

EGEGIK Health Clinic



Alaska Rural Primary Care Facility Code and Condition Survey Report

July 23, 2001



I. EXECUTIVE SUMMARY

Overview

The Egegik Clinic is located in one corner of a community building which also houses the community library and tribal offices. The building was reportedly constructed in 1982 is in poor condition due to extreme weather and heavy use. The clinic has inadequate space for equipment, storage, and trauma emergencies. The lack of adequate space and the lack of a sufficient trauma room prevent the staff from providing the level of care needed on a daily and emergency basis.

Renovation and Addition

The existing clinic is 465 s.f. and would require an addition of 1535 s.f. to meet the 2000 s.f. minimum area recommended for a medium clinic by the Alaska Rural Primary Care Facility study. The existing site could accommodate an addition of this size. The floor plan layout would require the remodel of approximately 100% of the interior space. Additionally, the poor condition of the building will require extensive upgrades to improve the foundation, thermal enclosure and other building systems. The cost of required renovations and code upgrades, combined with the cost of a new addition equal 135% of the cost of a new clinic.

New Clinic

Because the cost of renovation and addition is more than 75% of the cost of new construction, a new clinic of at least 2000 s.f. should be built to replace the existing clinic. This community is in favor of constructing a new clinic on a new site and has already begun the planning process for this project.

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 4, 2001 by John Biggs, AIA, Architects Alaska and Bill Henriksen, PE, RSA Engineering. Randy Muth of ANTHC was the team escort. Randy made introductions and conducted the village briefings. 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 Egegik has a current population of 116 as published in the 2000 U.S. Census. It is located 100 miles southeast of Dillingham in the Kvichak Recording District. It is a part of the Bristol Bay Native Corporation. Refer to the attached Alaska Community Database prepared by the Alaska Department of Community and Economic Development in Appendix C for additional community information.

B. General Clinic Information

The building which houses the Egegik Clinic was constructed in 1982. The building is approximately 40' x 60' in size and is of prefabricated metal construction. In general, the building is in poor condition due to the extreme climatic conditions. The clinic is approximately 465 s.f. The clinic area is comprised of three rooms. The main room includes the reception, office, waiting, and trauma room. Beyond the main room, there is a small office and a small exam room. The lack of space results in a loss of privacy. If there is more than one patient in the clinic, some patients may undergo exams in the trauma area, which has virtually no separation from the waiting area. This clinic suffers from a significant lack of adequate space.

C. Program Deficiency Narrative

The main programmatic deficiencies pertain to a shortage of adequate storage, lack of privacy and security, and absence of handicapped access. The clinic does not have a kitchen, bathing facilities, or a separate area for medications. The clinic lacks sleeping facilities and work facilities for traveling health aides. Both building exits are not ADA accessible and there is no useful trauma room or trauma entrance. In general, the lack of adequate space and the lack of adequate storage prevent the staff from providing adequate health care to the community.

The following table illustrates a comparison between the current actual square footage (SF) and the 2000 s.f. minimum area recommended by the Alaska Rural Primary Care Facility study for a Medium Clinic:

Table 1 – ARPCF Clinic Area Comparison

| Purpose/Activity | # | Existing Net SF | # | ARPCF Medium | Difference |
|-------------------------------|----------|------------------------|----------|---------------------|-------------------|
| Arctic Entry | 1 | 53 | 2 | 2 @ 50=100 | 47 |
| Wait/Recep/Closet | 1 | 50 | 1 | 150 | 100 |
| Trauma/Telemed/Exam | 1 | 150 | 1 | 200 | 50 |
| Office/Exam | 1 | 134 | 1 | 150 | 16 |
| Admin./Records | 1 | 92 | 1 | 110 | 18 |
| Pharmacy/Lab | - | - | 1 | 80 | 80 |
| Portable X-ray | - | - | - | - | - |
| Spec. Clinic/Health Ed./Conf. | - | - | 1 | 150 | 150 |
| Patient Holding/Sleep Room | - | - | 1 | 80 | 80 |
| Storage | - | - | 1 | 100 | 100 |
| HC toilet | - | - | 2 | 2 @ 60=120 | 120 |
| Janitorial Closet | - | - | 1 | 30 | 30 |
| Total Net Area | - | - | - | 1270 | - |
| Mechanical Room | - | - | - | 147 | 147 |
| Morgue | - | - | - | 30 | 30 |

The Egegik Clinic has a current gross area of 465 s.f. This would require a gross building area expansion of approximately 1535 s.f. in order to meet the 2000 s.f. minimum requirements for a Medium clinic.

An analysis of the existing building’s program functions follows. Please also refer to the floor plan in Section H:

- **Arctic Entries:** The building main corridor serves as an arctic entry for the clinic.
- **Waiting:** The waiting area is part of the clinic entry, reception area, and trauma area. The waiting area lacks security, confidentiality, or privacy.
- **Trauma/Telemed/Exam:** The trauma area is cluttered with medical equipment and supplies and appears totally inadequate for emergencies.
- **Office/Exam:** The clinic exam room is small but functional.

- **Administration/Records:** The administration area is generally located in the main reception and waiting area. The clinic does have a small office for use by a doctor or nurse, and it appears that some records may be stored in this office.
- **Pharmacy/Lab:** None provided.
- **Specialty Clinics:** None provided.
- **Patient Holding/Sleep:** None provided in the clinic.
- **Storage:** None provided.
- **HC Toilet Room:** None provided.
- **Janitor Closet:** None provided.
- **Ancillary Spaces:** There are no ancillary spaces in this clinic.

D. Architectural/Structural Condition

The building which houses the clinic is a prefabricated metal structure approximately 40' x 60' in size. The foundation is a 2'-3" deep concrete grade beam supporting 2x10 wood joists. The main structure is a standard metal building steel "arch" design with girts supporting siding and roofing. There is some settlement at the interior supports apparent by small cracks at gypsum board finishes. The exterior finishes are weathered due to the harsh environment and all of the interior finishes are worn.

E. Site Considerations

An addition could be placed on the existing site. All necessary utilities are available. The clinic staff noted that the community is already in the process of planning a new clinic on a new site. Multiple sites appear available with access to utilities, water, sewer, electricity, and telephone.

F. Mechanical Condition

Heating and Fuel Oil: Heating for the building is provided from a Weil McLain Gold Oil model P-WTGO-3 boiler located between the library and the laundry area. The clinic has a single zone of baseboard with a thermostat appropriately located for the clinic layout. A single 500-gallon fuel tank serves the building. The tank is installed too close to the building, it is not vented, not properly supported and the piping has been improperly installed and supported. In addition there is another 500-gallon tank within 5 feet of the clinic that provides fuel to a different building. That tank also needs to be relocated. A number of maintenance and code issues have been identified with the boiler and the boiler room and the fuel system. Complete descriptions can be found in the Deficiency Evaluation and Cost Assessment forms.

Ventilation: There is no mechanical ventilation for the clinic. The sources of ventilation for the occupied spaces are though operable windows. The clinic needs to be provided with a mechanical ventilation system and should not rely on operable windows alone. The two restrooms have toilet exhaust fans but they are not ducted to the outside of the building. They appear to be ducted up into the attic area.

Plumbing: Domestic water is provided from the village water supply. Hot water for the building is provided from an Amtrol WH-7C hot water generator located in the boiler room. The hot water generator is connected to the boiler. The building waste gravity drains to the village sewer system. Plumbing fixtures in the clinic include a toilet and lavatory for each of two restrooms and a double compartment sink in the exam room. The plumbing fixtures in the restrooms do not meet ADA requirements and are not securely fastened down to the floor. There is a laundry sink located in the laundry facility that is used for janitorial purposes.

G. Electrical Condition

Power: The building has two 120/240-volt overhead electrical services one for the laundry area and the other serving the remainder of the building. The meter bases are grounded to grounding rods located below the meters. The panel serving the clinic (and the rest of the building except the laundry area) is a 200 amp panel with room for 40 breakers, 21 breakers are installed two of which are spares. Conductors to the panel were run in copper. Conductors from the panels have been run in Romex. The panel appeared to be grounded correctly, but as noted in the Deficiency Evaluation and Cost Assessment forms there was a grounding or shorting condition occurring from one of the two panels. Receptacles are provided throughout the clinic, but the staff indicated they needed more, especially in the trauma room area. We noted the use of plug strips in that area. Receptacles in the restroom were not GFCI protected nor are they within 10 feet of the kitchen/laboratory sink were not GFCI protected. There were no receptacles on the outside of the building.

Lighting and Emergency Fixtures: Interior lighting is provided by surface mounted fluorescent fixtures throughout the building. There is a mix of double 4-ft. fixtures using 35-watt 40F bulbs and four bulb fixtures using 35-watt 40F bulbs. The lighting levels were not measured, but appear adequate. The fixtures are fairly low quality but are in good condition. Exterior lighting was provided with incandescent fixtures at the entrances only. The fixtures were in poor condition with no covers for the bulbs. They should be replaced. There are no emergency light fixtures in the clinic. Exit fixtures were installed over each of the two entrances into the building. We were unable to check the fixtures for proper battery operation. There appeared to be an appropriate number of smoke detectors located throughout the clinic, but we found that two of the detectors needed batteries replacement.

Telecommunication: Four phone lines serve the building, two for the local incoming line, a fax line and a dedicated line for modem. A Telemed system had been installed at this facility, but training was not complete.

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 Egegik 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 Egegik | 1.28* | |
| Adjusted Cost per s.f. | | \$338/ s.f. |

Total Project Cost of NEW BUILDING 2,000 x \$338 = \$676,000

- **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** | | \$43,769 Renovation |
| Projected cost of remodeling work (See A04) | | |
| 465 s.f. clinic @ 100% remodel = 465 s.f. | | \$82,502 Remodel |
| Projected cost of building addition (See A01) | | |
| 2,000 s.f. – 465 s.f. = 1,535 s.f. | | \$586,890 Addition |
| <input type="checkbox"/> Design 10%, Const. Contingency 10%, Const. Admin. 8% | | \$199,685 |

Total Project Cost of REMODEL ADDITION \$912,846

- **Ratio of remodel:new is \$912,846 : \$676,000 = 1.35X**

The cost of a remodel/addition for this clinic would cost 135% the cost of a new clinic, therefore, a new clinic is 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.

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 Egegik.

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