

# SIGAR

**Special Inspector General for  
Afghanistan Reconstruction**

SIGAR Inspection 13-10

## Bathkhak School: Unauthorized Contract Design Changes and Poor Construction Could Compromise Structural Integrity



JULY  
2013

# SIGAR

## Special Inspector General for Afghanistan Reconstruction

### WHAT SIGAR REVIEWED

In August 2012, U.S. Forces-Afghanistan (USFOR-A), through the Commander's Emergency Response Program, awarded a \$262,899 contract to Emaar Emarat Construction Company to build an addition and improve conditions at a school located in the village of Bathkhak, in the Bagrami district, Kabul province.

The contract had a 150-day period of performance and required construction of a single-story, 10-classroom building to be added to the school's existing facilities. It also required building a structure to house the generator, repairing the water wells, installing an irrigation system, completing the brick wall around the compound, and upgrading the existing classroom building, including replacing all interior doors and broken windows, repainting the interior, and installing gutters.

This report assesses whether (1) construction was being completed in accordance with contract requirements and applicable construction standards, and (2) any construction deficiencies had been identified and, if so, corrected.

July 2013

### BATHKHAK SCHOOL: UNAUTHORIZED CONTRACT DESIGN CHANGES AND POOR CONSTRUCTION COULD COMPROMISE STRUCTURAL INTEGRITY

SIGAR INSPECTION 13-10

#### WHAT SIGAR FOUND

Bathkhak school is not being constructed in accordance with contract requirements. Instead of a single-story, 10-classroom building, two 5-classroom buildings are being built. SIGAR also found that the contractor freely substituted building materials without U.S. government approval. For example, brick instead of cinder block was used for the walls, and a concrete slab ceiling/roof was installed instead of a wood-trussed roof framing system that was called for in the contract. SIGAR found no documentation that substitutions were approved through contract modifications or that prices for those substitutions were reviewed as required by the Federal Acquisition Regulation. More significantly, the use of a concrete ceiling/roof instead of a wood-trussed roof framing system with a sheet metal roof raises serious safety concerns because the Bathkhak school is located in an area of high seismic activity. This potentially dangerous change to the original contract requirements raises serious concerns for the safety of the hundreds of faculty and children that will be using the classrooms at any given time. Based on the serious nature of this issue, SIGAR recently issued a safety alert letter (SIGAR SP-13-6).

The school addition appears to have design and construction flaws that could compromise its structural integrity. SIGAR found, among other things, (1) large gaps between bricks in the walls that support the concrete ceiling/roof; (2) walls that did not appear to be reinforced; and (3) honeycombing, exposed rebar, and concrete form boards remaining in the roof. Each of these issues could compromise the building's structural integrity. For example, honeycombing can be caused by inadequate vibration during pouring of the concrete, leaving air bubbles which, depending on the location, can significantly weaken the structure. Additional deficiencies that cannot be seen, such as incorrect placement of the roof's rebar—which helps supply the concrete's strength—may also be present.

### WHAT SIGAR RECOMMENDS

SIGAR recommends that the Commanding General, USFOR-A, direct the appropriate USFOR-A units to take the following steps: (1) perform an immediate physical inspection of the two new school buildings, including appropriate tests and analyses, and determine whether to certify their structural integrity; (2) require the contractor to correct any deficiencies or substandard work identified during the physical inspection and tests; (3) review the product substitutions made and, based on a price analysis, determine whether the changes warrant a reduction in the overall cost of the contract; and (4) identify the contracting officer(s) responsible for initial oversight of the Bathkhak school construction activities and determine why: (a) no oversight visits were made during the first 6 months of construction, (b) no contract modifications were made approving the contractor's substitution of building materials, and (c) no pricing determinations were made of the building materials substituted for those required in the contract. After making these determinations, decide what disciplinary action should be taken, if any, against the contracting officer(s) responsible for not properly overseeing construction activities.

In its comments, USFOR-A generally agreed with SIGAR's recommendations and noted that it has implemented several new policies and re-inspected all recently completed projects as a result of SIGAR's report.



Two 5-classroom buildings under construction instead of single 10-classroom building

Source: SIGAR photo, January 20, 2013.



**SIGAR**

Office of the Special Inspector General  
for Afghanistan Reconstruction

July 24, 2013

General Lloyd J. Austin III  
Commander, U.S. Central Command

General Joseph F. Dunford, Jr.  
Commander, U.S. Forces–Afghanistan, and  
Commander, International Security Assistance Force

Lieutenant General Mark A. Milley  
Commander, International Security Assistance Force Joint Command, and  
Deputy Commander, U.S. Forces–Afghanistan

Major General James M. Richardson  
Deputy Commander, Joint Operational Corps Headquarters-Afghanistan, and  
Commander, U.S. National Support Element Command-Afghanistan

This report discusses the results of SIGAR's inspection of the Bathkhak School addition in the Bagrami district, Kabul province, Afghanistan. The Commander's Emergency Response Program funded this project. This report includes four recommendations to the Commander, U.S. Forces–Afghanistan (USFOR-A), to direct the appropriate USFOR-A units to take the following steps: (1) perform an immediate physical inspection of the two new school buildings, conduct appropriate tests and analyses, and determine whether to certify their structural integrity; (2) require the contractor to correct any deficiencies or substandard work identified during the physical inspection and tests; (3) review the product substitutions made and, based on a price analysis, determine whether the changes warrant a reduction in the overall cost of the contract; and (4) identify the contracting officer(s) responsible for initial oversight of the Bathkhak school construction activities and determine why (a) no oversight visits were made during the first 6 months of construction, (b) no contract modifications were made approving the contractor's substitution of building materials, and (c) no pricing determinations were made of the building materials substituted for those required in the contract. After making these determinations, decide what disciplinary action should be taken, if any, against the contracting officer(s) responsible for not properly overseeing construction activities.

In its written comments on a draft of this report, USFOR-A generally agreed with SIGAR's recommendations and noted that, as a result of SIGAR's report, it has implemented several new policies and re-inspected all recently completed infrastructure projects. USFOR-A's comments are reprinted in appendix IV.

SIGAR conducted this inspection under the authority of Public Law No. 110-181, as amended; and the Inspector General Act of 1978, as amended, and in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency.

John F. Sopko  
Special Inspector General  
for Afghanistan Reconstruction

# TABLE OF CONTENTS

Background.....	1
Bathkhak School Facilities Are Not Being Constructed in Accordance with Contract Requirements .....	2
Poor Workmanship Resulted in Construction Deficiencies That Could Compromise the School’s Structural Integrity .....	4
Conclusion.....	6
Recommendations .....	7
Agency Comments .....	7
Appendix I - Scope and Methodology .....	9
Appendix II - Bathkhak School Site Plan.....	10
Appendix III - Construction Activities That Deviated from Contract Requirements .....	11
Appendix IV - Comments from U.S. Forces-Afghanistan .....	12
Appendix V - Acknowledgments .....	15

## TABLES

---

Table 1 - Bathkhak’s Construction Activities That Deviated from Contract Requirements.....	11
--	----

## FIGURES

---

Figure 1 - Location of Earthquakes in Afghanistan since 1964 .....	3
Figure 2 - Site Plan .....	10

## PHOTOS

---

Photo 1 - New Classroom Building under Construction .....	1
Photo 2 - New Classroom Construction with Brick Walls and Concrete Ceiling/Roof .....	2
Photo 3 - School Building’s Exterior Brick Wall with Gaps in the Mortar .....	4
Photo 4 - Concrete Ceiling/Roof Showing Poor Workmanship .....	5

## ABBREVIATIONS & ACRONYMS

---

CERP	Commander’s Emergency Response Program
USACE	U.S. Army Corps of Engineers
USFOR-A	U.S. Forces-Afghanistan

The Department of Defense's Commander's Emergency Response Program (CERP) provides unit commanders with funds to respond quickly to urgent humanitarian relief and reconstruction needs in Afghanistan.<sup>1</sup> CERP funds have been used for a variety of projects, including public roads, schools, and medical clinics. This CERP project, a school building addition, was requested by the village elders in Bathkhak, located in the Bagrami District, Kabul province.

For this inspection, we assessed (1) whether construction was being completed in accordance with contract requirements and applicable construction standards, and (2) whether any construction deficiencies had been identified and, if so, corrected.

We conducted this inspection in Kabul province, Afghanistan, from September 2012 through June 2013, in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency. The engineering assessment was conducted by professional engineers in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. Appendix I contains a more detailed discussion of our scope and methodology.

## BACKGROUND

---

On August 27, 2012, a U.S. Forces-Afghanistan (USFOR-A) Regional Command-Central task force awarded a \$262,899 contract (20120627131725) to Emaar Emarat Construction Company.<sup>2</sup> The contract, with a 150-day period of performance, required the construction of a single-story, 10-classroom building to be added to the school's existing facilities (see photo 1). The contract also required building a structure to house the generator, repairing the water wells, installing an irrigation system, completing the brick wall around the school compound, constructing sidewalks, replacing the volleyball court with a basketball court, and providing power and lighting for the new school building. The contract further required upgrading the existing classroom building, including replacing all interior doors and broken windows, repainting the interior, and installing gutters.

The Ministry of Education is responsible for the Bathkhak school, which originally included a two-story, 12-classroom building; single-story administration office; guard building, water well; and perimeter wall.

Appendix II provides a layout of the existing school along with the new facilities. According to the headmaster, the school currently has about 1,500 students, ages 7 through 20, who attend one of three daily class sessions. The headmaster stated that the existing facilities were not large enough to serve the community and, as a result, students were being turned away. The

---

**Photo 1 - New Classroom Building under Construction**



Source: SIGAR photo, January 20, 2013.

---

---

<sup>1</sup> CERP funding criteria for project selection includes (1) sustainability by the local community, an Afghan agency, or the Afghan government; (2) benefit to the Afghan population; (3) high visibility to the local populace; (4) support for local, community, and national employment; and (5) ability to be quickly executed.

<sup>2</sup> Emaar Emarat Construction Company was established in 2011, and registered with the Afghanistan Investment Support Agency to conduct business in Afghanistan. There are several different spellings for the company name; in this report, we use the name as it appears on the contract.



headmaster also told us that the newly added facilities will enable the school to accommodate additional teachers and serve up to 1,500 additional students.

## BATHKHAK SCHOOL FACILITIES ARE NOT BEING CONSTRUCTED IN ACCORDANCE WITH CONTRACT REQUIREMENTS

---

**Photo 2 - New Classroom Construction with Brick Walls and Concrete Ceiling/Roof**



Source: SIGAR photo, January 20, 2013.

---

We conducted our inspection of the Bathkhak school construction site on January 20, 2013. Based on our observations and review of design and contract documents, the new school facilities are not being built in accordance with contract requirements. We found that instead of a single 10-classroom building, two 5-classroom buildings were being built, and building materials specified in the contract were not being used. For example, brick was being used for the interior and exterior walls instead of the required concrete masonry unit block also known as cinder block. Similarly, wooden window frames were installed instead of the required vinyl frames. Furthermore, a concrete slab ceiling/roof had been installed rather than the wood-trussed roof framing system with sheet metal roofing (see photo 2).

USFOR-A task force officials overseeing the project produced a memorandum for the record, dated February 15, 2013, that modified the statement of work to account for the work the contractor had conducted that differed from the contract requirements. The memorandum stated that the Ministry of Education and school headmaster directed the changes, and that the Ministry engineer told the contractor to build two buildings with five rooms each. The memorandum also noted that the statement of work specifying that a “concrete masonry building” should be constructed was a “typographical error.” However, the Federal Acquisition Regulation states that only contracting officers acting within the scope of their authority are

empowered to execute contract modifications on behalf of the U.S. government.<sup>3</sup> When our inspectors reviewed the project construction files, they could not find any documentation that the task force contracting officer had reviewed and approved the changes through contract modifications.

The memorandum also stated that the changes made to the statement of work did not increase the project’s cost. However, under the Federal Acquisition Regulation, contract modifications must be priced before they are executed, “if this can be done without adversely affecting the interests of the Government.”<sup>4</sup> We found that the project files contained no documentation showing that contracting officials had reviewed and approved the

---

<sup>3</sup> Federal Acquisition Regulation 43.102.

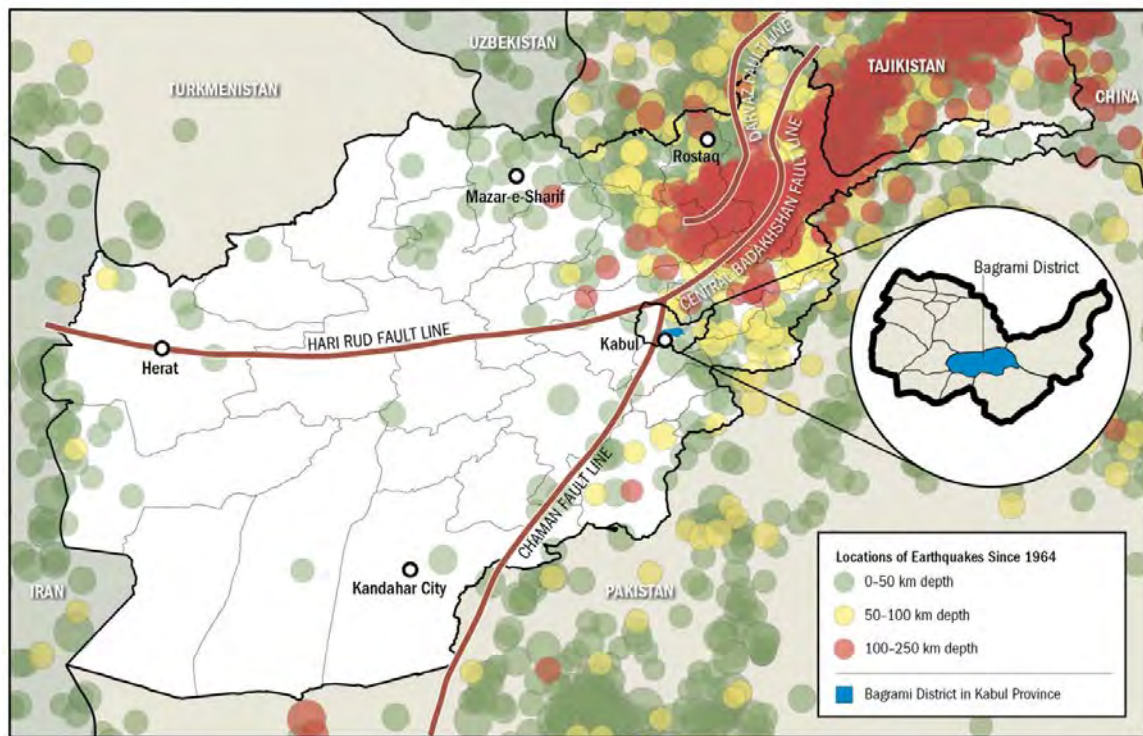
<sup>4</sup> *Id.*

prices in advance for substituted materials.<sup>5</sup> Appendix III provides more detail on the construction activities that deviated from the contract requirements.

## Use of Concrete Ceiling/Roof Raises Safety Concerns due to Bathkhak School's Location in an Earthquake Zone

Emaar Emarat Construction Company's change from the requirement for a wood-trussed roof framing system to a flat reinforced concrete ceiling/roof without the contracting officer's approval or adequate oversight raises very serious safety concerns. Kabul province is located in an area of Afghanistan that experiences relatively frequent and intense seismic events. According to the U.S. Embassy in Afghanistan, the area surrounding Kabul has been the site of numerous shallow earthquakes (less than 50 kilometers in depth) due to its proximity to a seismic fault line that runs through the Hindu Kush Mountain Region and along the Chaman fault system.<sup>6</sup> The U.S. Geological Survey has reported that earthquakes represent a serious threat to the people and institutions of Afghanistan and have killed more than 7,000 Afghans from 1997 to 2007.<sup>7</sup> Figure 1 shows the Chaman, Hari Rud, Central Badakhshan, and Darvaz fault lines and the location of earthquakes that have occurred in Afghanistan since 1964.

Figure 1 - Location of Earthquakes in Afghanistan since 1964



Source: U.S Geological Survey

<sup>5</sup> In commenting on a draft of this report, USFOR-A officials stated that they had reviewed the product substitutions and determined that the substitution costs exceeded the costs of the original contract products. They also stated that the contractor had agreed to absorb the additional costs (see appendix IV).

<sup>6</sup> According to the *U.S. Embassy Kabul's Guide to Earthquake Preparedness and Survival*, the Chaman fault system lies along Pakistan's frontier with Afghanistan, beginning near Kalat in the northern Makran range and extending along the border in a north-northeastern direction to Kabul.

<sup>7</sup> U.S. Geological Survey, Open-File Report 2007-1137, *Preliminary Earthquake Hazard Map of Afghanistan*, 2007.

The U.S. Embassy in Afghanistan also has reported on the natural vulnerability of the city of Kabul's infrastructure due to substandard construction. As discussed below, we found no evidence that anyone oversaw the contractor's pouring of the concrete ceiling/roof to ensure that the reinforcing steel, known as rebar, was properly placed within the concrete, that the concrete was properly "vibrated" to eliminate air pockets that can weaken the structure, or that the concrete consisted of the proper mixture. Further, although required by USFOR-A operating procedure,<sup>8</sup> we did not find any evidence that consideration was given to an earthquake-resistant design for the concrete ceiling/roof and its supporting structure.<sup>9</sup>

## Project Was Not Completed on Time

The contractor did not complete the Bathkhak construction project by the required January 20, 2013, completion date. At the time of our site visit on January 20, we estimated the project was about 70 percent complete. The headmaster told us that he anticipated an additional 2 months of construction. Open items included, among other things, installing windows and doors on the new school buildings; completing a two-foot height extension to the perimeter wall; purchasing and connecting a generator; and refurbishing the existing school building.

We did not find any letters of concern in the project files in which USFOR-A notified the contractor that it was behind schedule and needed to adopt a more aggressive approach to complete the project. Also, although the contractor had exceeded the period of performance, there was no documentation in the project files indicating that the contracting officer had approved a new project completion date. USFOR-A officials told us they made a site visit on June 13, 2013, and discovered that the project was still not complete. The officials also stated that they informed the contractor they would immediately begin imposing a \$100 per day penalty until the contract work was completed.

## POOR WORKMANSHIP RESULTED IN CONSTRUCTION DEFICIENCIES THAT COULD COMPROMISE THE SCHOOL'S STRUCTURAL INTEGRITY

During our inspection, we observed several construction deficiencies associated with poor workmanship that could lead to future structural problems for the Bathkhak school. For example, we noted inadequate amounts of mortar being used, which left large gaps between bricks of the school building's interior and exterior walls (see photo 3). The walls make up the structure supporting the concrete ceiling/roof and, as such, need to be laid properly with sufficient amounts of mortar to help resist structural failure.

Our engineer examined the concrete roof and structural components and noted three areas of poor workmanship: (1) honeycombing, also known as "rock pockets," in the set concrete; (2) exposed rebar; and (3) concrete form boards that had not been removed before the

**Photo 3 - School Building's Exterior Brick Wall with Gaps in the Mortar**



Source: SIGAR photo, January 20, 2013.

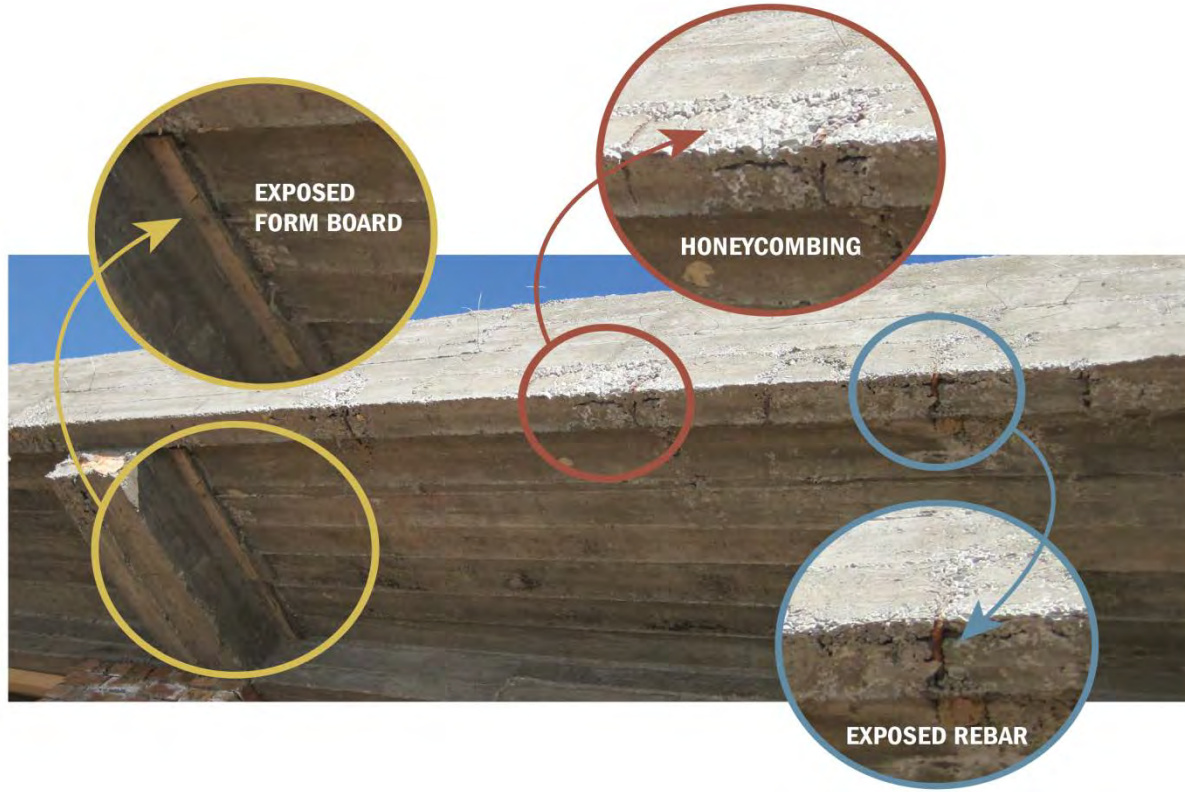
<sup>8</sup> USFOR-A Publication 1-06, *Money As A Weapon System-Afghanistan Commander's Emergency Response Program Standard Operating Procedure*, March 2012.

<sup>9</sup> Based on the serious nature of this issue, SIGAR recently issued a safety alert letter. See SIGAR SP-13-5.



concrete hardened. Honeycombing is evidence of poor concrete consolidation, which may be caused by too dry a mix, incorrect aggregate size relative to the rebar's clearance, or inadequate vibration during pouring of the concrete leaving air bubbles in the concrete mix.<sup>10</sup> Depending on the location of these defects, honeycombing can significantly weaken the structure. Exposed rebar will eventually rust and compromise the integrity of the concrete and cause it to fail.<sup>11</sup> Lastly, the concrete form boards, which should have been removed, will eventually rot, leaving a space between the roof and the supporting beams, which will weaken the overall structure (see photo 4).

**Photo 4 - Concrete Ceiling/Roof Showing Poor Workmanship**



Source: SIGAR, January 20, 2013

We found no evidence that USFOR-A had anyone present to oversee pouring of the concrete ceiling/roof to ensure that the rebar was properly welded and placed and that the concrete consisted of the proper mix. The poor quality of workmanship that we observed raises questions about certain aspects of the construction that

<sup>10</sup> American Concrete Institute Education Bulletin EI-07, *Aggregates for Concrete*, August 2007, notes that "failure of a concrete strength specimen most often starts as microcracks between the mortar and the surfaces of the largest aggregate particles". Aggregate is granular material such as sand, gravel, and crushed stone that usually occupies approximately 60 to 75 percent of the volume of concrete. Aggregate properties significantly affect the durability, strength, and density of hardened concrete. To ensure a good distribution of particles of aggregate of varying sizes, Field Manual 3-34.400, General Engineering, Department of the Army, December 2008, recommends that the maximum size of coarse aggregate not exceed 1.5 inches for a heavily reinforced slab, 6-11 inches in width.

<sup>11</sup> Reinforced concrete is a combination of adequate steel reinforcement or "rebar" and concrete designed to work together to resist applied loads. Properly placed reinforcement in concrete improves its compressive strength and provides tensile strength. The American Concrete Institute notes "In addition to unintentional omission of part or all of the reinforcement, improper placement of the reinforcement designed to resist tension is one of the most common causes of structural concrete failures." American Concrete Institute Education Bulletin E2-00, *Reinforcement for Concrete-Materials and Applications* (2000, reapproved 2006).

we could not observe because the ceiling/roof had been completed. USFOR-A operating procedure requires that, under the CERP program, at least three site visits be made during the construction project.<sup>12</sup> Documents that we obtained show that the first site visit occurred in February 2013, or almost 6 months after construction began, and when the buildings were about 70 percent complete. We found no documentation showing that the original task force that awarded the contract ever visited the construction site to oversee some of the more critical aspects of construction, such as the roof and walls.<sup>13</sup>

Our examination of the new school buildings' interior concrete ceilings revealed that large stones—up to 5 centimeters (2 inches) in diameter—had been included in the concrete mixture. Stones of this size normally will sink to the bottom of the mixture and weaken the structure. Similar to the exterior roof, we also observed honeycombing on the interior ceiling of the building, which could also significantly weaken the structure.

The Bathkhak school also may have design deficiencies that are putting the building at further risk. First, the rigid concrete ceiling/roof sits on top of the brick walls, but because there was no U.S. oversight during construction, it is not known whether the walls were reinforced. For example, walls can be reinforced by using a type of brick designed for rebar to add reinforcement. Second, during our inspection, our engineer noted that the classroom windows and doors were located close together and along one side of the building. As a result, during a seismic event, the narrow wall sections between the windows and doors could experience a disproportionate amount of force and could be the first to fail, causing the other walls to buckle and the roof to collapse. Without proper design analysis, it cannot be certain that the brick walls will support the weight of the concrete roof.

## CONCLUSION

---

The new Bathkhak school has serious design and construction flaws and could be a disaster waiting to happen. Problems began with the contractor freely substituting building materials and doing so without proper approval. Building materials that the contractor substituted were not reviewed for price as required. Most significantly, the concrete ceiling/roof that was substituted for the wood-trussed framing system has visible defects. Proper U.S. oversight, the lack of which has been a recurring theme in our inspection reports, would have detected and corrected these conditions during construction. However, we found no evidence of any oversight for the first 6 months after construction began. In addition to finding construction deficiencies that can be seen, it is more disconcerting to note that there may be deficiencies that cannot be seen after 6 months of construction, such as possible incorrect placement of the roof's rebar, which supplies the concrete's strength. The contractor made a bad situation worse by placing a heavy rigid concrete roof on top of what appears to be unreinforced and poorly constructed supporting brick walls. Consequently, the building's structural integrity could be compromised. The school's location in a high seismic activity area, exacerbated by construction flaws and no consideration for an earthquake-resistant design, raises serious safety concerns due to the large number of faculty and students that will be using the classrooms at any given time.

---

<sup>12</sup> USFOR-A Publication 1-06, *Money As A Weapon System-Afghanistan Commander's Emergency Response Program Standard Operating Procedure*, March 2012.

<sup>13</sup> In commenting on this report, USFOR-A stated that, at the request of the current project manager, a U.S. Army Corps of Engineers (USACE) licensed structural engineer had performed a building structural assessment to determine the integrity of the building. The engineer determined that the ceiling reinforcement may be inadequate and should be monitored for future cracks. Prior to transferring the school to the Afghan government, USFOR-A officials plan to meet with the Ministry of Education and determine whether the Ministry will accept risk for the buildings. If the Ministry accepts the structure, USFOR-A further noted that, as the structural engineer recommended, the ceiling should be monitored for future cracks.

## RECOMMENDATIONS

---

To ensure that the Bathkhak school addition is adequately designed and constructed to meet the Afghan government's needs, and to protect the U.S. government's investment, we recommend that the Commander, USFOR-A, direct the appropriate USFOR-A units to take the following steps:

1. **Prior to turning over the facilities to the Afghans, perform an immediate physical inspection of the two new school buildings, including appropriate engineering tests and analyses, and determine whether to certify the structural integrity of the buildings.**
2. **Require the contractor to correct any deficiencies or substandard work identified during the physical inspection and tests.**
3. **Review the product substitutions made, and, based on a price analysis, determine whether the changes warrant a reduction in the overall cost of the contract.**
4. **Identify the contracting officer(s) responsible for initial oversight of the Bathkhak school construction activities and determine why**
  - (a) **no oversight visits were made during the first 6 months of construction;**
  - (b) **no contract modifications were made approving the contractor's substitution of building materials; and**
  - (c) **no pricing determinations were made of the building materials substituted for those required in the contract.**

**After making these determinations, decide what disciplinary action, if any, should be taken against the contracting officer(s) responsible for not properly overseeing construction activities.**

## AGENCY COMMENTS

---

We received comments on a draft of this report from USFOR-A, which we incorporated into the final report, as appropriate. USFOR-A comments are reproduced in appendix IV.

USFOR-A generally agreed with our recommendations and noted that, as a positive result of our report, it has implemented several new policies and re-inspected all recently completed CERP infrastructure projects within its battle space. USFOR-A commented that, so far, it has found deficiencies at 7 of 14 sites and that the responsible contractors are making corrections. USFOR-A also stated that it is limiting its contracting officers' and representatives' project workloads to ensure these issues do not occur in the future.

With regard to our specific recommendations, USFOR-A agreed with our recommendation to conduct an immediate physical inspection of the two new school buildings, including appropriate engineering tests and analyses, and determine whether to certify the buildings. USFOR-A stated that a USACE licensed structural engineer performed an assessment to determine the structural integrity of the buildings. Although the buildings met the Afghan Ministry of Education's standards, USACE's engineer concluded that the ceiling reinforcement may be inadequate and should be monitored for future cracks. USFOR-A also commented that, prior to transferring the school, it will meet with Ministry of Education officials to determine if the Ministry is willing to accept the risk for the buildings based on USACE's report. USFOR-A noted that, if the buildings are accepted "as is" by the Ministry of Education, the ceiling should be monitored for any cracks exceeding 2 millimeters. We will review USACE's structural assessment report and determine whether it adequately addresses our recommendation.

USFOR-A also agreed with our second recommendation to require the contractor to correct any deficiencies or substandard work identified during the physical inspection and tests. USFOR-A stated that it had conducted

inspections on February 14, 2013, and March 16, 2013, and informed the contractor to correct identified deficiencies. USFOR-A further noted that any discrepancies identified during the final inspection will be addressed, and that the contractor has a 1-year warranty for any defects with its work. Although these are positive steps, they were not taken until 6 months after construction began. Further, as noted in our report, because there was no oversight during critical periods of construction, such as setting the rebar and pouring the concrete for the ceiling/roof, it is not known whether there are deficiencies associated with these activities.

In addition, USFOR-A agreed with our third recommendation to review product substitutions made by the contractor and determine whether they warrant an overall reduction in the contract cost. USFOR-A stated that the Afghan Ministry of Education directed the substitutions made by the contractor. USFOR-A noted that it performed a review which showed that the cost of the substitutions exceeded the cost of the original contract required materials and that the contractor agreed to absorb the additional costs. Although USFOR-A noted that a contract modification was made to cover changes to the statement of work, it is unclear whether these changes were approved in writing by the provincial reconstruction team engineer or project purchasing officer as required by the statement of work. Unless these approvals were obtained, the statement of work required the contractor to adhere to the approved design. We will review USFOR-A's cost analysis and the modification to the statement of work to determine whether these actions adequately address this recommendation.

USFOR-A did not explicitly agree or disagree with our final recommendation regarding inadequate oversight of the contract and holding the responsible officials accountable. However, USFOR-A stated that no disciplinary action should be taken against these officials because other factors—such as local security conditions, availability of coalition support, contractor issues, construction supplies, weather, and personnel availability—also affect project management. While we appreciate the challenges that USFOR-A units face in carrying out their duties in Afghanistan, we continue to believe that USFOR-A should do a more in-depth inquiry into the circumstances surrounding why its contract management requirements were not fulfilled. For example, USFOR-A's comments describe nine oversight visits that were made on the project, but its comments do not address why none of these visits occurred during the project's first several months. In addition, while noting that substitution of building materials were made at the direction of Afghan Ministry of Education, USFOR-A's comments do not explain why no contract modifications were made in response to these substitutions. Rather than dismissing the idea of holding the appropriate officials accountable, we believe that a more thorough inquiry into the specific reasons contract management requirements were not adhered to would provide a stronger basis to determine whether disciplinary action is appropriate. Effective oversight is critical to ensure that U.S. funded projects are efficiently and effectively executed and that U.S. taxpayer funds are not being wasted. In our view, a vital part of effective oversight is holding those officials that are responsible for the execution of projects accountable for failure. We will continue to monitor this situation to ensure appropriate action, if needed, is taken regarding the actions of the contracting officer.

## APPENDIX I - SCOPE AND METHODOLOGY

---

This report provides SIGAR's inspection results of the Bathkhak school addition. The school is located in the village of Bathkhak, located in the Bagrami district, Kabul province, Afghanistan. We conducted our inspection on January 20, 2013. This is one in a series of inspection reports that will focus on medical, education, and police facilities located in Kabul province.

For this inspection, we assessed whether (1) construction was being completed in accordance with contract requirements and applicable construction standards, and (2) any construction deficiencies had been identified and, if so, corrected.

To determine whether construction was being completed in accordance with contract requirements and applicable construction standards and whether construction deficiencies had been identified and corrected, we:

- reviewed contract documents, design materials, and geotechnical reports to understand project requirements and contract administration;
- interviewed U.S. and Afghan officials involved with the construction project; and
- conducted a physical inspection and photographed the project site to observe the current status and the quality of construction.

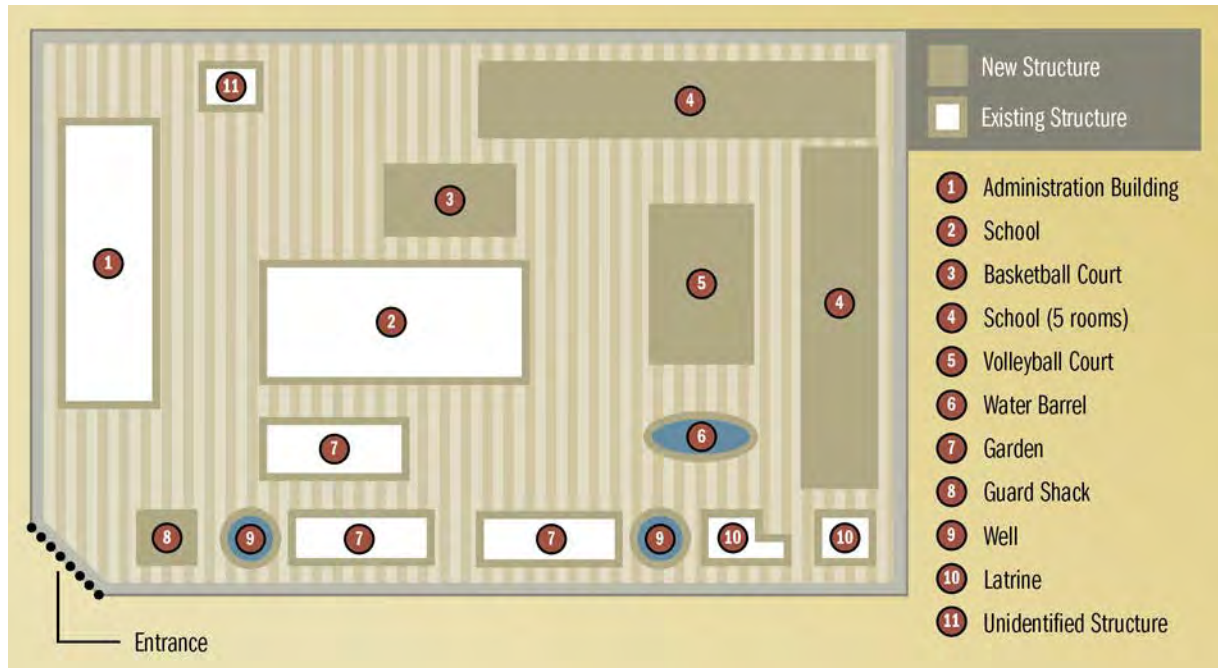
SIGAR conducted its work in Kabul province from September 2012 through June 2013, in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency. These standards were established to guide all inspection work performed by all the Offices of Inspectors General. The engineering assessments were conducted by professional engineers in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. We did not rely on computer-processed data in conducting this inspection. We considered the impact of compliance with laws and fraud risk.

We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our inspection objectives. SIGAR conducted this inspection under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended.



## APPENDIX II - BATHKHAK SCHOOL SITE PLAN

Figure 2 - Site Plan



Source: SIGAR Generated

## APPENDIX III - CONSTRUCTION ACTIVITIES THAT DEVIATED FROM CONTRACT REQUIREMENTS

---

The contract's statement of work defines the work required to be performed. Any deviations from the statement of work must be approved through contract modifications. Federal Acquisition Regulation, Subpart 43.102, states that only contracting officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the U.S. government. Table 1 shows the Bathkhak construction activities that deviated from contract requirements.

**Table 1 - Bathkhak's Construction Activities That Deviated from Contract Requirements**

Requirement	Actual Construction
Single-story, 10-classroom building with interior hallway	Two single story, 5-classrom buildings with exterior exits
Cinder block interior and exterior walls	Brick interior and exterior walls
Wood trussed framing system with sheet metal roofing	Concrete slab ceiling/roof
Vinyl window frames	Wood window frames
Wooden interior doors	No interior doors due to changing to exterior exits
Six exterior exit doors	Ten exterior exit doors due to change from one to two classroom buildings
No requirement to refinish concrete floors	Refinished concrete floors
Construct shelter around the school's generator	School no longer has a generator because site is connected to city power

Source: U.S. Forces-Afghanistan awarded contract 20120627131725 and SIGAR's January 20, 2013, site visit.

## APPENDIX IV - COMMENTS FROM U.S. FORCES-AFGHANISTAN



DEPARTMENT OF THE ARMY  
HEADQUARTERS, TASK FORCE TARPON  
KABUL BASE CLUSTER COMMAND  
UNITED STATES FORCES – AFGHANISTAN  
CAMP PHOENIX, AFGHANISTAN  
APO AE 09320

AFZF-TFT-CO

18 July 2013

MEMORANDUM THRU Commander, United States Forces-Afghanistan

FOR Commander, United States Central Command

SUBJECT: SIGAR Inspection 13-10 Bathkhak School: Unauthorized Contract Design Changes and Poor Construction Could Compromise Structural Integrity

1. I have reviewed the following recommendations on SIGAR Inspection 13-10 and added my comments.

a. Prior to turning over the facilities to the Afghans, perform an immediate inspection of the two new school buildings, including appropriate engineering tests and analyses, and determine whether to certify the structural integrity of the buildings.

CONCUR with COMMENTS: On 27 June 2013, on the request of the current Project Manager, a licensed structural engineer from the United States Army Corps of Engineers (USACE) performed a building structural assessment to include test and analysis for determination of the structural integrity of the building. The engineer determined that the ceiling reinforcing may be inadequate and should be monitored for any future cracks. However, the USACE assessment found that the building did meet Afghanistan's Ministry of Education (MoE) standards. Prior to transferring the school over to the MoE, Task Force (TF) Tarpon will meet with MoE and to see if they will accept the risk for this structure based on the USACE report. If the structure of the school is accepted "as is" by MoE, the ceiling should be monitored for any cracks develop that are over 2mm.

b. Require the contractor to correct any deficiencies or substandard work identified during the physical inspection and tests.

CONCUR with COMMENTS: During site inspections conducted by Alpha Company/486th Civil Affairs Battalion, Civil Affairs Team Bravo personnel conducted on 2/14/13 and 3/16/2013, the contractor was informed to correct discrepancies that were identified. Any discrepancies that are identified during final inspection will be addressed. The contractor has a one year warranty for any defects on their work.

c. Review the product substitutions made, and, based on a price analysis, determine whether the changes warrant a reduction in the overall cost of the contract.

CONCUR with COMMENTS: Substitutions were made on the direction of the MoE. The contractor followed, as a standard practice in Afghanistan. A new IGCE with the substitutions was performed and the substitution costs exceeded the costs of the original IGCE. The contractor agreed to absorb the additional costs. A contract modification was exercised modifying the statement of work.

AFZF-TFT-CO

SUBJECT: SIGAR Inspection 13-10 Bathkhak School: Unauthorized Contract Design Changes and Poor Construction Could Compromise Structural Integrity

d. Identify the contracting officer(s) responsible for initial oversight of the Bathkhak school construction activities and determine why

COMMENT: Initial CORs were CPT Michael Miller (Program Manager) and CPT Eric Wahner (Project Manager).

(1) no oversight visits were made during the first 6 months of construction;

COMMENT: QA/QC visits were documented on December 11, 2012, December 18, 2012, February 14, 2013, 16 March 2013, 4 Apr 2013, 25 April 2013, 20 May 2013, 13 June 2013, and then on 27 Jun 2013. On 14 Feb 2013 SFC Harris (A 486th CA) noted the modifications recorded situation on a memorandum. Other oversight visits could have been made but were not documented.

(2) no contract modifications were made approving the contractor's substitution of building materials; and

COMMENT: Substitutions were made on the direction of the MoE. The contractor followed, as a standard practice in Afghanistan. For example, adding a wall to separate the female and male classrooms is a cultural norm in Afghanistan. Although no official CERP contract modification was submitted, a MFR was uploaded documenting the changes to the SOW made by the MoE.

(3) no pricing determinations were made of the building materials substituted for those required in the contract.

COMMENT: A new IGCE with the substitutions was performed and the substitution costs exceeded the costs of the original IGCE. The contractor agreed to absorb the additional costs. A contract modification was exercised modifying the statement of work. This information was determined on first site visit conducted by SFC Charles Gonzalez once he took over the project in April of 2013. This was noted on 4 April 2013 and memorandum was submitted to the official project file.

2. Determine disciplinary action, if any, should be taken against the contracting officer(s) responsible for not properly overseeing construction activities.

COMMENT: It is recommended that no disciplinary action should be taken against CERP PMs/PPOs. As you are probably aware, other factors affect project management, such as the local security conditions, availability of coalition support, contractor issues, construction supplies, weather, and personnel availability. The complexity of the RIP/TOA process between the TFs has attributed to project managers across multiple Task Forces not completely understanding the status of their projects across the battle space.

3. As a positive result of this report, TF Tarpon has implemented several new policies. It is re-inspecting all the recently completed CERP infrastructure projects within their battle space. So far, seven of fourteen were found to have deficiencies and the contractors responsible for warranty work are performing the corrections. In addition, contracting officers and representatives are being limited on their project workloads to ensure issues do not occur in the future.

AFZF-TFT-CO

SUBJECT: SIGAR Inspection 13-10 Bathkhak School: Unauthorized Contract Design Changes and Poor Construction Could Compromise Structural Integrity

4. Point of contact for this action is LTC David Pinkston, USFOR-A J9,

Email: [REDACTED] or

LTC David Ward, Task Force Tarpon Civil Military Officer, Email:

[REDACTED]



SYLVESTER CANNON  
COL, MP  
Commanding



## APPENDIX V - ACKNOWLEDGMENTS

---

Crawford “Les” Thompson, Senior Inspections Manager

Milton Naumann, Senior Auditor

Warren Anthony, Senior Auditor

Lee Dillingham, Professional Engineer

Lise Pederson, Professional Engineer

This inspection report was conducted  
under project code SIGAR-I-005D.

## SIGAR's Mission

The mission of the Special Inspector General for Afghanistan Reconstruction (SIGAR) is to enhance oversight of programs for the reconstruction of Afghanistan by conducting independent and objective audits, inspections, and investigations on the use of taxpayer dollars and related funds. SIGAR works to provide accurate and balanced information, evaluations, analysis, and recommendations to help the U.S. Congress, U.S. agencies, and other decision-makers to make informed oversight, policy, and funding decisions to:

- improve effectiveness of the overall reconstruction strategy and its component programs;
- improve management and accountability over funds administered by U.S. and Afghan agencies and their contractors;
- improve contracting and contract management processes;
- prevent fraud, waste, and abuse; and
- advance U.S. interests in reconstructing Afghanistan.

## Obtaining Copies of SIGAR Reports and Testimonies

To obtain copies of SIGAR documents at no cost, go to SIGAR's Web site ([www.sigar.mil](http://www.sigar.mil)). SIGAR posts all publically released reports, testimonies, and correspondence on its Web site.

## To Report Fraud, Waste, and Abuse in Afghanistan Reconstruction Programs

To help prevent fraud, waste, and abuse by reporting allegations of fraud, waste, abuse, mismanagement, and reprisal, contact SIGAR's hotline:

- Web: [www.sigar.mil/fraud](http://www.sigar.mil/fraud)
- Email: [sigar.pentagon.inv.mbx.hotline@mail.mil](mailto:sigar.pentagon.inv.mbx.hotline@mail.mil)
- Phone Afghanistan: +93 (0) 700-10-7300
- Phone DSN Afghanistan: 318-237-3912 ext. 7303
- Phone International: +1-866-329-8893
- Phone DSN International: 312-664-0378
- U.S. fax: +1-703-601-4065

## Public Affairs

Public Affairs Officer

- Phone: 703-545-5974
- Email: [sigar.pentagon.ccr.mbx.public-affairs@mail.mil](mailto:sigar.pentagon.ccr.mbx.public-affairs@mail.mil)
- Mail: SIGAR Public Affairs  
2530 Crystal Drive  
Arlington, VA 22202