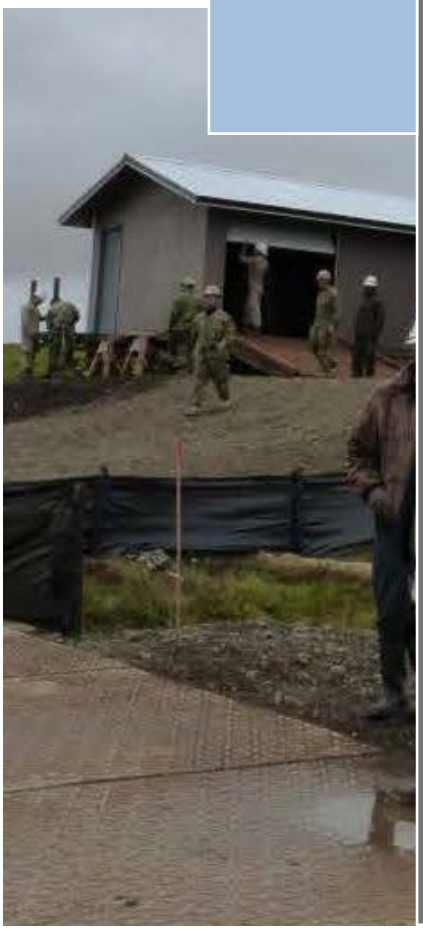
Newtok Traditional Council-Project Management

Performance Audit Report on the Project Management of the Mertarvik Evacuation Center, September 10, 2013.



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STATE OF ALASKA
DEPARTMENT OF
COMMERCE
COMMUNITY AND
ECONOMIC DEVELOPMENT
Division of Community and Regional Affairs

Sean Parnell, Governor
Susan K. Bell, Commissioner
Scott Ruby, Director

EXECUTIVE SUMMARY

Why was this audit conducted? **September 10, 2013**

This is the second part of a two part audit report. The first part (released July 12, 2013) focused on Newtok Traditional Council's financial compliance with grant agreement terms, it tested the reliability of accounting reports and provided a historical summary of project milestones. This second part is a performance audit report concentrating on construction management practices relative to such factors as: economy, efficiency and effectiveness; and meeting the project goal of constructing the Mertarvik Evacuation Center or MEC. Because of the large scale construction, potential of cost overruns and the possibility of not meeting project goals this audit has been conducted.

The continuing erosion of the village's town site into the ocean has required the evacuation of villagers to a more stable site named Mertarvik. Once villagers begin to move, the Newtok villagers will need an enclosure to provide emergency shelter and serve as multi-use facilities for residents to relocate.

The state of Alaska has funded the MEC project in two phases. The first phase occurred in the legislative session of 2010, a designated grant of $4 million was awarded to the Newtok Traditional Council or NTC for a construction of an evacuation center. In the 2011 legislative session, an additional $2.5 million was provided to help complete the project.

In July of 2010, a Memorandum of Understanding agreement between NTC and the Department of Transportation and Public Facilities (DOT/PF) stipulated the department was to manage all aspects of the design and construction of the MEC. Initially, the shelter design consisted of a building of approximately 8,200 square feet and would have provided a gathering space for 300 people. Construction progressed under DOT/PF's management until September of 2011 when NTC decided to cancel the agreement. The NTC decided its tribal administrator and the newly hired CEO of the Mertarvik Community Development Corporation would manage all aspects of a re-design and the further construction of the MEC. The NTC chose to proceed with a different construction method—one that would use prefabricated panels. The panels would be assembled on the foundation already constructed by DOT/PF's general contractor.

Of the two grants for construction purposes, DOT/PF expended approximately $2.6 million of the initial $4 million grant—leaving $1.4 million and another $2.5 million from the 2011 designated grant. The combined funding of the two grants, $3.9 million ($1.4 + $2.5) was made available to NTC project team which consisted of—the tribal administrator, the "CEO" and three assistants. The audit scope of this performance review is focused on using economy, efficiency and effectiveness as factors when considering the project team's administration and management of the construction project. Specifically; I designed the audit to address the following question:

- **Has the Newtok Traditional Council and its project team established and followed sound processes to effectively manage MEC's construction?**

For further information or questions regarding this report please contact Tom Sutton, CPA, Internal Auditor--Division of Community and Regional Affairs, Dept. of Commerce, Community and Economic Development.
P.O. Box 110809 Juneau, Alaska 99811-0809
Telephone: (907) 465-5550 Fax: (907) 465-4761
Thomas.Sutton@alaska.gov.

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I conducted the audit under the authority of audit provisions within the articles of the grant agreement. The purpose is to promote: accountability, cost-effective use of state funds and provides a prospective focus for future construction management. Furthermore, the report is to provide guidance and describe the "project management practices" issued by the Project Management Institute and utilized by the industry.

The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that I plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on my audit objectives. I believe that the evidence obtained provides a reasonable basis for my findings and conclusions.

Audit results

The Newtok Traditional Council had previously developed policies and procedures to manage projects like the MEC. The procedures generally were well designed and included most of the leading practices of the construction industry. However, there are certain gaps in procedures, which if addressed, could improve policies and procedures and provide greater assurance construction projects will be adequately managed and monitored.

For example, the policies and procedures should require with complex and large projects only experienced and licensed professionals will be hired to increase the probability that key issues of cost, time and quality of workmanship will be addressed. A policy should also be developed that identifies the minimum terms and conditions that should be included in construction and consulting contracts.

Additionally, it was found NTC's project team did not always follow prescribed policies and procedures. Deviations from policies and procedures consisted of: not maintaining procurement integrity, the apparent failure of not inspecting the workmanship of received manufactured goods and failure to meet established standards for writing "requests for proposals" and procurement contracts.

At this time it is difficult to determine the precise impact of the noted weaknesses on the overall cost of the project. Grant administrators need to pursue and obtain information on $696,696 of "unresolved costs" due to the failure to inspect manufactured goods. Also, expenditures with the consulting contract for project superintendent and management services should be reviewed because of possible "conflict of interests." In conclusion, I believe the deficiencies of the project team to fully comply with management policies and internal procedures have had negative effects' on MEC costs and project results.

Recommendations

Focusing on the project team's management practices, the following improvements are recommended to the NTC:

- **To address project management and oversight--**I recommend the NTC hire a licensed and bonded general contractor that is able to provide the expertise to complete the MEC construction; to act as a representative between the general contractor and the NTC, consideration should be given to hiring a professional project manager that will be responsible for accomplishing project goals and objectives; prior to proceeding with any construction activities, NTC's project manager should contact the "Architect of Record" because of the architect's "claims" of deficiencies in the current architectural plans.

Executive Summary

- **For contract development, negotiations and approvals--**I recommend the NTC adopt policies and procedures to include: provisions that require the hiring of an "experienced and professional" project manager to manage large and complex building projects; and describe the minimum "terms and conditions" to be written in procurement contracts as a protection to NTC's financial interests. To promote "procurement integrity" the tribal administrator should review all competitive bids for potential "conflict of interests" and report deficiencies found to the NTC. To safeguard assets the tribal administrator should inspect and record received goods and products and compare such items with specifications required in the procurement contracts.

As a result of examining the project team's handling of the two contracts, the following are recommendations for the Division's grant administrators:

- **Accountability of grantee--**I recommend the grant administrators withhold reimbursement of expenditures concerning the Kenai Manufacturing consulting contract to prevent funding a contract that has a potential "conflict of interests" between an NTC employee and Kenai Manufacturing. Also, grant administrators should determine if NTC's project administrators breached NTC's policies and procedures by not inspecting the delivered SIP panels and determining whether the items meet the required specifications in the procurement contract. The 2012 reimbursements for the SIP panels totaled $696,696 and are "unresolved costs" until NTC confirms the delivered panels meet the required specifications in contract provisions.

What's next?

There are no requirements of NTC to consider the audit findings, conclusions and recommendations. However, the Director of the Division of Community and Regional Affairs (DCRA) or grant administrators could ask to receive comments from the council members or the tribal administrator on the findings and recommendations. Any comments from the NTC concerning corrective actions taken in response to the audit would help develop a good working relationship between the two organizations.

PHOTO BY SALLY RUSSELL COX - AUGUST 2013

The U.S. Department of Defense Innovative Readiness Training (IRT) program has assisted Newtok's relocation to Mertarvik by providing road and building assistance. At left are two building which were completed by the IRT and are meant to provide storage during the relocation.

INTRODUCTION

Audit overview

During 2010 the NTC began the construction project of the Mertarvik Evacuation Center by engaging the expertise of DOT/PF to manage all aspects of the center's construction. Initially, the project consisted of the planning and construction of 8,200 square foot building capable of handling 300 people. The DOT/PF project team was responsible for, but not limited to:

- Architectural design of the facility.
- Engineer subcontractors for civil, structural, mechanical and electrical engineering.
- Consultants associated with analyzing storm water pollution and determining prevention measures.
- Consultants required for inspecting the site in accordance with EPA regulations.
- Design and construction of a site septic system and water well supporting the drinking water system.
- Construction of a piling foundation and structural deck for the building.
- Obtaining all required permits and inspections for the building to be ready for occupancy.

The MEC has been funded by the legislature in two phases. The first funding took place in the 2010 legislative session for which a designated legislative grant of $4 million was appropriated. Secondly, in the 2011 legislative session a $2.5 million grant was awarded for continued financial support.

Construction progressed under DOT/PF's management until September of 2011 when NTC decided to cancel the management agreement with DOT/PF. The NTC determined its tribal administrator and the newly hired CEO of the Mertarvik Community Development Corporation would manage all aspects of the planning and construction of the MEC.

Of the two grants for construction, DOT/PF expended approximately $2.6 million of the initial $4 million grant—which left $1.4 million. The other $2.5 million grant was not expended. The combined and available funding of the two grants, $3.9 million ($1.4 + $2.5 million), was accessible to the NTC project team. The project management team—consisted of the tribal administrator, the "CEO" from MCDC and three recently hired assistants.

The audit scope of this performance review is focused on NTC's project team management of the project after it was turned over to NTC by DOT/PF. At the close of DOT/PF's involvement in September of 2011 several phases had been completed. The most visible is the completed foundation for the building. At left is a picture of the foundation as it sat in August of 2013.

After September of 2011, NTC's newly appointed project team was responsible for the management of all phases of the project—which included but not limited to: planning, implementing and coordinating construction activities. However, none of the employees of the project team had any experience with construction management. Further complicating matters, it was decided by NTC to change the architectural design and use a different method of constructing the building. The plan was to use the existing foundation—but complete the building with prefabricated polyurethane structural insulated panels or more commonly known in the industry as SIPs. This change in direction required a whole new set of architectural designs, engineer studies and certifications by engineers. New subcontractors would need to be selected and supervised in the professional fields of electrical, mechanical, plumbing, and structural engineering.

I conducted the audit under the authority of audit provisions within the articles of the grant agreement. Although the purpose of the audit is to determine the economy, efficiency and effectiveness of management, the report is also designed to promote: accountability, cost-effective use of state funds and provides a prospective focus for future construction management. Furthermore, the report is to provide guidance and describe the "project management practices" issued by the Project Management Institute and utilized by the industry. Specifically, I designed the audit to determine:

- **Has the Newtok Traditional Council and its project team established and followed sound processes to effectively manage MEC's construction?**

Audit scope

The audit scope covers NTC's management of the MEC project following the cancelation of the agreement with DOT/PF in September of 2011. Therefore, the audit scope is NTC's project management from October of 2011 to December 31, 2012. The ending date of December 31, 2012 is selected because NTC financial reporting is based on a calendar year basis. Additionally, grant administrators "suspended" reimbursing expenditures of NTC after that date. During the period under review, NTC advertised and engaged the services of two contractors: one for the manufacturing of SIP panels and another for construction management services. The products, services and contractual amounts of the two contracts consisted of the following:

I. A $774,000 contract for the architectural design, engineering, consulting, product manufacturing and delivery of SIP panels. A vital requirement of the contract mandated the SIP panels to be manufactured with a thickness of 10.25 inches for the floors, walls and roof panels.

II. A $230,000 contract for consulting services relative to oversight and management of the assembly of panels and construction of the building. The contract also required the contractor to develop a "virtual project management service" through the setup of an online project management tool. Furthermore, the contractor was to train, support and assist the local workforce.

During 2011 and 2012 the only invoices reimbursed were Earthcore SIPs for manufacturing and it amounted to $696,696. It should be noted that billings from the contractor for consulting services in 2012 were not made available during the audit. It wasn't until May of 2013 that NTC paid $35,165 to the consulting firm for services allegedly provided in 2012. Please **look to Exhibit 1** on page 6 for more details on the contracts audited.

Methodology

To gain an understanding of construction requirements and responsibilities I reviewed studies, audits and publications that identify "best practices" associated with construction management. I interviewed employees of firms that provided subcontractor services to determine how the project team conducted oversight responsibilities. To gain an understanding of the history of the project I interviewed the DOT/PF project manager in charge of the MEC project.

Audit in accordance with government auditing standards

This audit was conducted in accordance with the generally accepted government auditing standards prescribed by the U.S. Government Accountability Office. Those standards require that I plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for my findings and conclusions which is based on audit objectives.

The project team of NTC did not answer certain questions posed in emails and did not provide pertinent documentation in some instances. For example, the documentation requested and not provided consisted of the following:

- The company, Earthcore SIPs bid in response to the "Request for Proposal" concerning design and manufacturing of SIP panels.
- The 2012 invoices for consulting services provided by Kenai Manufacturing LLC.
- The "Completion Statement" or correspondence relating to the close of the contract with Earthcore SIPs.

Although these actions reduced the capability of determining the appropriateness of some management practices and expenditures, I believe the collaborating evidence obtained provides a reasonably basis for my findings and conclusions.

Government audit standards require that I disclose any impairment to independence in the audit report and how such impairment would of affect or could have affected the audit results. There were no impairments to this auditor's independence in the assessment of findings or the preparation of the audit report. In my opinion, the audit results are based on my objective assessment of the sufficient and appropriate evidence and it provides a reasonable opinion as to the findings and conclusions--based on the audit objectives.

Exhibit 1

Construction Contracts Audited

Project	Description	Original Budget	Contract Award	Expenses Audited	Transaction Dates Audited
Manufacture of SIPs Panels for 6,700 sq. foot MEC Building.	Architectural, engineering and manufacturing of panels ready to assemble panels at site. Contract included freight costs from Colorado to Mertarvik.	**(a)**	$ 774,106	$ 696,696	Jan-12 Dec-12
Construction management services.	Consisting of project oversight of the assembly of SIPs panels at Mertarvik. Includes supervision of attaching panels to foundation.	**(a)**	$ 230,000	$ - **(b)**	Oct-12 Dec-12

Notes: ***(a)*** *Each contract was derived from a competitive bid process.*

(b) *Although the contractor billed NTC in 2012--there were no payments until 2013, outside of the audit scope. It should be noted a request was made to examine the 2012 invoices, however, the invoices were not provided.*

BACKGROUND AND LEADING PRACTICES

Background on the construction of the Mertarvik Evacuation Center

Newtok is a growing Yup'ik Eskimo village (population approximately 350) located on the Yukon-Kuskokwim Delta along the western coast of Alaska and near the confluence of the Newtok and Ninglick Rivers. Years of erosion studies have concluded that Newtok must relocate as there is no permanent and cost-effective alternative for remaining at the current village site.

After a relocation study the village confirmed the selection of Mertarvik—a site located nine miles from the existing village of Newtok. In 2003, the Newtok Native Corporation acquired 10,943 acres for the new town site from the U.S. Department of Interior.

The Newtok Traditional Council or NTC is an elected 7 member board that governs the Newtok village. The council sets policies, priorities and manages the tribe's resources. The NTC appoints a tribal administrator that manages the day-to-day operations. With the approval of the NTC, the tribal administrator selects and supervises employees to carry out the responsibilities of fiscal, program and project matters.

In the fall of 2011, the NTC determined there was a less expensive option of constructing the MEC and it would use the existing foundation. The change of construction was the use of prefabricated polyurethane structural insulated panels which are commonly known as SIPs. This was a design change from the former DOT/PF design which required "point loading (or columns) at each steel piling of the foundation."[1] As a result of NTC's decision, it required the NTC project team to open a competitive bid process for the selection of a contractor familiar with manufacturing SIPs. Additionally, the contractor would be responsible for selecting subcontractors to provide the architectural plans and reviewing the structural engineering plans. The responsibilities of obtaining the necessary construction permits and shipping the panels to the construction site also fell to the selected contractor.

The Request for Proposal or RFP for the Mertarvik Evacuation Center

During February of 2012, the NTC selected from Colorado the manufacturing firm of Earthcore SIPs to provide the manufacturing for the project. The "Request for Proposal" or RFP required the selected contractor to "deliver all materials to the respective project site [Mertarvik] not later than August 17, 2012."

Earthcore SIPs[2] or Earthcore won the competitive bid because it would manufacture SIP panels with a 10.25 inch width and at a lower cost than the competition. The competitive bid provided by Earthcore was protested by at least one Alaskan manufacture. The primary reason for protesting the bid was the premise that 10.25 inch SIP panels are not a proven or a tested process and they claimed, *"As a non-proven process, it was the reason why 10.25 inch SIP's are not manufactured or offered for sale by any of the longtime SIP manufacturers."*

The protest was rejected by NTC and on February 23, 2012 the council entered into a contract with Kenai Manufacturing LLC which was representing Earthcore SIPs. Earthcore's manufacturing plant is located in Colorado and as a result the company selected an architect licensed in Colorado. The assignment according to the architect was to, *"Just design the envelope [or exterior of the MEC] so that the framing could begin in the 2012 building season."* The architect's plans called for a smaller building than previously designed and resulted in a building with an area of 6,700 square feet. Once

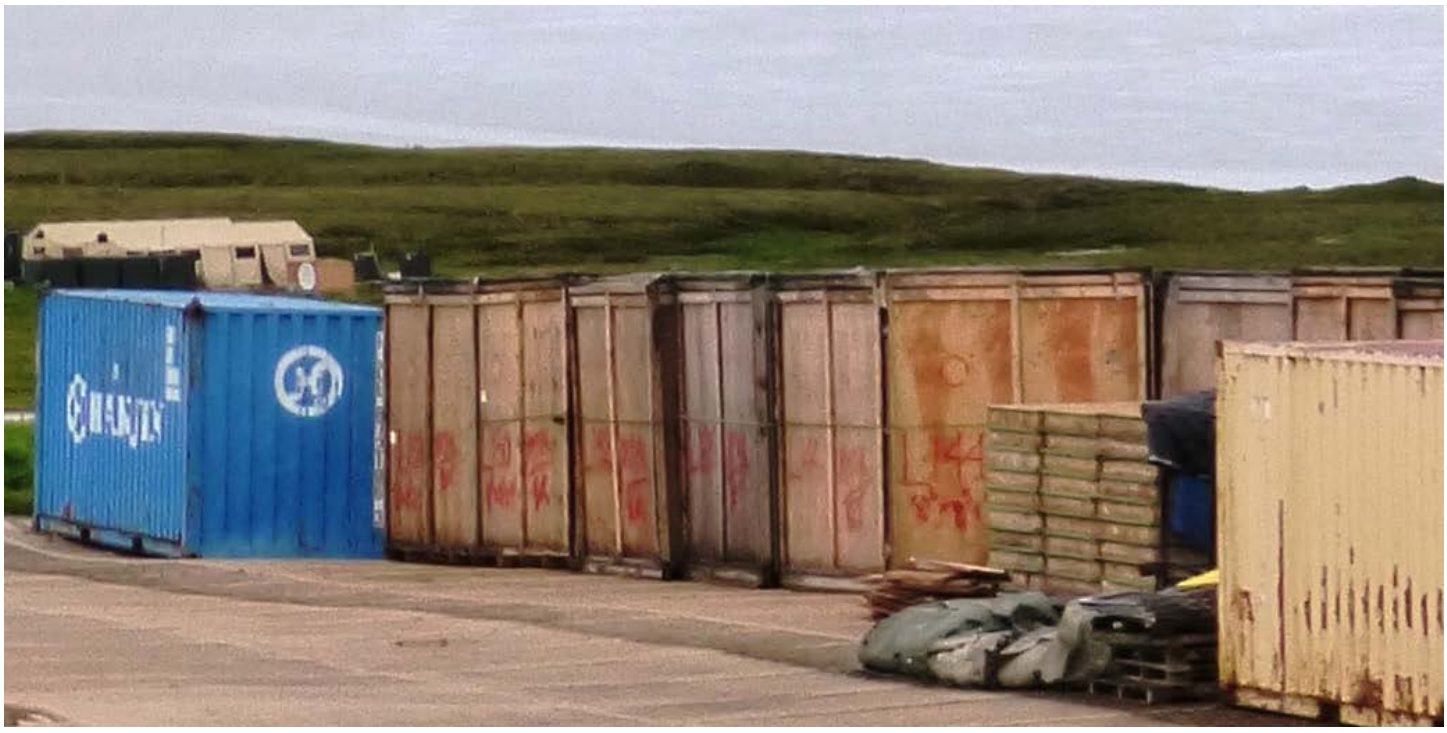
[1] Memorandum dated September 20, 2011 and prepared by DOT/PF's project manager—Ms. Kim Mahoney, PE.

[2] To alleviate confusion—Earthcore SIPs of Colorado does business in Alaska under Kenai Manufacturing LLC. The owner and manager of both companies is Mr. Scott Anderson.

finished, the "framing" plans were submitted to an Alaskan engineer for certification as the "engineer of record." The "engineer of record" is responsible for warranting the "framing" plans meet Alaska building codes and may be used as a guide to assemble the framing. After the approval by the "engineer of record" the plans were submitted to the Alaska Fire Marshal Office for review and approval as required by Alaska statutes and regulations. On June 1, 2012 the Fire Marshal gave a "Framing Only" plan approval for the erection of the building frame. Any work associated with the interior of the building would require a more extensive "Final Plan" approval by the Fire Marshal's Office.

According to the architect of record—Mr. George Watt, "*The "structural plans" submitted to the Alaska engineer were never meant to be used as a guide to attach the framework of the building to the existing foundation. The plans were drafted for informational purposes only. After inspecting the foundation in Mertarvik I could see the existing foundation had changed from engineering plans I based my preliminary drawings upon. This is not uncommon in construction; the built foundation does not match the initial architectural drawings.*" This issue is addressed in **recommendation 3.**

Furthermore, according to Mr. Watt, *"What should to be completed before any framing construction and assembling of SIP panels are new structural architectural plans which would be in coordination with the foundation as it was built."* Of course this requires another engineering professional to be the "engineer of record" and approve the plans for submission to the state Fire Marshal. Once the Fire Marshal has again issued a "Framing Only" plan, construction of MEC's framing and envelope may proceed.[3] The Fire Marshal's two step process of approving architectural and engineering plans is done to allow the builder to assemble the outer envelope (the outside panels, framing and trusses) of building in the summer months and once the "Final Plan" is approved the interior (i.e. walls, plumbing and electrical) of the building may be completed without regard to the weather.



Above is a picture of the containers which was taken during August of 2013 by Ms. Sally Russell Cox—a Local Government Specialist with DCRA

[3] However, these steps are to be taken only if NTC approves of the SIP panels and materials delivered to Mertarvik in June of 2012. It appears the panels were not inspected to determine if panels were manufactured in accordance with contract specifications. There is a genuine risk the panels are 5 ½ inch instead of the required width of 10 ¼ inches. See item B of page 15.

Before any work is completed within the envelope of the building, the architect of record should consult with engineers in the fields of plumbing, electrical, mechanical and fire hazard in which the outcome would be detailed in the finalized architectural plans. Furthermore, once the complete architectural plans are compiled; structural, and mechanical and electrical engineers need to become "engineers of record" for their area of expertise. The combined architectural plans are then sent by the architect to Fire Marshal's Office for "Final Plan" approval. Once the plan approval is in hand--construction in the interior of the building may proceed.

For the required remaining work (the finalized architectural plans) the architect stated, *"It is 90% of my effort to complete the architectural planning and drawing."* None the less, to meet the contractual deadline set by the project team Earthcore manufactured the panels and packaged in protective containers they were delivered to Mertarvik in July of 2012.

After the delivery of the materials and panels last year, the project team needed to start the process of selecting a project superintendent and project manager to oversee the construction and assembly of the panels. Through the RFP process, NTC again selected the firm of Kenai Manufacturing LLC—the manufacturer of the SIP panels. The contracted amount was a "proposed fee" of $215,000 for the management services. Per the contract the enactment date of the agreement was November 20, 2012 for the, "furnishing of project management services for the MEC from October 2012 – December 2013 for NTC located at Mertarvik."

According to the owner of Kenai Manufacturing LLC or "Kenai"—planning for the upcoming 2013 construction began in December of 2012. Billing for services rendered were sent to NTC, however, payment was not received by Kenai until May of 2013. Because administrative issues with NTC bookkeeping, this author requested the Kenai owner to provide a copy of the service invoices for 2012. Although his response was cooperative the documentation was never sent and thereafter phone calls were never returned. Although consulting services were allegedly performed in 2012 and paid for in 2013[4] the precise nature and extent of services rendered is not known.

Roles and responsibilities of the NTC project team

The tribal administrator, working with the assistance of the "CFO", a project assistant and two accounting technicians was responsible for—but not limited to: budget development, procurement, personnel actions, accountability, safeguarding funds, staff supervision and grant administration.[5] Furthermore, the tribal administrator insures internal control procedures are adhered to by all personnel as outlined in NTC's, *Procurement Management System – Policies and Procedures* and the *Policies Manual*.

Exhibit 2 on the next page, details the roles and responsibilities of project management staff, the contractor and other sub-contractors during the audit period:

[4] NTC bank account records indicate wire transfer of $35,165 to Kenai Manufacturing on May 8, 2013.

[5] Per the NTC Policy Manual, III Administration, page 5.

Exhibit 2

Roles and Responsibilities of Construction Management				
Newtok Traditional Council (NTC)	**Tribal Administrator (TA)**	**CEO Project Assist. Accountant Assist. Accountant**	**Contractor** (Earthcore and Kenai)	**Sub-Contractors**
Management/Oversight And Direct Management Responsibilities				
NTC: Final approval of contracts, change orders and contract modifications for more than $10,000. Establishes policy and has oversight responsibility of construction contracts.	**Tribal Administrator or TA:** Approves purchases under $10,000. Oversees project team and accounting staff. Responsible for contract content ready for NTC approval. Monitors product or services deliverables from contractors.	**CEO:** Assist TA with budget, RFP content, contract terms, grant administration and monitors product and service deliverables. **Project Assist:** reviews invoices and filing paperwork. **Accountant/Assist:** payroll, payment of invoices and grant reporting.	**Contractor**: Plans, organizes, selects and supervises architect and engineer sub-contractors. Obtains all necessary permits and ensures compliance to laws and regulations. Responsible for delivery of product.	**Architect, and engineers in following disciplines-- structural, electrical, plumbing, civil, mechanical and fire suppression:** completes and certifies building plans for each professional discipline.

Leading practices for construction management

Good project management is critical to effectively: plan, execute, monitor and evaluate construction projects. Likewise, project managers should reduce the risk of unnecessary cost increases and improve the likelihood of projects being completed on time and within budget. There are numerous industry and government guidelines' that identify best practices for project managers to use.

The literature guidelines reviewed and the architect I interviewed supports the premise; the most important step for a project of MEC's size, scope and complexity, would be to hire a "qualified project manager." The project manager would be separate from the general contractor whose responsibilities are different. The project manager working directly for NTC would an important "check and balance" to ensure the general contractor's work is satisfactory and meets industry standards. It would be the general contractor's responsibility to oversee: the sub-contractors' work, coordinate code and building inspections, monitoring change requests, tracking budgets, controlling costs, monitoring and reporting project risks to the project manager.

No matter how many "checks and balances" in the hierarchy of management, the ultimate responsibility leads to top management. Therefore, to identify the best and leading management practices for the council members, various project management guides were reviewed. The guide that was the most straightforward was published by the *Project Management Institute*. The guide describes key phases of a project management process—and highlights the best practices associated with each phase—the guide is summarized in **Exhibit 3 on the next page**.

Exhibit 3

Global Project Management Leading Practices	
Process	**Sample of Leading Practices**
Develop Project Charter	Establish standardized guidelines. Assign project manager and authority level. Provide information on communication process.
Preliminary Project Scope & Statement	Develop requirements for services needed and requirements for approvals. Set project schedule for completion.
Project Management Plan	Select a project management team. Establish clearly defined performance standards for contractors, identify how performance will be evaluated and assign staff for monitoring performance. Decide how project changes will be monitored and controlled. Develop provisions for communication requirements with interest groups.
Direct and Manage Project Execution	Manage the project team and train staff. Obtain bids from contractors, negotiate contracts. Manage risks, adopt approved changes. Collect project information and report costs.
Monitor and Control Work	Assign a contract manager to monitor the project. Compare actual project performance to the project plan. Identify needs for corrective or preventative actions. Track budgets and compare invoices and charges to contract terms and conditions. Maintain accurate and timely information and documentation.
Integrated Change Control	Ensure only approved changes are implemented. Control an updated project scope, cost, budget, schedule and quality requirements based on approved changes. Document complete impact of requested changes.
Close Project Process	Verify and document project completion. Collect project records. Gather lessons learned form the project. Update all records and archive for future use.
Source: Project Management Institute, A Guide to the Project Management Body of Knowledge, 2001 Third Edition.	

AUDIT RESULTS

Audit Objective: Has the Newtok Traditional Council and its project team established and followed sound processes to effectively manage MEC's construction?

In previous years the Newtok Traditional Council developed many sound policies and procedures for guiding the management of construction projects like the Mertarvik Evacuation Center. Overall the document created by NTC, "*Procurement Management System—Policy and Procedures"* addresses many of the leading practices of good management. However, I found several gaps that if addressed could improve policies, procedures and provide greater assurance that construction projects will be adequately managed and monitored. For details on this topic please see the next section titled:

"Issue – Overall, the NTC's *"Procurement Management System—Policies and Procedures"* have appropriate contract management practices, but it could make improvements is several areas."

I also found NTC's project team did not always comply with established policies and procedures or provide effective management and oversight of the contractors. For example, of the two contracts under review—the project team did not abide by the following provisions within the manual: "*Procurement Management System—Policy and Procedures*."

Exhibit 4

NTC Procurement Management System--Policies and Procedures			
Provision Title	Section Number	Infraction of policy or procedure described	Contract
Standards of Conduct	2		
Procurement Integrity	2.4-A-1	Competing Contractor included procurement official of NTC in bidding offer.	Kenai
Procurement Integrity	2.4-A-3	Competing Contractor obtained from employee of NTC source selection information on procurement.	Kenai
Negotiated RFP Contracts	5		
Solicitation Phase	5.3-A-1	RFP format did not meet format requirements such as: defined reponsibilites & clear objectives.	Kenai
Evaluation & Negotiation	5.4-A-1	Award made to contractor in which offer or bid did not meet minimum qualifying requirements of RFP.	Kenai
Contract Administration	5.5-G-4	Products from contractor not inspected for required specifications-nevertheless contractor paid-in-full.	Earthcore
Contract Administration	5.5-H-4	No evidence "Completion Statement" issued to Earthcore as required when contract closed.	Earthcore
Notes: Kenai *refers to Kenai Manufacturing and* ***Earthcore*** *refers to Earthcore SIPs contract.*			

For more elaborate information on the above items please see the section titled:

"Issue – The project team did not follow certain requirements of NTC's *"Procurement Management System—Policies and Procedures*."

It is difficult to determine the effect of procedural gaps and noncompliance with policies on the overall cost of the project. The challenge of the remote site construction, the relatively small construction season and the complexity of changing the building design and subcontractors in the project's midstream has a great effect on completing the project—notwithstanding the objective of staying within a reasonable budget.

Issue: Overall, the NTC's *"Procurement Management System—Policies and Procedures"* have appropriate contract management practices, but it could make improvements in several areas.

In general I found NTC's guidelines in the "*Procurement Management System – Policies and Procedures"* or "procurement policies and procedures" were well designed and addressed most of the leading practices for managing contracts for construction. Some noteworthy examples of good practices are:

- ✓ Establishing guidelines for managing projects which addressed: financial controls, roles and responsibilities of employees and monetary limits on approval of materials purchased.
- ✓ Establishing guidelines related to project records management, project reporting and communication.
- ✓ Review and approval of contract modifications and provisions for corrective action with contracts.
- ✓ Establish evaluation and selection procedures for negotiated contracts and requests for proposals.
- ✓ Establishing guidelines related to negotiations' of contracts and determining the competitive range of contractual amounts.

Nonetheless, after reviewing the project team's management with the two contracts, I found NTC could improve its "procurement policies and procedures" by adding provisions in the following areas:

- When faced with large and complex construction projects, there should be a requirement of procuring the services of a "project manager" who has professional experience managing similar projects. A project manager is the person responsible for accomplishing the stated project objectives. Key project management responsibilities include: creating clear and attainable project objectives, building the project requirements, and managing the constraints of cost, time, scope and quality.

  Furthermore, a project manager is the client representative and has to determine and implement the exact needs of the client, based on knowledge of the firm they are representing. A project manager is the bridging gap between the general contractor and the client. The project manager should have full responsibility and the same level of experience and authority required to complete a project. The project manager must have communication skills and capable of discussing the problems with either party. The project manager should have the ability to adapt to the various internal procedures of the contracting party and to form good working relationships to ensure key issues of cost, time and quality can be realized.

- NTC needs to add a provision in the "procurement policies and procedures" which describes the minimum terms and conditions to be included in procurement contracts. Presently there are no guidelines to creating a written contract. Although each procurement contract is different there are certain provisions that should be in each contract, such as, workman's compensation insurance and verification of insurance. What has also stood out with the two contracts is the lack of clearly defined performance standards for the contractors and the description of criteria to which performance will be evaluated. For contracts funded by State grants, there are many required conditions that are too numerous to describe. Appendix A has table listing of general terms and conditions required by NTC's procurement policies and with State grants. Furthermore, Appendix B describes typical provisions that should be considered when writing construction contracts.

The issues above are addressed in **recommendations 2 and 4.**

Issue: The project team did not follow certain requirements of NTC's *"Procurement Management System—Policies and Procedures."*

Many features of NTC's policies and procedures for contract management are well designed, but they were not entirely followed or in some instances completely ignored by the project team. I categorized the deficiencies as:

A. The project team did not follow guidelines for maintaining "procurement integrity."
B. There is no evidence "close out procedures" for a contract was followed by documenting and inspecting the receipt of SIP panels and building materials.
C. During "pre-solicitation phase" of contract procurement the project team did not follow prescribed procedures for composing an RFP. For the consulting contract, the RFP did not contain clear and concise language describing the "statement of work or specifications required."

A. Guidelines for maintaining "procurement integrity" were not followed.

During the acquisition of consulting services, a procurement employee of NTC gave "source selection information" to Kenai Manufacturing and included himself in the contractor's bid. The project team is responsible for ensuring "procurement integrity" is not compromised during the procurement process. The "procurement policies and procedures" prohibit contractors from making an offer of future employment or promise of a business opportunity with any procurement official of NTC. When Kenai responded to the RFP for "project superintendent and project manager" services, Kenai's bid revealed that a NTC project employee was also the Kenai project manager. The compensation for the project manager was described as $60,000—without defining if it was a set amount or it represented a certain number of hours devoted to the project.

Since the beginning of the employee's tenure with NTC the employee was very much involved with: procurement, writing contracts and RFPs, and negotiating contracts. The employee's participation in the Kenai contract is a direct conflict of interest—compromising the integrity of the contract. Such employee and sub-contractor relationships are prohibited activity and not a reimbursable expense with State grants.

Although, the tribal administrator denied there was any participation of the NTC employee with Kenai's contract, no evidence was provided that proved the NTC employee was removed as a consultant. During November of 2012, NTC awarded the "project superintendent and project manager" consulting contract to Kenai. The review of the contract between Kenai and NTC did not disclose the identity of the participating consultants—which was a break from the RFP requirements. Kenai started billing in 2012 for services rendered. However NTC did not pay Kenai until May of 2013 when a wire transfer of $35,165 was remitted. Although outside of the audit scope (2013 transaction) it is a matter which grant administrators should be aware of and track.

Considering the known facts and unanswered questions about the Kenai contract, any submitted "requests for reimbursement of expenditures" should be denied until certain information is obtained. Specifically, the following needs to be provided as support for the expenditures:

a. Evidence that provides proof of the identity of the consultants.
b. A description and verification of the services and products provided by the consultants.

These issues are addressed in **recommendations 5 and 7.**

B. There is no evidence "close out procedures" for a contract was followed by documenting and inspecting the SIP panels and building materials received on the project site.

Earthcore's manufacturing contract required the manufactured panels and building materials to be delivered to Mertarvik. The panels and materials were packaged inside of containers and arrived in Mertarvik during July of 2012. However, no evidence has been provided that anyone from the project team opened the containers and determined if goods received matched the shipping log or the specifications in the procurement contract.

Within the "procurement policies and procedures" there are provisions that require the receipt and quality of goods and materials to be matched with contract specifications. After reviewing the architectural plans and interviewing the project's architect and engineer of record, it was revealed that all architectural plans called for SIP panels with a measurement of 5 ½ inches in width. The RFP proposal and the contract with Earthcore required the SIP panels to be 10 ¼ inches in width. The 10 ½ width was required because of the severe weather conditions along the western Alaskan coastline.

Further complicating this issue, it *appears* the Earthcore manufacturing contract has been paid in full. According to the owner, the last and remaining invoice of $77,410 was paid in January of 2013. The Earthcore contract called for: designing, engineering and manufacturing the SIP panels for $774,106. For 2012, invoices totaling $696,696 were submitted as reimbursable expenditures and grant administrators made payment. Aside from the fact the 5 ¼ inches of panel width may not be appropriate for the severe weather conditions, the oversight of not inspecting manufactured goods has significantly increased the risk of: litigation, higher project costs and project delays.

As required by Article 9 of the grant agreement, "The grantee shall establish and maintain a financial management and accounting system that conforms to generally accepted accounting principles." The "procurement policies and procedures" of NTC are an integral part of the internal controls for financial management and accounting. Any expenditure found to be a breach of procurement policy and procedures would be "unresolved costs" which require more information. Not inspecting and comparing manufactured goods with contractual requirements is a material breach of written procedures.

The freight containers in Mertarvik should be inspected and the width of the panels measured. An inventory count of the panels and building materials should be matched with the shipping invoice. The "material supplies contract" with Earthcore should be reconciled with the received SIP panels and building materials. If the items received by NTC do not "materially" agree with the procurement contract in terms of: SIP specifications, drawings, materials, workmanship, permits and codes; then arguably the "unresolved costs" could be determined as "disallowed" and a return of the $696,696 sought.

These issues are addressed in **recommendations 6 and 8.**

C. During the pre-solicitation phase of procurement for services, the project team did not follow prescribed procedures.

In contradiction to procurement policies and procedures, the RFP for project superintendent and project manager services did not contain clear and concise language describing the "statement of work or specifications required." The "statement of work or specifications required" is one of the most important features of an RFP. The policies and procedures state in part, "It is essential that a complete and comprehensive statement of work or specification be provided by the program [tribal administrator] office. The statement of work describes the requirements to be performed and may describe the methods to be used." The project team should have included in the RFP (and the ensuing contract) a clear and accurate description of the technical requirements of the consulting services to be provided. For example, the following items should have been clarified as the responsibilities of the project superintendent and project manager:

- Obtain lien waivers and affidavits from subcontractors,
- Inspection for the quality of work done by specialized sub-contractors,
- Responsible for the purchase of materials, tools and equipment,
- Report and process requests for change orders,
- Responsible party for compliance with laws and regulations,

- Provide evidence of insurance coverage and professional liability,
- Order and review the architectural plans in the areas of: mechanical, plumbing, fire suppression and electrical engineering,
- Obtain the Fire Marshal's "Plan Approval" of the "final" architectural plans.

All of the responsibilities just described are precisely the duties and tasks of a licensed general contractor. Another provision with "procurement policies and procedures" is the requirement to include in the RFP any, "special approvals, clearances and requirements pertinent to the proposed acquisition."

The project team should have conducted research to determine the required licensing of an individual charged with the responsibility of constructing a "public building." According to State laws and regulations only an Alaska licensed general contractor may construct and assemble a public building.

The RFP for consulting services was significantly deficient in terms of protecting the interests of the NTC. Without a licensed contractor—all of the work conducted on the MEC would have been "unlicensed general contractor" activity. If the unlicensed activity had taken place, most likely, the NTC would not have been able to obtain the most important permit for the MEC—the Certificate of Occupancy.

This issue is addressed in **recommendation 1.**

AUDIT RECOMMENDATIONS

For the Newtok Traditional Council

Project management and oversight

1. The NTC should hire an experienced general contractor licensed and bonded to supervise and manage the remaining construction of the Mertarvik Evacuation Center. The general contractor should assist NTC in performing tasks such as: acquiring permits, receiving fire marshal approval, obtaining licenses and partial lien waivers, meeting grant requirements and obtaining the MEC's "Certificate of Occupancy."

2. The NTC should consider hiring a professional and experienced "project manager" as the representative between a general contractor and the NTC. The "project manager" should be responsible for the accomplishing the project objectives and managing the construction constraints of cost, time, scope and quality of work.

3. Prior to assembling the SIP panels to construct the "framing" of the MEC—NTC's project manager should consult with the former "Architect in Charge" because of that architect's claims of deficiencies in the current architectural plans.

Contract development, negotiations and approvals

4. To improve administrative controls, the NTC should amend the manual, *"Procurement Management System—Policies and Procedures"* to include provisions that address the following concerns:

    - When conducting construction projects, a project manager with experience handling similar projects should be hired to develop project objectives and manage the construction constraints of cost, time, scope and quality.
    - To create contracts that protect NTC and meet grant requirements, a section should contain guidelines that describe the minimum terms and conditions in procurement contracts. Consideration should also be given to using an attorney versed in contract law to review contracts that represent large and complex projects.

5. To protect "procurement integrity" the Tribal Administrator should review "bids or proposals" from contractors to determine if they are free of "conflict of interests" and when faults are found—whether perceived or actual—report such matters to the NTC.

6. As required by provisions in the *"Procurement Management System—Policies and Procedures"* manual, the Tribal Administrator should inspect and record received goods or materials and confirm the items match the *contracted for specifications* in the purchase contract.

Continued

Audit Recommendations

For the Division's Grant Section

Accountability of grantee

7. The grant administrators should withhold reimbursement of expenditures with the Kenai Manufacturing LLC contract until unanswered questions are resolved. Specifically, NTC should provide evidence that: proves the identity of the consultants and provides a description and verification of the services and products provided by the consultants.

8. The grant administrators should review the "unresolved costs" found with the Earthcore SIPs procurement contract. Although invoices totaling $696,696 were paid for the manufacture and delivery of SIP panels—it appears NTC personnel have not inspected and confirmed the SIP panels meet contractual requirements. Any "material" differences between delivered panels and contract specifications—would require grant administrators to determine if "unresolved costs" should be disallowed and a return of $696,696 sought.

APPENDIX A

General Conditions for Contracts Per the Procurement Management System (PMS) and the Grant Agreement (GA)
General Terms and Conditions
Indian preference clause-**PMS 1.3 – AA 1**
Subcontractors must be in compliance with Copeland "Anti – Kickback" Act-**PMS 1.3 – AA 2**
Subcontractors must be in compliance with Davis – Bacon Act – **PMS 1.3- AA 3**
Subcontractor must be in compliance with "Contract Work Hours and Safety Standards Act" **PMS 1.3 AA 4**
Subcontractor must be in compliance with "Equal Employment Opportunity – **PMS 1.3 – AA5 and GA Article 30**
With grantee subcontracts-a provision indemnifying the State from any claims, damages and costs arising out of or in connection with activities authorized by the grant agreement. **GA Article 2**
Any subcontractor engaged by the Grantee shall be required to comply with all provisions of the grant agreement. Grantee will bind all subcontractors to each and every applicable grant agreement provision. **GA Article 13**
No employee of the Grantee shall have personal gain in any contract, subcontract or the proceeds thereof, for work performed in connection with the project assisted under this grant agreement. **GA Article 14**
Shall require any contractor to provide Workers' Compensation Insurance for its employees (AS 23.30) and contractor must be licensed, bonded and insured for at least the amount of the project and if appropriate maintain professional liability insurance. **GA Article 26 and Appendix B2**
Any subcontracts for engineering services, grantee required engineering firm certify authorized to do business in State of Alaska. **GA Article 27**
Grantee or subcontractor must pay prevailing wage per AS 36.05.010. **GA Article 34**

General Conditions for Contracts - Prepared by Tom Sutton

APPENDIX B

General Conditions for Construction Contracts	
Construction Requirements	**General Terms**
Preconstruction Conference and Notice to Proceed	Definitions
Construction Progress Schedule	Contractor's Responsibility for Work
Site Investigation and Conditions Affecting the Work	Architect's Duties, Responsibilities and Authority
Differing Site Conditions	**Administrative Requirements**
Specifications and Drawings for Construction	Contract Period
Material and Workmanship	Order of Precedence
Permits and Codes	Payments
Health, Safety, and Accident Prevention	Contract Modifications
Temporary Buildings and Transportation Materials	Changes
Availability and Use of Utility Services	Suspension of Work
Prohibition Against Liens	Disputes
Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	Default
	Liquidated Damages
Temporary Buildings and Transportation Materials	Termination of Convenience
Inspection and Acceptance of Construction	Assignment of Contract
Use and Possession Prior to Completion	Royalties and Patents
Warranty of Title	Examination and Retention of Contractor's Records
Warranty of Construction	
Source: U.S. Department of Housing and Urban Development	