sewer lines and water and power distribution.

B. Photographs

Each sheet has space for a photograph. Some deficiencies do not have photos. Photographs do not cover all areas where the deficiencies occur but are intended to provide a visual reference to persons viewing the report who are not familiar with the facility. Additional photographs of the clinic and the surrounding area are included in Appendix B.

C. Cost Estimate General Provisions

New Clinic Construction

- **Base Cost**

The Base Cost provided in Section VI of this report is the direct cost of construction, inclusive of general requirements (described below) and contingency for design unknowns (an estimating contingency) The base cost is exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The Project Factors and Area Cost Factor are multipliers of the base costs.

General Requirements are based on Anchorage costs without area adjustment. It is included in the Base Cost for New Clinics. These costs are indirect construction cost not specifically identifiable to individual line items. It consists of supervision, materials control, submittals and coordination, etc. The general requirements factor has not been adjusted for Indian Preference.

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned.

- **Project Cost Factors**

Equipment Costs for new medical equipment has been added at 17% of the cost of new floor space.

Design Services is included at 10% to cover professional services including engineering and design.

Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.

Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Estimated Total Project Cost of New Building**

This is the total estimated cost of the project, including design services. The construction contract will be work subject to Davis Bacon wages, and assumes construction before year-end 2001. No inflation factor has been applied to this data.

Remodel, Renovations, and Additions

- **Base Cost**

The Base Cost provided in the specific deficiency sheets is the direct cost of construction, exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Most of the deficiency items do not constitute projects of sufficient size to obtain efficiency of scale. The estimate assumes that the projects are completed either individually, or combined with other similar projects of like scope. The numbers include moderate allowances for difficulties encountered in working in occupied spaces and are based on remodeling rather than on new construction costs. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The General Requirements, Design Contingency and Area Cost Factors are multipliers of the base costs.

The cost of Additions to clinics is estimated at a unit cost higher than New clinics due to the complexities of tying into the existing structures.

Medical equipment is calculated at 17% of Base Cost for additions of new space only and is included as a line item in the estimate of base costs.

- **General Requirements Factor**

General Requirements Factor is based on Anchorage costs without area adjustment. The factor is 1.20. It is multiplied by the Base Cost to get the project cost, exclusive of planning, architecture, engineering and administrative costs. This factor assumes projects include multiple deficiencies, which are then consolidated into single projects for economies of scale. The general requirements factor has not been adjusted for Indian Preference.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Contingency for Design Unknowns (Estimating Contingency)**

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned. The factor used is 1.15.

- **Estimated Total Cost**

This is the total estimated bid cost for work completed under Davis Bacon wage contracts, assuming construction before year-end 2001. This is the number that is entered in the front of the deficiency form. No inflation factor has been applied to this data.

- **Project Cost Factors**

Similar to new clinics, the following project factors have been included in Section VI of this report.

Design Services is included at 10% to cover professional services including engineering and design.

Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.

Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Estimated Total Project Cost of Remodel/Addition**

This is the total estimated cost of the project including design services, the construction contract cost for work completed under Davis Bacon wages and assuming construction before year-end 2001. No inflation factor has been applied to this data.

V. SUMMARY OF EXISTING CLINIC DEFICIENCIES

The attached table summarizes the deficiencies at the clinic and provides a cost estimate to accomplish the proposed modifications. If all deficiencies were to be addressed in a single construction project there would be cost savings that are not reflected in this tabulation. The total cost of remodel/addition shown in Section VI is intended to show an overall remodel cost that reflects this economy. Refer to Section VI for a comparison of remodel/addition costs to the cost of new construction. The specific deficiency sheets are included in Appendix A.

VI. NEW CLINIC ANALYSIS

The decision on whether to fund new clinic construction or a remodel/addition of the existing clinic is to be determined by comparing the cost of a new facility designed to meet the program requirements of the Alaska Rural Primary Care Facilities minimum area requirements with the projected combined cost of renovating, remodeling and adding onto the existing building to provide an equivalent facility. If the cost of the remodel/addition project is greater than 75% of the cost of constructing an altogether new facility then a new facility is recommended. That ratio is computed as follows:

- **The cost of a new clinic in Alatna is projected to be:**

Base Anchorage Cost per s.f.		\$183/ s.f.
Medical Equipment Costs @ 17%		\$31
Design Services 10%		\$18
Construction Contingency 10%		\$18
Construction Administration. 8%		\$15
Sub-total		\$265/ s.f.
Area Cost Factor for Alatna	1.74*	
Adjusted Cost per s.f.		\$461/ s.f.

Total Project Cost of NEW BUILDING 1,500 x \$461 = \$691,500

- **The cost of a Remodel/Renovation/Addition is projected to be:**

Projected cost of code/condition renovations (From the deficiency summary)		
90% of cost of code/condition improvement**		\$14,850 Renovation
Projected cost of remodeling work		
915 s.f. clinic @ 0% remodel = 0 s.f.		\$0 Remodel
Projected cost of building addition (See A02)		
1,500 s.f. – 915 s.f. = 585 s.f.		\$304,817 Addition
<u> Design 10%, Const. Contingency 10%, Const. Admin. 8%</u>		<u>\$89,507</u>

Total Project Cost of REMODEL ADDITION \$409,174

- **Ratio of remodel:new is \$409,174 : \$691,500 = 0.59X**

The cost of a remodel/addition for this clinic would cost 59% the cost of a new clinic, therefore, a new clinic is Not recommended for this community

* The Area Cost Factor was refined by Estimations, Inc. in July 2001 based on information obtained during the site visit.

** The 90% factor represents economy of scale by completing all renovation work in the same project.

It is unlikely that the community will need additional clinic space in the near future. The clinic planned will provide nearly 850 s.f. of programmed net space. This is under the ARCPF minimum of 1500 s.f. for a staffed clinic in a community of less than 100 persons, however, Alatna is a community of only 35 persons. The students are transported across the river each day in the winter for school in Allakaket where they can make use of the clinic facilities there. The large trauma room planned for the new clinic will accommodate most medical emergencies and the ancillary spaces to be provided will accommodate staff, medical supplies, lab, waiting, and medical records for the community.

Appendix A: SPECIFIC DEFICIENCIES LISTING

Refer to the attached sheets for the listing of the individual deficiencies and the corrective action recommended.

Appendix B: GENERAL SITE PHOTOGRAPHS

The following sheets provide additional photographic documentation of the existing building and surroundings.

Appendix C: ADCED Community Profile

Refer to the attached document prepared by Alaska Department of Community and Economic Development profiling the community of Alatna.

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