

# PLATINUM HEALTH CLINIC



## Alaska Rural Primary Care Facility Code and Condition Survey

April 23, 2003



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## I. Executive Summary

### Overview:

The Platinum Clinic, originally built in 1988, is currently a 534 SF clinic of somewhat typical design for the times it was constructed. The arrangement is very difficult since the lobby is small in the front and then down one side as a waiting/office with no privacy. The situation requires patients and visitors to view all the clinical space including exam rooms from the waiting area. It has very small waiting area, a larger exam room/trauma/kitchen/office room, one other exam room, one very small office, no toilet/bath, kitchen in trauma room, no TDY room, no medical files and medical supply room, no janitor, no storage, and no mechanical room. The facility is of simple wood frame construction on a post and pad system on a gravel pad and is similar to many clinics constructed in the region over the last 20-30 years. It has been added and modified, and is small for the current size of the village, 41 residents.

### Renovation/Upgrade and Addition:

The Clinic will require a 966 SF addition to accommodate the current need and Alaska Rural Primary Care Facility space guidelines. This addition is possible on the existing site. The addition would require minimal additional pad filling and substantial renovation of the existing clinic. As can be seen from the documentation enclosed, the existing clinic will require major renovation to meet current code and standards as well. The cost of renovation and addition will far exceed the cost of a new clinic facility.

### New Clinic:

The community has proposed that a new larger 1500 SF Denali Commission Small Clinic can be constructed on a new site located adjacent to the existing clinic. We have included preliminary site plans based on the site that has been chosen.

None of the sites have existing utilities available to them and cannot be served easily. The Traditional Council President of Platinum, Evan Bobby, is in process of working further on the site selection and the ability to bring utilities to the site and the community.

The community has completely supported this effort and have met extensively to assist in new site issues and to resolve any site considerations.

## II. General Information

## **A. The Purpose of the Report and Assessment Process:**

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 assessment, planning, design and construction. Over 200 clinics will be inspected through the course of the program. 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 between the communities of Alaska for funding assistance for the construction of new or remodeled clinic facilities. 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 3 and 4. The information gathered will be tabulated and analyzed according to a set of fixed criteria that should yield a priority list for funding. Additionally, the relative costs of new construction vs. remodel/addition will be evaluated to determine the most efficient means to bring the clinics up to a uniform standard of program and construction quality.

A team of professional Architects and Engineers traveled to the site and completed a detailed Field Report that was reviewed by all parties. Subsequently, the team completed a draft and then final report of the facility condition.

## **B. Assessment Team:**

Tom Humphrey, Capital Projects Director, and Emilee Kutch, the administrator for Yukon Kuskokwim Health Corporation, organized the assessment team. The team for this site visit was Tom Humphrey, YKHC; Gerald L. (Jerry) Winchester, Architect, Winchester Alaska, Inc.; Bob Jernstrom, PE, Jernstrom Engineering, and Sherrie Hadley, ANTHC. Team members who assisted in preparation of report from information gathered included members of the field team above and Ben Oien PE, Structural Engineer; Tom Humphrey, PE, Electrical Engineer; Carl Bassler PE, Civil Engineer; and Estimation Inc.

## **C. Report Format:**

The format adopted is a modified "Deep Look" format, a facilities 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. The written report includes a floor plan of the clinic, site plan as available, and new plans for renovation/upgrade or completely new clinics. Additional information was gathered during the field visit which includes a detailed Field Report and building condition checklist, sketches of building construction details, investigations of potential sites for new or replacement clinics, and proposed plans for village utility upgrades. This information is available for viewing at ANTHC's Anchorage offices and will be held for reference.

## **D. The Site Investigation:**

On November 13, 2001, the team flew to the site and made observations, took photos, and discussed the needs with on-site personnel for the facility. Approximately three-four hours was spent on site, with sufficient time to investigate foundations, structure, condition, mechanical and electrical systems, and to interview the staff to assess current and projected health care needs. The clinic was not open and had no heat. It has not been opened for some time due to lack of a health aide in the village and patients must travel to Goodnews Bay for care. There is currently a Mr. Mark Moyle taking his exam to become the village health aide and reopen the clinic this spring.

Interviews were conducted with the Lou Kirby, Village Administrator and Acting Mayor. The council staff provided information on the existing building, site, and utilities. We interviewed Mark Moyle, the person currently taking his licensing for Health Aide. These interviews provided clear understanding of the needs of the village, the clinic facility, and the users of the facility.

The Platinum Council President and staff have reviewed the use of a Denali Commission Small Health Clinic design adapted to the selected Platinum Site. They have agreed to proceed with final approvals of a site based on final determination of the most appropriate one.

### III. Clinic Inspection Summary

#### A. Community Information:

Population: 41 (2000 Census)

2<sup>nd</sup> Class City, Unorganized Borough, Lower Kuskokwim School District, Calista Native Corporation

Location:

Platinum is located on the Bering Sea coast, below Red Mountain on the south spit of Goodnews Bay. It lies 11 miles from Goodnews Bay and 123 miles southwest of Bethel. It is 440 miles west of Anchorage. It lies at approximately 59d 00m N Latitude, 161d 49m W Longitude. (Sec. 32, T013S, R075W, Seward Meridian.) Platinum is located in the Bethel Recording District. The area encompasses 44.6 sq. miles of land and .1 sq. miles of water. Platinum has a marine climate. Average annual precipitation is 22 inches, with 43 inches of snowfall. Summer highs range from 53 to 57, winter highs average 6 to 9. Extremes have been measured from 82 to -34.

History:

Platinum is near a traditional village site called Arviq. The community was established shortly after traces of platinum were discovered by an Eskimo named Walter Smith in 1926. Between 1927 and 1934, several small placer mines operated on creeks in the area. Some 3,000 troy ounces of platinum were mined over that period, with a value of about \$48 per ounce. A post office opened in 1935. The "big strike" occurred in October of 1936, which brought a stampede of prospectors for "white gold." The claims proved to be too deep for hand mining methods and were bought out by two companies. The largest, Goodnews Mining Co., eventually acquired title to over 150 claims. In 1937 a large dredge was built at the mining site, about 10 miles from the village of Platinum. The Company also constructed bunkhouses, a recreation hall, offices, shops and a cafeteria. Platinum developed as a "company town," with the store, water, and electricity supplied by the mine. A school opened in 1960. By 1975, 545,000 ounces of platinum had been mined at the site. The city government was formed. The mine was later sold to Hanson Properties, who estimate reserves of over 500,000 ounces - it ceased operations in 1990.

Culture:

Because the community was founded as a commercial center, and has always seen an influx of outsiders, local traditions have not been retained as much as in other villages. Platinum is one of the few Eskimo villages in the region in which the first language of the children is English. The economy is primarily cash-based. The sale or importation of alcohol is banned in the village.

Economy:

Commercial fishing now contributes to the largely cash-based economy. The mine, school, stores and City provide employment. Platinum is a major supplier of gravel to area villages. Seven residents hold commercial fishing permits. Subsistence activities are also an important part of the lifestyle. Salmon and seal are the staples of the diet. The community is interested in developing a marine repair facility and dry dock, a seafood processing plant, specialty seafoods venture, or herring roe aquaculture project.

Facilities:

Almost half of the homes have individual water wells and septic systems. During the summer, untreated water is hauled from approximately fifteen watering points. During winter, residents dig holes in the ice to draw water. Honeybuckets are disposed of in seepage pits. A washeteria is under construction. Funds have been requested to construct a 20,000-gallon water storage tank, water treatment plant, water connections, plumbing and septic tanks for 16 homes, a sludge disposal site and new landfill. The school has asked for funds to drill its own well, and construct a treatment plant that would also serve as the community's back-up water system. The City operates the electric service once provided by the mining company.

Transportation:

The community relies heavily on air transportation for passengers, mail and cargo service. There are two gravel airstrips. One is State-owned, at 3,640' in length with a 2,000' crosswind runway. The second is a 2,000' gravel airstrip owned by the Platinum Mine. A seaplane landing site is also available. Barge services deliver goods twice a year. Boats, snow machines and ATVs are used for local travel and subsistence activities.

Climate:

Platinum has a marine climate. Average annual precipitation is 22 inches, with 43 inches of snowfall. Summer highs range from 53 to 57, winter highs average 6 to 9. Extremes have been measured from 82 to -34.

## **B. General Clinic Information:**

Physical Plant Information:

The existing Platinum Health Clinic completed in 1980's occupies 534 sq. ft. (See attached Plan) It is one of the small size clinics constructed during the last twenty years and existing in the BBAHC program area. It has small a waiting room, toilet, supply room, exam room, office work area, a small supply storage area, and a closet for a mechanical room. It has a front entry with unheated vestibule but does not allow stretcher access. The rear entry has a stair but no vestibule. The clinic is served with hauled water and electric toilet. Sinks are not provided in the exam rooms.

Clinic program usage information:

We do not have the patient records that indicate clinic usage and area available from the Bristol Bay Area Health Corporations. There is no full or part time staff and 1 person taking the exam to become the Platinum Health aide and reopen the clinic. The office space provided is entirely inadequate as it has all office functions, travel, files, and use by all health aides. The room contains a desk, copier, fax, and two chairs for triage and other equipment and supplies.

Community Program Sheet:

The community program sheet P1.0 Services has been included if available on the next page. These sheets were completed during the Code and Condition Survey by ANTHC representative.

**C. Program Deficiency Narrative:**

1. Space Requirements and Deficiencies:

**Space Comparison Matrix - Current Platinum Actual SF to Denali Commission Small Clinic**

Alaska Rural Primary Care Facility

Purpose / Activity	Current Clinic			Small clinic			Difference		
	Actual Net SF			ARPCF SF			Difference		
	No.	Net Area (SF)		Size	No.	Net Area (SF)	Size	No.	Net Area (SF)
Arctic Entries	28	1	28	50	1	50			22
Waiting/Recep/Closet	122	1	122	100	1	100			-22
Trauma/Telemed/Exam			0	200	1	200			200
Office/Exam	92	1	92	150	1	150			58
Admin./Records	53	1	53			0			-53
Pharmacy/Lab			0	80	1	80			80
Portable X-ray			0			0			0
Specialty Clinic/Health Ed/Conf			0	150	1	150			150
Patient Holding/ Sleeping Room			0	80	1	80			80
Storage	66	1	66	80	1	80			14
HC Toilet	30	1	30	60	1	60			30
Janitor's Closet			0	30	1	30			30
<b>Subtotal Net Area</b>			391			980			589
Circulation & Net/Gross Conv. @ 45%			134			441			307
<b>Subtotal (GSF)</b>			525			1421			896
Mechanical Space @ 8%			9			114			105
<b>Total Heated Space</b>			534			1535			1001
Morgue (unheated enclosed space)				30	1	30			30
Ext. Ramps, Stairs, Loading			As Required			As Required			As Required

- a. Overall space deficiencies: The size of the facility is about 966 sf short of the ARPCF space requirements.
- b. Specific room deficiencies: There is minimal vestibule, small waiting space, minimal office and storage space, no TDY, and combined trauma. This in combination with other small spaces leaves the clinic very program deficient.
- c. Other size issues: Mechanical room is virtually non-existent as a closet, and there are no unheated or exterior storage areas, and circulation is through rooms such as trauma to get to second exit.

2. Building Issues:

- a. Arctic Entries - The main entry in not accessible for ADA and is impossible to get a gurney into the room. It does not have a legal ramp but it has storage of needed materials that

cannot be stored inside the facility due to lack of room. The rear entry access to trauma but is narrow and non-compliant and does not meet ADA or standards for gurney access.

- b. Waiting / Reception –The waiting area contains a couple chairs for secondary patient use and has equipment and other items stored in the room.
- c. Trauma/Telemed/Exam – There is no trauma room and the exam room does not meet all aspects or requirements. There is one room that are used for exam or some combination.
- d. Office / Exam – There is one exam room, which is crowded with equipment. There was no capability of putting a patient in a gurney in the exam rooms. There is no working sink in the room and therefore sanitation for patients was an issue. Privacy was very difficult. Note that electrical service is completely inadequate for the needs of the equipment.
- e. Administration / Records – There is one office room space used for all administrative, records, scheduling, and other functions. It is very small.
- f. Pharmacy / Lab – There is not a Pharmacy and medicines are stored in locked cabinets in the exam room or trauma room.
- g. Specialty Clinic / Health Education / Conference - This function is completed in the exam rooms. There is no special area.
- h. Patient Holding / Sleeping Room – There is no sleeping room and a rollaway bed for itinerant staff. The exiting does not meet code with window egress.
- i. Storage – Storage is inadequate and is an impediment to safety and the operation of this clinic. There is a lack of adequate storage for needed medical supplies, files, and equipment in this facility. There is minimal storage and mostly it is in the exam rooms. There is storage in all the rooms.
- j. HC Toilet Facilities – There is an incinerator toilet and no bath facilities.
- k. Janitors Room – There is no janitor’s room as required by code.
- l. Mechanical/Boiler room – There is a closet mechanical room. The heat was off in the facility due to lack of health aide for the last couple months to operate.
- m. Ancillary Rooms – There are no ancillary rooms as all space is used to maximum capacity including exam rooms, office, waiting room, corridors, and vestibules.

### 3. Functional Design Issues

This facility is functionally inadequate for its intended use. The spaces do not meet the functional size requirement, access is non-compliant, and the ability to perform required medical functions within the facility is severely hampered by lack of storage.

### 4. Health Program Issues

- a. Vestibule and comfort:

The front door of the clinic is through a non-compliant, unheated, vestibule, which is inadequate to defer the heat loss. There is no ADA access or proper gurney access. The exam rooms are cold every time the door is opened and the cold air migrates into the clinic where patients are being attended.

- b. Medical/Infectious Waste  
This is being handled in a very basic method and is hampered by the small non-functional facility.
- c. Infection Control  
This is being completed with minimal long-term control due to lack of facilities. Floor materials are very worn out and replaced with multiple materials and sizes allowing for control problems. There are no rubber base materials, and wall and ceiling materials are also considerably lacking in cleaning ability. The exposed piping also provides very unsanitary conditions and impossible cleaning of the exam rooms.
- d. Insect and Rodent Control  
None noted or investigated
- e. Housekeeping  
The difficulty in cleaning and housekeeping in such a congested facility is understandable and is being done at the best level currently possible.

5. Utilities

- a. Water Supply  
All water is hauled from IHS system fill lines and main system
- b. Sewage Disposal  
Incinerator toilet at this time.
- c. Electricity  
See Electrical Narrative.
- d. Telephone  
A single phone line services the clinic and is inadequate for current needs.
- e. Fuel Oil  
The fuel system is not adequate with some leaking having occurred around the existing above ground tank. There is not protection or containment for possible spilling.

**D. Architectural / Structural Condition**

1. Building Construction:

a. Floor Construction:

The floor is 2x10 joist over a 6x6 beams with treated post and pad foundation system. There is some settlement and heaving which has caused doors to stick and floor to be uneven. There is approximately 1 inches of differential in the floor elevations. There is batt insulation of the 2x10 joist space with 3/8" plywood soffit.

b. Exterior Wall Construction:

The walls are 2x6 construction at 24" oc with R-19 insulation. The sheathing is plywood with half sawn log siding. There appears to be fiberglass batt insulation with no vapor barrier and paneling plywood on the interior.

c. Roof Construction:

The roof is 2 x 4 trusses at 24" oc with furring over rafters and metal roof. There is roof shear plywood and ventilation is minimal. The insulation is approximately R-24 batt insulation that is minimal in this climate and required upgrading to R-60.

d. Exterior Doors:

The exterior doors are residential metal and very deteriorated. They are in very poor shape and need replacement.

e. Exterior Windows:

Windows are of thermo-pane wood casement windows; require thorough rework and repainting for upgrade to useful life..

f. Exterior Decks, Stairs, and Ramps

There is one minimal Arctic entry. The landing at the exterior door is deteriorating, and the stairs rise and run do not meet code. The ramp is very steep and does not meet ADA and the handrails and landings do not meet code. Requires all new stairs, ramps, railings and landings.

2. Interior Construction:

a. Flooring:

The flooring is Vinyl Tile over plywood. It has been replaced in many areas and is work out and covered with duct-tape in other areas. Entire replacement of sub-floor and finish is required to meet sanitary requirements.

b. Walls:

The walls are of 2x4 wood construction, with no sound insulation. The type of wall construction does not provide for patient privacy in any way. The finish is gypsum wallboard and in serious need of repair and repaint. There are many cracks in wallboard due to settlement and shifting building.

c. Ceilings:

The ceilings are 12x12 fiberboard tile over plywood as well and needing repair and repaint due to cracking as well.

d. Interior doors:

The interior walls are of hollow core wood construction that provides minimal construction durability and they are all in need of repair. Additionally, these doors are not acceptable for patient privacy and sound control. There has been floor shifting and most of the doors do not close properly.

- e. Casework:  
The upper casework is minimal and the lower casework is of very poor construction. Plastic laminate tops do not fit to walls and are damaged. The sanitary issues are very significant with the counters being of such poor construction. Need full replacement.
- f. Furnishings:  
The furnishings are very old and worn. There is an old couch in the waiting room and a variety of mismatched and old desks, chairs, and tables for other use. The exam tables are older as well.
- g. Insulation:

Floor Insulation		R-16 to R-19
Wall Insulation	R-19	
Attic/Roof Insulation		R-24
Attic Ventilation		minimal to NONE
- h. Tightness of Construction:  
The building is of poor overall construction, with numerous leaks in construction system at doors, floor, roof, and sills.
- i. Arctic Design:  
The vestibules are minimal, orientation is OK, and siting of the clinic is next to a large gully that probably needs additional fill.

### 3. Structural

- a. Foundations  
The foundation is post and pad over gravel pad and is in poor structural condition. Posts have settled, walls are racked, and the building has floor level deviation and has substantial cracking on the interior. There not adequate hold down strapping and the bracing is loose or missing. In general the foundation needs substantial upgrade to new useful life or replacement.
- b. Walls and Roof:  
The walls and roof seem in relatively stable and adequate condition and do not meet code.
- c. Stairs, Landings, and Ramps  
These elements are in poor condition and in need of replacement with signs of rotting and deterioration of structural elements.

## E. Mechanical Condition

### 1. Heating System

It should be noted that the clinic is not operational at the time of the site visit. There is no heat or power to the building. All heating equipment is off and not usable in their current state.

- a. Fuel Storage and Distribution  
The clinic's heating fuel oil storage tank is located adjacent to the building and not a minimum of 5 ft. as required by code. The 55-gallon storage barrels do not UL tank standards nor does it have the proper venting, piping, or valving as required by code.
  - b. Boiler  
A single residential grade, oil-fired boiler provides heating for the entire clinic. The boiler is in fair shape with missing controls and systems that are required by code. There is severe corrosion on the boiler stack and the vent assembly is in poor condition. There is no combustion air opening for the boiler which is against code. There are no additional heaters in the clinic to assist with heating.
  - c. Heat Distribution System  
The heating piping has been rerouted in the clinic to avoid freezing and is exposed throughout the facility. Pipe insulation has been added which does not meet flame spread and smoke-developed ratings. The baseboard enclosures are all bent and in serious disrepair.
2. Ventilation System
    - a. System  
There is no mechanical ventilation system. Ventilation is by operable windows. The windows do not open easily and as such do not provide effective ventilation.
    - b. Exhaust Air  
A ceiling mounted exhaust fan services the toilet room. This fan is not ducted outside, but is ducted into the attic space.
3. Plumbing System
    - a. Water System  
There is no water system in the clinic. Water is hauled to the clinic and stored in cans.
    - b. Sewer System  
There is no sanitary sewer system in the clinic. An incinerator water closet is used in the bathroom
    - c. Fixtures  
The toilet room plumbing fixture (water closet) is not ADA approved or UPC code compliant for barrier free access.
    - d. Water Heater  
There is no water heater in the clinic.

## **F. Electrical Condition**

The Clinic is very small 20' x 24' and was unheated at the time of inspection. The clinic is basically wired like a small house. The inspection was limited by lack of power and heat. Although some deficiencies are noted it is apparent that this Clinic should be completely replaced.

1. Electrical Service
  - a. Electrical service is an overhead connection to the building with 100A 120/240V single-phase power from the serving utility power line. The meter/main is starting to show some signs of heavy corrosion.
  - b. The meter is a GE #79919007, CL200 240V 3W.
2. Power Distribution
  - a. There is one panel in the building, a Sq.D Qo style Panel 100A 12 circuit (panel A). It has 4 spare spaces.
  - b. The feeder to Panel A is 3#2 Cu – No ground. (NEC 250-122 Equipment Ground minimum size required is #8 Cu.)
  - c. Panel A is mounted directly through the wall from the meter/main with a short nipple. There is a file cabinet located directly in front of it. Adequate clearance is not provided. NEC110-26(b).
  - d. Non-metallic sheathed cable (Romex) is used for the branch circuit wiring. Patient care areas need to be wired in metal raceways. NEC 517-13(a) and (b).
  - e. Several cables enter the panel with no bushing.
3. Grounding System
  - Grounding of Electrical Systems*
    - a. The service is grounded to a ground rod.
  - Grounding of Electrical Equipment*
    - b. The antenna is not grounded. NEC 820-40(d)
4. Exterior Elements
  - a. Exterior lighting is incandescent flood light at the entrance. Does not have photocell or time clock controls.
5. Wiring devices
  - a. Wiring devices could not be checked. There was no power to the building.
  - b. Receptacles are residential grounding type, not hospital grade. NEC 517-18(b)
  - c. Interior device plates are non-metallic ivory decorator plates.
  - d. There are an inadequate number of receptacles. NEC 210-52(a) 210-60.
6. Lighting
  - a. Foot-candle measurements could not be taken.



4. Utilities

- a. Water Supply  
The city water provides fill points and water is hauled to building and stored in cans.
- b. Sewage Disposal  
Incinerator toilet system is currently provided.
- c. Electricity  
Power from Village system via overhead wire. See Photos
- d. Telephone  
Overhead phone with only one phone connection, requiring fax and phone on same line.

**H. Existing Facility Floor Plan (Site Plans, New Clinic Plans, Regional Map):**

We have attached drawings, as we have been able to identify, find, or create as part of this report. We have endeavored to provide all drawings for all the sites; however, in some cases exact existing site plans were not available. We have provided as indicated below:

- A1.1 Existing Site Plan is attached if available
- A1.2 Existing Facility Floor Plan is attached following.
- A1.3 The Existing typical wall section is attached following as required by the report guidelines.
- A2.1 The Addition to the Existing Facility as required to meet ARPCF Space Guidelines is attached following.
- A3.1 The New Clinic Site plan is attached as proposed based on the community input.
- A3.2 The New Denali Commission Clinic Floor Plan meeting the ARPCF Space Guidelines and proposed for this location is attached.

## IV. Deficiency Evaluation

### A. Deficiency Codes:

The deficiencies are categorized according to the following deficiency codes to allow the work to be prioritized for funding. The codes are as follows:

**01 Patient Care:** Based on assessment of the facilities ability to support the stated services that are required to be provided at the site. Items required for the patients social environment such as storage, privacy, sensitivity to age or developmental levels, clinical needs, public telephones and furnishings for patient privacy and comfort.

**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 life safety aspects of building codes including the Uniform Building Code, International Building Code, The Uniform Fire Code, NFPA 101, The Uniform Mechanical and Plumbing Codes and The National Electrical Code. Deficiencies could include inadequacies in fire barriers, smoke barriers, capacity and means of egress, door ratings, safe harbor, and fire protection equipment not covered in other deficiency codes.

**03 General Safety:** These deficiencies identify miscellaneous safety issues. These are items that are not necessarily code items but are conditions that are considered un-safe by common design and building practices. Corrective actions required from lack of established health care industry safety practices, and local governing body code safety requirements. I.e. Occupational Safety Health Administration (OSHA) codes & standards.

**04 Environmental Quality:** Deficiencies based on Federal, State and Local environmental laws and regulations and industry acceptable practices. For example this addresses DEC regulations, hazardous materials and general sanitation.

**05 Program Deficiencies:** These are deficiencies that show up as variations from space guidelines evaluated through industry practices and observation at the facility site and documented in the facility floor plans. These are items that are required for the delivery of medical services model currently accepted for rural Alaska. This may include space modification requirements, workflow pattern improvements, functional needs, modification or re-alignment of existing space or other items to meet the delivery of quality medical services. (Account for new space additions in DC 06 below)

**06 Unmet Supportable Space Needs:** These are items that are required to meet the program delivery of the clinic and may not be shown or delineated in the Alaska Primary Care Facility Space Guideline. Program modifications requiring

additional supportable space directly related to an expanded program, personnel or equipment shall be identified in this section; for example additional dental space, specialty clinic, storage, or program support space that requires additional space beyond the established program.

**07 Disability Access Deficiencies:** The items with this category listing are not in compliance with the Americans with Disabilities Act. This could include non-compliance with accessibility in parking, entrances, toilets, drinking fountains, elevators, telephones, fire alarm, egress and exit access ways, etc.

**08 Energy Management:** These deficiencies address the efficiency of lighting, heating systems/fuel types and the thermal enclosures of buildings, processes, and are required for energy conservation and good energy management.

**09 Plant Management:** This category is for items that are required for easy and cost efficient operational and facilities management and maintenance tasks of the physical plant.

**10 Architectural M&R:** Items affecting the architectural integrity of the facility, materials used, insulation, vapor retarder, attic and crawlspace ventilation, general condition of interiors, and prevention of deterioration of structure and systems.

**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, interior mechanical utilities, requiring maintenance due to normal wear and tear that would result in system failure.

**13 Electrical Deficiencies:** These are deficiencies with normal or emergency power, electrical generating and distribution systems, interior electrical and communications utilities, fire alarm systems, power systems and communications systems within a building that should be repaired or replaced on a recurring basis due to normal wear and tear that would otherwise result in system failure.

**14 Utilities M&R:** This category is used for site utilities for incoming services to facilities that are required for the building to be fully operational. Deficiencies may include sewer and water lines, water wells, water tanks, natural gas and propane storage, electric power and telecommunications distribution, etc.

**15 Grounds M&R:** Real property grounds components that should be replaced on a recurring basis due to normal wear and tear. Deficiencies with respect to trees, sod, soil erosion, lawn sprinklers, parking, bridges, pedestrian crossings, fences, sidewalks & roadways, and site illumination etc. are considerations.

**16 Painting M&R:** Any painting project that is large enough to require outside contractors or coordination with other programs.

**17 Roof M&R:** Deficiencies in roofing, and related systems including openings and drainage.

**18 Seismic Mitigation:** Deficiencies in seismic structural items or other related issues to seismic design, including material improperly anchored to withstand current seismic requirements effect. The elements under consideration should include the cost incidental to the structural work like architectural and finishes demolition and repairs.

### **B. Photographs:**

We have provided photographs attached which are noted to describe the various deficiencies described in the narratives and itemized in the summary below. The photos do not cover all deficiencies and are intended to provide a visual reference to persons viewing the report who are not familiar with the facility.

We have included additional photos as Appendix B for general reference. These are intended to add additional information to the specific deficiencies listed and to provide general background information.

## C. Cost Estimate General Provisions

### 1. New Clinic Construction

- a. 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 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.
- b. 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.
- c. 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.
- d. 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.

### 2. Remodel, Renovations, and Additions

- a. 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 flat rate of approximately \$32 which is the same amount as used for Equipment for New Clinic Construction. It is included as a line item in the estimate of base costs.
- b. 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.
- c. 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.
- d. 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.
- e. 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.
- f. 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.
- g. 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 sheets document the deficiencies; provide recommendations on how to make repairs or accommodate the needs and provide a cost estimate to accomplish the proposed modifications. The summary addresses individual deficiencies. If all deficiencies were to be addressed in a single construction project there would be cost efficiencies that are not reflected in this tabulation.

These sheets are reports from the Access Data Base of individual Deficiencies that are compiled on individual forms and attached for reference.

Refer to Section VI. New Clinic Analysis for a comparison of remodel/addition to new construction.

**VI. New Clinic Analysis**

The analysis of whether a new clinic is required is based on the Denali Commission standard of evaluation that "New Construction is viable if the cost of Repair/Renovation and Addition exceeds 75% of the cost of New Construction".

We have therefore determined the cost of a New Clinic Construction to meet the Alaska Rural Primary Care Facility (ARPCF) Space Guidelines for the size of village. We have also determined the cost to Repair/Renovation and Addition to the existing Clinic to meet the same ARPCF Space Guidelines.

A. The cost of a New Denali Commission 1500 SF Small Clinic in Platinum is projected to be:

• Base Anchorage Construction Cost per sf.			\$183
• Project Cost Factor:		@ 45%	\$ 82
Medical Equipment	17%		
Construction Contingency	10%		
Design Fees	10%		
Construction Administration	8%		
• <u>Multiplier for Village</u>		<u>@ 1.70</u>	<u>\$185</u>
Adjusted Cost per SF			\$450
<hr/>			
<b>Projected Cost of a New Clinic:</b>	<b>1500 sf. X \$450</b>	<b>=</b>	<b>\$675,000</b>

B. The cost of the Repair/Renovation and Additions for the existing Clinic are projected to be:

• Code & Condition Repairs/Renovations			
Cost from Deficiency Summary			\$368,890
• Remodel/Upgrade work (See Def. Code 01)			
100% of clinic 534 SF = 534 SF @ \$137/SF			\$ 73,150
• Additional Space Required by ARPCF – (See Def. Code 06)			
o Base Anchorage Cost			\$226
Medical Equipment			\$ 32
Additional Costs –			\$ 98
General Requirements	20%		
Estimation Contingency	15%		
o <u>Multiplier for Village @1.70</u>			<u>\$249</u>
Adjusted Cost per SF			\$605
Total Addition Cost of 962 SF @ \$605			\$582,172
• Project Cost Factor:		@ 28%	\$286,779
Construction Contingency	10%		
Construction Administration	8%		
Design Fees	10%		
<hr/>			
<b>Total cost of remodel/addition</b>			<b>\$1,310,991</b>

C. Comparison of Existing Clinic Renovation/Addition versus New Clinic:

**Ratio of Renovation/Addition versus New Clinic is:**

$$\$1,310,991 / \$675,000 = 1.94 \text{ x cost of New Clinic}$$

Based on Denali Commission standard of evaluation; the remodel/addition costs are more than 75% of the cost of new construction. A new clinic is recommended for this community.

\* Note: Village factors may have been adjusted for recent 2001 cost adjustments and may have changed from previously published data distributed to the villages.

**D. Overall Project Cost Analysis:**

The overall project cost analysis below incorporates land, multi-use, utility costs, and road access costs, and project management fees if any are associated with the project.

Item	Quantity	Units	Unit Cost	Area Adjustment Factor	Total Cost	Allowable under "Small" Clinic Process (yes/no)
Primary Care Clinic (Allowable)	1500	SF	\$265.00	1.7	\$675,000	yes
Clinic (Non-allowable portion)	0	SF	\$265.64	1.7	\$0	no
Land	15,000	SF	\$2.00	1	\$30,000	yes
Multi-Use Facility Design Cost	0	LS	\$0.00	1	\$0	yes
Multi-Use Facility Construction Cost	0	LS	\$0.00	1	\$0	no
Utility Extension/Improvements	1	LS	\$15,000	1	\$15,000	yes
Road access & parking lot improvements	1	LS	\$5,000	1	\$5,000	yes
Subtotal					\$725,000	
Project Management Fees					<u>Unknown</u>	
<b>Total Project Cost</b>					<b>Unknown</b>	

## VII. Conclusions and Recommendations

The existing Platinum Clinic has served the community well for many years. Base on current ANTHC and BBAHC delivery model for health care to rural Alaska, the facility is not adequate in size or in condition to meet these needs. The existing structure could be adapted for many other less clinical and medically stringent uses without extensive remodeling.

After careful review it is the recommendation of the consultant team that a new Denali Commission 1500 SF Small Clinic be considered for Platinum. The addition of approximately 966 sf of clinic space required by the current ARPCF Program Space Guidelines and the major renovation and upgrading of the existing clinic space will cost 1.96 times the cost of a new clinic. This results in the recommendation of a new clinic for this village.

We reviewed the options with the local community leaders the consensus was that the New Small Clinic would meet the current community needs and for years to come. In addition, they agreed that there is an adjacent site available for construction of a new clinic. Utilities will have to be resolved for the new clinic site.

The community believes this is a good solution and will produce the best return for funds invested in a clinic that meets the needs of Platinum Community and is aggressively moving to assist in any way to accomplish this goal.

**Appendix A: Specific Deficiencies Listings**

The attached sheets represent the individual deficiencies identified for this project and the corrective action required to meet current codes and standards of construction. The deficiencies are further summarized in Section V. Summary of Existing Clinic Deficiencies.

**Appendix B: General Site Photographs**



Aerial



Exterior From West



Exterior From Northeast



Exterior from Northwest



Exterior From East



Foundation Failure



Entry Door



Foundation



Waiting Room



Waiting Room/ Entry



Exam Room





Toilet



Office



Office



Hall



New Site From Southwest



New Site From West

This Report was Prepared by  
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