# OFFICE OF THE SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

SUMMARY REPORT GROUND PROJECT SURVEYS FOR THE QUARTER ENDED DECEMBER 31, 2005

SIGIR PA-06-048 April 13, 2006

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# SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

April 13, 2006

### MEMORANDUM FOR COMMANDING GENERAL, MULTI-NATIONAL FORCES -IRAQ COMMANDING GENERAL, GULF REGION DIVISION, U.S. ARMY CORPS OF ENGINEERS DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT OFFICE

### SUBJECT: Summary Assessment Report of Ground Project Surveys for the Quarter Ended 31 December 2005 (Report Number SIGIR-PA-06-048)

We are providing this summary assessment report of Ground Project Surveys for the Quarter Ended 31 December 2005 for your information and use. We conducted 55 ground project surveys between 3 September 2005 and 5 December 2005, as part of our continuing assessments of selected sector reconstruction activities. Five additional sites were visited, but due to issues with missing contracts, are not covered in depth in this report. These surveys focused on the Facilities and Transportation sectors, to include border control, education, medical and public safety facilities, as well as roads and railways. We documented site conditions using our Quality Control and Quality Assessment teams. A team comprised of an engineer and auditor reviewed and analyzed reports and photographs provided by the Quality Control and Quality Assessment teams. The review of those reports, as well as contracting documents, provides the basis for the conclusions presented in this report.

The comments received from the Commander, Gulf Region Division, U.S. Army Corps of Engineers, and the Commanding General, Multi-National Security Transition Command – Iraq, in response to a draft of this report addressed the issues raised and the actions taken and planned should correct the issues we identified. As a result, comments on this final report are not required.

We appreciate the courtesies extended to our staff. This letter does not require a formal response. If you have any questions please contact Mr. Brian Flynn at (703) 343-9149 or brian.flynn@iraq.centcom.mil or Ms. Lynne Champion, at (703) 343-9147 or lynne.champion@iraq.centcom.mil.

Stuart W. Bowen, Jr. Inspector General

# **Special Inspector General for Iraq Reconstruction**

**SIGIR PA-06-048** 

April 13, 2006

# Summary Report of Ground Project Surveys for the Quarter Ending December 31, 2005

# **Synopsis**

**Introduction.** We conducted 55 ground project surveys between 3 September 2005 and 5 December 2005, as part of our continuing assessments of selected sector reconstruction activities. These surveys focused on the Facilities and Transportation sectors, to include border control, education, medical and public safety facilities, as well as roads and railways. We documented site conditions using our Quality Control and Quality Assessment teams. A team comprised of an engineer and auditor reviewed and analyzed reports and photographs provided by the Quality Control and Quality Assessment teams. The review of those reports, as well as contracting documents, provides the basis for the conclusions presented in this report.

**Objectives, Site Selection Rationale and Survey Process.** The overall objectives of the ground project surveys are to provide summary information on overall progress of selected projects, and identify deviations from contract requirements. We selected projects from the Iraq Reconstruction Management System database to cover new structures, roads, and high dollar refurbishment projects in the various Governorates of Iraq, which were located within Gulf Region Division, United States Army Corp of Engineers northern and southern districts. We selected projects based on their accessibility, percentage of completion, dollar value, and availability of grid coordinates.

We assigned the sites to Quality Control and Quality Assessment teams familiar with the local area. We provided the teams with the project title and grid coordinates for locating the project. If the Quality Control and Quality Assessment teams could not locate the project at the provided grid coordinates, the teams determined the location by interviewing local residents. The Quality Control and Quality Assessment teams then visited the sites, obtained Global Positioning System coordinates, completed photo documentation, and interviewed available on-site personnel. The teams provided brief summary reports for each project visited to one of our engineers and an auditor for review and compilation into this report.

Conclusions. The assessment determined that:

- The grid coordinates provided by the Gulf Region Division/Project and Contracting Office for the projects surveyed were not always accurate. The difference in the distance between the Gulf Region Division/Project and Contracting Office provided site locations and the actual site locations recorded by the Quality Control and Quality Assessment teams ranged from 300 meters to 13 kilometers.
- Multi National Security Transition Command-Iraq was unable to identify or locate the contract documents for five border post projects inspected. In addition, the Multi National Security Transition Command-Iraq data contained in the Iraq Reconstruction Management System was not complete.

• Common deficiencies noted in the ground project surveys consisted of plumbing, electrical, and finishing work. A review of the contracts determined that construction warranties covered 34 of the 55 projects surveyed. Although the warranties for each project differed in coverage, in general, coverage amounted to a period of at least one year. As such, projects listed in the Iraq Reconstruction Management System database as being 100 percent complete would benefit by follow up procedures to ensure the correction of noted deficiencies, prior to warranty expiration.

**Recommendations.** We recommend that the Commander, Gulf Region Division, U.S. Army Corps of Engineers:

- 1. Assess the accuracy of its project location grid coordinates, and make the necessary changes in its database to reflect the actual project locations.
- 2. Develop and implement procedures to follow up on projects covered by contract warranties to ensure needed repairs are corrected prior to warranty expiration.

We recommend that the Commanding General, Multi-National Security Transition Command – Iraq:

- 1. Require Major Subordinate Commands responsible for maintaining contract documents to locate and provide to the Special Inspector General for Iraq Reconstruction, the five unaccounted for contract documents, related to border posts, addressed in this report.
- 2. Assess the accuracy and completeness of the data in the Iraq Reconstruction Management System database relating to Multi National Security Transition Command-Iraq projects, and make the necessary changes and updates to ensure the accuracy and completeness of the database.

**Management Comments.** The Commander, Gulf Region Division, U.S Army Corps of Engineers concurred with our conclusions and recommendations and provided comments regarding ongoing actions to update the grid coordinates, as well as actions being undertaken by the districts to address contract warranty work.

The Commanding General, Multi-National Security Transition Command – Iraq, concurred with our conclusions and recommendations and provided comments regarding efforts to locate and provide requested contract documentation and ensure that the information contained in the Iraq Reconstruction Management System database is accurate and complete.

**Evaluation of Management Comments.** Management comments address the issues raised in our conclusions and actions taken should correct the deficiencies.

# **Table of Contents**

Synopsis	i
Introduction	
Objective, Site Selection Rationale and Survey Process Reported Project Locations	1 3
Border Control Facilities Projects	
Project Objective Scope of Work of the Task Order Current Project Design and Specifications Warranties Ground Surveys Conclusions	4 5 5 5 14
Education Facilities Projects	
Project Objective Scope of Work of the Task Order Current Project Design and Specifications Ground Surveys Conclusions	14 15 15 15 17
Medical Facilities Projects	
Project Objective Scope of Work of the Task Order Current Project Design and Specifications Warranties Ground Surveys Conclusions	18 18 19 19 20 23
Public Safety Facilities Projects	
Project Objective Scope of Work of the Task Order Current Project Design and Specifications Warranties Ground Surveys Conclusions	24 24 25 25 35
Transportation Projects	

Project Objective	
-------------------	--

Scope of Work of the Task Order	36
Current Project Design and Specifications	36
Warranties	36
Ground Surveys	36
Conclusions	38

# **Summary Conclusions**

Project Locations Contract Documentation and Data	38 38
Deficiencies and Warranty Coverage	38
Recommendations	39
Management Comments	39

# **Evaluation of Management Comments**

# Appendixes

A.	Scope and Methodology	42
В.	Acronyms	43
C.	Report Distribution	44
D.	Assessment Team Members	46

41

# Introduction

We conducted 55 ground project surveys between 3 September 2005 and 5 December 2005, as part of our continuing assessments of selected sector reconstruction activities. These surveys focused on the Facilities and Transportation sectors, to include border control, education, medical and public safety facilities, roads, and railways. We documented site conditions using our Quality Control and Quality Assessment (QCQA) teams. A team comprised of a Special Inspector General for Iraq Reconstruction (SIGIR) engineer and auditor reviewed and analyzed reports and photographs provided by the QCQA teams. The review of those reports, as well as contracting documents, provided the basis for the conclusions presented in this report.

# **Objective, Site Selection Rationale and Survey Process**

The overall objectives of the ground project surveys are to provide summary information on overall progress of selected projects and identify deviations from contract requirements. We selected projects from the Iraq Reconstruction Management System (IRMS) database to cover new structures, roads, and high dollar refurbishment projects in the various Governorates of Iraq, which were located within Gulf Region Division (GRD), United States Army Corp of Engineers northern and southern districts. We selected projects based on their accessibility, percentage of completion, dollar value, and availability of grid coordinates.

We assigned the sites to QCQA teams familiar with the local area. We provided the teams with the project title and grid coordinates for locating the project. If the QCQA teams could not locate the project at the provided grid coordinates, the teams determined the location by interviewing local residents. The QCQA teams then visited the sites, obtained Global Positioning System (GPS) coordinates, completed photo documentation and interviewed available personnel on site. The teams provided brief summary reports for each project visited to one of our engineers and an auditor for review and compilation into this report.

We planned the ground project surveys to be a short cursory look at projects in the field. This differs from SIGIR project assessments that are more comprehensive, and in which the SIGIR auditors and engineers involved review contract files and perform the on-site inspection fieldwork directly.

We eliminated five of the sites selected for ground project surveys from this report because we could not confirm that the projects visited by our QCQA teams were actually the projects selected due to differences between the projects encountered and the Statements of Work in contracting documents. We will follow-up on the five projects eliminated with more comprehensive project assessments.

Table 1 lists the 55 ground project surveys sites by category and total costs. Figure 1 illustrates the locations of the 55 projects throughout Iraq.

#### Table 1: Sites by category and costs

Project Type	Number of Projects	Cost of Projects	
Border Posts Construction and			
Renovation	22	\$9,783,430	
Educational Facilities Renovation	3	\$422,881	
Hospital Renovations	2	\$13,492,168	
New Clinic Construction	4	\$2,690,251	
Fire Station Construction	1	\$559,680	
Police Station Renovation	13	\$2,780,073	
Police Checkpoint Construction	7	\$2,190,796	
New Road Construction	2	\$1,866,258	
Railway Station Rehabilitation	1	\$291,125	
Total	55	\$34,256,682	

Figure 1: Iraq map indicating selected Ground Project Survey sites



# **Reported Project Locations**

As previously indicated, QCQA teams obtained GPS location coordinates during their site visits. We compared the project locations submitted to us by GRD/Project and Contracting Office (PCO) with the actual location, as determined by our QCQA teams during site visits. Of the 55 GRD/PCO submitted location sites, 31 were within 300 Meters (m) of the actual site location, whereas 9 were between 300 and 1000 m, 2 were between 1 and 3 kilometers (km), and 13 were greater than 13 km from the actual location. GRD/PCO officials acknowledged that there are errors in their grid coordinate database. Figure 2 shows a pie chart representation of the distance between the recorded project location and the GRD/PCO supplied project location.





Less Than 300 M
300 - 1000 M
1 km - 3 km
Greater than 3 km

# **Border Control Facilities Projects**

We conducted ground project surveys of 22 border posts located in Basrah<sup>1</sup> and Sulaymaniyah,<sup>2</sup> Iraq, along the Iraq-Iran border. Of the 22 border post projects surveyed, 17 were or will be completed under Contract W914NS-04-D-0009, a design-build, indefinite delivery indefinite quantity contract, awarded to Parsons Delaware Inc., Pasadena, California. The Coalition Provisional Authority (CPA) awarded the contract on March 26, 2004. The border posts under that contract are to be completed under three separate Task Orders, 0003, 0034, and 0036. The following table lists the border post projects associated with Contract W914NS-04-D-0009, as well as the cost per project. The remaining five border posts were completed under a contract awarded by Multi National Security Transition Command-Iraq (MNSTC-I) and are presented later in this section.

Border Post	Project ID	Task Order Number	Actual/Estimated Completion Date	Construction Cost	GRD Region
Basrah <sup>1</sup> #17	12137	0003	7-Sep-05	\$477,794	South
Basrah #16	12138	0003	28-Aug-05	\$477,785	South
Basrah #14	12141	0003	26-May-05	\$477,785	South
Basrah #13	12142	0003	17-May-05	\$477,785	South
Basrah #12	12144	0003	2-Jun-05	\$477,785	South
Basrah #11	12145	0003	23-May-05	\$477,785	South
Basrah #10	12149	0003	13-Jun-05	\$477,785	South
Basrah #04	12161	0034	27-Aug-05	\$375,766	South
Sulaymaniyah <sup>2</sup> #03	12781	0036	25-Feb-06*	\$604,240	North
Sulaymaniyah #29	12787	0036	8-Mar-06*	\$604,240	North
Sulaymaniyah #09	12800	0036	12-Mar-06*	\$604,240	North
Sulaymaniyah #10	12801	0036	4-Mar-06*	\$604,240	North
Sulaymaniyah #11	12802	0036	12-Mar-06*	\$604,240	North
Sulaymaniyah #20	12840	0036	4-Mar-06*	\$604,240	North
Sulaymaniyah #21	12842	0036	14-Apr-06*	\$604,240	North
Sulaymaniyah #24	12856	0036	27-Feb-06*	\$604,240	North
Sulaymaniyah #37	12883	0036	31-Mar-06*	\$604,240	North

\*GRD/PCO revised actual/estimated completion dates as of 24 March 2006

# **Project Objective**

The overall objective of the project's Scope of Work (SOW) under Contract W914NS-04-D-0009, Task Orders 0003, 0034 and 0036 is to build 119 new border denial points along the Iraq-Iran border.

# Scope of Work of the Task Order

The border denial posts are to include an exterior compound wall with vehicle gate, four elevated guard posts, one watch tower, perimeter lighting, one operations building (with

<sup>&</sup>lt;sup>1</sup> Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Al Basrah, as noted in project documentation will henceforth be referred to as Basrah.

<sup>&</sup>lt;sup>2</sup> Ibid. As Sulaymaniyah, as noted in project documentation will henceforth be referred to as Sulaymaniyah.

three offices, secured arms room, communications room, toilet/shower room and kitchen/dining area), an electrical generator, water storage and a septic system.

#### **Current Project Design and Specifications**

The SOW for Contract W914NS-04-D-0009, Task Orders 0003, 0034 and 0036 lists the following codes and standards although Task Orders 0034 and 0036 state, "Significant deviations from the following codes are anticipated. Material used in this project is to be that which are currently found on the local Iraqi market."

International Building Code (IBC) International Electrotechnical Commission (IEC) International Existing Building Code (IEBC) International Fire Code (IFC) International Mechanical Code (IMC) International Plumbing Code (IPC) National Fire Protection Association (NFPA) Sheet Metal and Air Conditioning Contractor's National Association (SMACNA) Underwriter's Laboratories (UL) ASTM<sup>3</sup> International Standards American Society Mechanical Engineers (ASME) American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc. Standard 52 (ASHRAE 52)

# **Warranties**

The contract required the provision and certification of warranties for all equipment to include any mechanical, electrical and/or electronic devices, and all operations for 12-months after issuance of the Taking-Over-Certificate. The contractor was also to provide any other commonly offered extended warranties for equipment and machinery purchased.

#### **Ground Surveys**

#### W914NS-04-D-0009 Task Order 0003 Projects

We assessed seven of the border post projects under Task Order 0003. A review of the reports and photos provided by the QCQA teams determined that overall, the sites associated with Task Order 0003 appeared to be complete and generally consistent with contract requirements. During the site visit, the QCQA teams observed constructed main border posts and jail facilities, installed electrical generators, a water supply, and septic tanks. The border posts all shared common security features such as installed window bars, air conditioner grates, and generator cages. The electrical work, specifically the breaker boxes, appeared new and to be installed correctly. Six of the seven border posts included perimeter security systems of walls or berms and gates. We noted the following discrepancies at four of the seven border posts:

#### Project 12137: Border Post - Basrah #17 - Al Haddidayah - Al Kishik

• The roof contained standing water due to poor drainage. Site Photo 1 shows the exterior view of Project 12137.

<sup>&</sup>lt;sup>3</sup> There is no longer a definition for this acronym. The ASTM in an open forum for the development of high-quality, market relevant international standards used around the globe.

### Project 12138: Border Post - Basrah #16 - Kushk

- The front entry gate was inoperative according to reports.
- The floor of the main atrium contained standing water.



Site Photo 1: Exterior view of Project 12137 Border Denial Post

# Project 12144: Border Post – Basrah #11 - Khut Abu Ikab - Reno - Kut Agab

- The interior stairwell was missing handrails (Site Photo 2).
- Cracks were in some interior walls and the external corner tower.



Site Photo 2: Interior stairwell without handrails at Project 12144

### Project 12149: Border Post - Basrah #10 - Ra'as Al Bashah

- Site did not include perimeter security walls or fences.
- The interior walls had several cracks.

#### Task Order 0034 Project

A review of the report and photos provided by the QCQA teams determined that overall, the site associated with Task Order 0034, Project 12161, appeared to be complete and consistent with contract requirements. A perimeter wall surrounded the post, containing the parking area and above ground fuel tank. In addition, there were security bars on the first floor windows and a security cage enclosed the generators. The site also contained above ground water tanks, set on a concrete base, with additional water tanks located on the roof. A septic tank appeared to be located between the berm and outer wall of the post. Site Photo 3 shows the front gate and border post.



Site Photo 3: Front entrance gate and border post Project 12161

#### Task Order 0036 Projects

We assessed nine border post projects under Task Order 0036. A review of the reports and photos provided by the QCQA teams determined, that overall, the sites associated with Task Order 0036 appeared to be complete and generally consistent with contract requirements. The IRMS database showed these projects to be 90-99 percent complete at the time of our site visit. During the site visit, the QCQA teams observed constructed main border posts and jail facilities, installed electrical generators, a water supply, and septic tanks. The border posts all shared common security features, such as installed window bars, air conditioner grates, and generator cages. The electrical work, specifically the breaker boxes, appeared new and to be installed correctly. All nineborder posts surveyed lacked perimeter security requirements. We noted the following discrepancies:

#### Project 12781: Border Post - Sulaymaniyah #03 - Mashan

- No perimeter security fences or gates were present.
- The concrete roof over the guard post was not level.
- The water pump on the site showed signs of leakage, and the electrical components, such as the water pump switch and light fittings lacked protection from the weather.

#### Project 12787: Border Post - Sulaymaniyah #29 - Kuralau Bnaw - Azmick

- No perimeter security fences or gates were present.
- Leaking roof drains are causing problems with the plaster, both inside and outside the building. In addition, the roof structures over the parking and generator areas contained loose bolts and possible weak welds.
- A ridge formed by site leveling lacked stabilization. Site Photo 4 shows the cut bank without stabilization.
- The border patrol guards indicated that they received minimal training on the use of the generators. Technical manuals, spare parts, and maintenance schedules were not available.
- There is a septic system present, however, the quality of the concrete used for the tank is poor, possibly due to improper mixture or curing procedure. In addition, border patrol guards indicated no provisions exist to support this post with water.



Site Photo 4: Cut bank with no stabilization Project 12787

#### Project 12800: Border Post - Sulaymaniyah #09 - Sarshe - Ashknh

- No perimeter security fences or gates were present.
- A slope, created by site leveling, and appearing to be composed of loose material, lacked retaining walls or soil reinforcement. Site Photo 5 shows the cut bank without stabilization.
- Water tank pump switches have un-insulated wires, exposing them to the environment, which may pose a hazard to personnel in the area. In addition, water pipes lacked proper insulation for winter conditions.

• Exterior finishing and plastering are uneven in many locations.



Site Photo 5: Cut bank with no stabilization Project 12800

# Project 12801: Border Post - Sulaymaniyah #10 - Nawzang (Near Grd Hester) - Sberoo

• No perimeter security fences or gates were present.

### Project 12802: Border Post - Sulaymaniyah #11 - Tappa Kan - Hero

• No perimeter security fences or gates were present.

#### Project 12840: Border Post - Sulaymaniyah #20 - Marwa

- No perimeter security fences or gates were present. Site Photo 6 shows the front view of project 12840.
- Concrete on the atrium roof showed inconsistent textures, possibly the result of non-continuous pour. Site Photo 7 shows the atrium concrete roof.
- Spot welds on the generator roofing appeared to be poor quality.





Site Photo 6: Front view of Project 12840

Site Photo 7: Concrete atrium roof showing uneven texture at Project 12840

#### Project 12842: Border Post - Sulaymaniyah #21 - Bowze - Kani Khal -Oo Kortee

- No perimeter security fences or gates were present.
- Exterior plaster shows inconsistent coloring and some surfaces appeared poorly finished.

#### Project 12856: Border Post - Sulaymaniyah #24 - Salki - Hlsho

- No perimeter security fences or gates were present.
- A hose made of plastic led from the fuel tank to the generator; this may be subject to breakdown over time. The tank was also located very close to the building, which could present a safety hazard.
- There was some discoloration in the exterior finish, possibly from moisture.

#### Project 12883: Border Post - Sulaymaniyah #37

- No perimeter security fences or gates were present.
- A slope, created by site leveling appeared to be composed of loose material and lacked retaining walls or soil reinforcement.

#### MNSTC-I Border Post

The IRMS database listed MNSTC-I as the executing agency for five border post projects included in our site surveys. The IRMS database showed that the contractor, as well as the contract number, was yet to be determined. However, that same database showed the same five projects as being 100 percent complete. We requested copies of contract documents from MNSTC–I; however, they were unable to identify or locate the contract(s) for these projects. As such, we were unable to determine the project objectives, SOW, or design specifications. The following table lists the border post projects associated with the unidentified contract(s), as well as the cost per project.

Border Posts	Project ID	Task Order Number	Actual/Estimated Completion Date	Construction Cost	GRD Region
		MST-			
Sulaymaniyah #53	20560	014	27-Oct-04	\$125,000	North
		MST-			
Sulaymaniyah #45	20565	014	27-Oct-04	\$125,000	North
		MST-			
Sulaymaniyah #57	20567	014	27-Oct-04	\$125,000	North
		MST-			
Sulaymaniyah #65	20568	014	27-Oct-04	\$125,000	North
		MST-			
Sulaymaniyah #64	20569	014	27-Oct-04	\$125,000	North

A review of the reports and photos provided by the QCQA teams determined that the four border posts identified as Projects 20560, 20565, 20568 and 20569 were pre-existing structures. According to local sources, the border patrol guards have occupied these posts since the October or November 2003 timeframe, contradicting the IRMS database that showed a completion date of 27 October 2004. The structures showed no sign of recent maintenance or renovation work. No information was available on the date of occupancy of Project 20567. All five projects inspected were within approximately 300 meters (m) of the reported project location. The QCQA team noted the following observations during the site visit:

#### Project 20560: Border Post - Sulaymaniyah #53 - Kindol / Ganow Qandool

- A small generator was on site; however, fuel storage was not available.
- Exposed electrical wiring was visible and cracks were noted in exterior walls (possibly due to foundation settling).
- Sanitary drainage and plumbing fittings were either broken or inoperable and the hot water heater was inoperable.
- The facility showed lack of any recent maintenance or remodeling.

#### Project 20565: Border Post - Sulaymaniyah #45 - Chowman

- The site lacked a generator.
- The facility lacked security fences.
- Concrete segregation and re-bar exposure was visible on interior concrete slab ceilings.
- Interior walls showed staining, probably due to water leaking from the ceiling area.
- Extensive cracking was visible on the exterior walls of the building (Site Photo 8).
- The facility showed lack of any recent maintenance or remodeling.



Site Photo 8: Cracks in exterior wall at Project 20565

#### Project 20567: Border Post - Sulaymaniyah #57 - Qala Diza HQ

- There was no perimeter fence around the site and the generator was located in an open area with no security cage to prevent theft or vandalism. In addition, there were no bars on the windows and in some places there appeared to be no glass in the window frames.
- Electrical wires, located on exterior walls that run to the guardhouse lacked conduit. In addition, wiring ran from window to window in multiple locations.
- A sewer outlet was protruding from the base of the building onto a down slope area, and sewage was leaking along one wall, as well as on the ground next to the building.
- Standing water and cracks were present on the roof, and the interior rooms show evidence of water leakage.
- A patch in the wall was present where a pipe exits the building, suggesting a possible repair or installation of the pipe after the wall was completed. In addition, the concrete above the stairwell did not show signs of plastering.

#### Project 20568: Border Post - Sulaymaniyah #65 - Chele

- Although a small generator was on site, fuel storage was not available.
- The plastering of external walls and sidewalks contained cracks and fractures. Site Photo 9 shows the exterior of a building with missing plaster.
- Most of the lights were broken and electrical wires were un-insulated.
- Bathroom fixtures appeared to be inoperative (Site Photo 10).
- The facility lacked security fences.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 9: Exterior wall at project at Project 20568



Site Photo 10: Bathroom fixtures at Project 20568

#### Project 20569: Border Post - Sulaymaniyah #64 - Zele

- A slope, created by site leveling, and appearing to be composed of loose material, lacked retaining walls or soil reinforcement. Site Photo 11 shows the cut bank located behind the border post.
- There was no security fence or security lighting, and only one window contained security bars. In addition, the doors appeared to be missing or in need of replacement.
- There were cracks in the building foundation and walls, and one set of stairs was crumbling. In addition, the finish work was in poor condition. Site Photo 12 shows the concrete steps.
- A small generator was on site; however, fuel storage was not available.
- The bathroom was missing some fixtures, and the water and sewer pipes were in need of repair or replacement.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 11: Behind border post at Project 20569



Site Photo 12: Concrete steps at Project 20569

#### **Conclusions**

#### Contract W914NS-04-D-0009 Border Posts

In general, the 17 border posts inspected were complete or near complete and functional. Only seven of the 17 border posts had perimeter security systems, gates, berms, or walls installed. Concrete quality was sometimes poor, probably due to hand mixing and improper curing techniques. Inconsistent surfaces in concrete and plaster finishing was common in the buildings and other structures. Due to the mountainous location of the border posts, site leveling required soil excavation; however, numerous sites lacked retaining walls to prevent degradation of the embankments.

Based on discussions with local border posts personnel, at the time of the site visits, we found that the day-to-day users, the border police, were unaware of a plan for maintenance and logistical support for the border posts. In addition, they received little if any training in maintaining the generator and septic systems. Logistical requirements, such as fuel and water delivery, were lacking at some border posts. The generators lacked protection from drifting snow, and some outdoor electrical fixtures lacked proper insulation against rainwater. All 17 border posts were covered under contract warranties.

#### **MNSTC-I Contracted Border Posts**

MNSTC-I was unable to identify or locate the contract documents for five border posts inspected. Those border posts were all of poor quality construction and showed no signs of any recent maintenance. Although small generators were located at the five border posts, fuel storage was not available. Electrical and water systems were consistently either inoperable or needing repair.

# **Education Facilities Projects**

We conducted ground project surveys of three schools located in the Governorate of Thi-Qar. The school projects surveyed were or will be completed under Contract FA8903-04-D-8672, a cost plus fixed fee contract awarded to the Environmental Chemical Corporation, Burlingame, California. U.S. Air Force Materiel Command awarded the contract on 19 May 2004. The following table lists the education projects associated with Contract FA8903-04-D-8672, as well as the cost per project.

School	Project ID	Task Order Number	Actual/Estimated Completion Date	Construction Cost	GRD Region
# 1800869, Al-Salam	10588	0011	11-Dec-04	\$140,894	South
# 1800809, Intifadha	10613	0011	10-Dec-04	\$140,744	South
# 1800425, Al-Shatra <sup>4</sup>	10630	0011	17-Mar-05	\$141,243	South

# **Project Objective**

The overall objective of the project's SOW under Contract FA8903-04-D-8672, Task Order 0011 is to assess and repair, as needed, schools in the Governorates of Muthanna, Thi-Qar, Missan and Wassit. The focus is to be on those schools that have not received

<sup>&</sup>lt;sup>4</sup> Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Al Shatrah, as noted in project documentation will henceforth be referred to as Al Shatra.

Non-Government Organization, donor, or government work in the last 12 months and those that the Ministry of Education has prioritized as schools with the most need.

#### Scope of Work of the Task Order

The primary SOW focuses on repairing or replacing sanitary and storm sewer works, plumbing, electrical and mechanical systems, the facility structure, and security. Secondary work under the task order would focus on cleaning and cosmetic renovation.

#### **Current Project Design and Specifications**

The SOW states that the contractor is to perform all work in accordance with Iraqi federal, state, and local statutes and regulations, as well as in accordance with the International Building Code (IBC) and the CPA.

#### **Ground Surveys**

#### Project 10588: School # 1800869, Al-Salam

Some renovations may have been performed on this school, however much of the workmanship was very poor and the school was still in need of repairs. We noted the following discrepancies:

- Interior and exterior wall finish appeared new, however, it was questionable whether repairs were made or walls were just painted over.
- Doors were old and needed replacement. There were no sidewalks.
- Installation of the electrical breaker box was poor. Site Photo 13 shows the electrical circuit breaker panel at Project 10588.



Site Photo 13: Electrical circuit breaker panel at Project 10588

### Project 10613: School # 1800809, Intifadha

Recent renovations were apparent at this school. Site Photo 14 shows the concrete courtyard at Project 10613. We noted the following discrepancies:

- Glass was missing or broken on many windows and there were no protective screens over the windows. An old open latrine was on one side of the school.
- Interior and exterior wall finishes appeared new on some walls, but others needed repair and painting.
- Mortar was missing between exterior bricks.



Site Photo 14: Concrete courtyard at Project 10613

#### Project 10630: School # 1800425, Al-Shatra

With the possible exception of a new concrete area outside, recent renovations were not obvious. Site Photo 15 shows the concrete courtyard area. We noted the following discrepancies:

- Paint, woodwork, doors, and floors were not consistent with new construction or recent remodeling. For example, the wall finish was of poor quality, portions of classrooms lacked any tile or floor material, and tiles and grout were missing from other floors. Site Photo 16 shows damaged tile in one of the classrooms.
- The concrete pad outside the building lacked sub-base and proper compacting.
- Parts of the school structure showed significant cracking above columns and the perimeter wall was crumbling in some areas. Site Photo 17 shows the cracking above columns.
- The bathroom facility appeared very old and lacked basic fixtures. Standing water observed on one side of the school could be due to poor drainage or possibly open sewage disposal.
- The main electrical switch was inaccessible and patching on the wall indicated completion of electrical work after finish work completion. Site Photo 18 shows electrical work and patching.



Site Photo 15: Concrete courtyard at Project 10630



Site Photo 16: Broken tiles at Project Project 10630



Site Photo 17: Crack in outer wall of Project 10630



Site Photo 18: Patching of wall at Project 10630

#### **Conclusions**

The workmanship on two of the three schools assessed appeared to be of low quality. In addition, the schools still needed significant work. The Bill of Materials was not available for review, so it is unclear what individual tasks were required. Materials used appeared to be substandard, although the contract stated the requirement for industrial type equipment. Renovation was superficial in some areas, as demonstrated by painting interior and exterior walls without repairing the walls first.

# **Medical Facilities Projects**

We conducted ground project surveys of six medical facilities located in the Governorates of Basrah, Qadissiya<sup>5</sup>, Najaf<sup>6</sup>, and Thi-Qar. The four clinic and two maternity and pediatric hospital projects surveyed were or will be completed under three separate Task Orders under Contract W914NS-04-D-0006, a design-build, indefinite delivery/indefinite quantity contract, awarded to Parsons Delaware Inc., Pasadena, California. The CPA Contracting Office awarded the contract on 25 March 2004.

<sup>&</sup>lt;sup>5</sup> Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Al Qadisiyah, as noted in project documentation will henceforth be referred to as Qadissiya.

<sup>&</sup>lt;sup>6</sup> Ibid. An Najaf, as noted in project documentation will henceforth be referred to as Najaf.

The Nassriya<sup>7</sup> Maternity & Pediatric Hospital was or will be completed under Task Order 0006; the Diwaniya<sup>8</sup> Maternity & Children's Hospital was or will be completed under Task Order 0008, and the four clinics surveyed were or will be completed under Task Order 0012. The following table lists the medical facilities projects associated with Contract W914NS-04-D-0006 as well as the cost per project.

Medical Facility	Project ID	Task Order Number	Actual/Estimated Completion Date	Construction Cost	GRD Region
Hospital, Maternity & Children's					
Diwaniya (Qadissiya)	1270	0008	28-Dec-05	\$4,292,169	South
Hospital, Maternity & Pediatric					
(Nassriya)	10318	0006	Jul-06*	\$9,199,999	South
Clinic in Basrah - Hai Al Hussein	11866	0012	31-Dec-06*	\$725,916	South
Clinic in Najaf - Hai Kinda	11897	0012	31-May-06*	\$513,520	South
Clinic in Thi-Qar - Al Zahra'	11941	0012	31-Dec-06*	\$768,445	South
Clinic in Thi-Qar - Qal' At Sukkar	11943	0012	31-Dec-06*	\$682,370	South

\*GRD/PCO revised actual/estimated completion dates as of 24 March 2006

# **Project Objective**

The overall objective of the project's SOW under Contract W914NS-04-D-0006, Task Order 0006 was to modernize maternity and pediatric hospitals in the southern Governorates of Iraq. Specifically, to provide new, repair, or replace prioritized building systems, as identified in property assessment surveys, and to provide new authorized equipment.

The overall objective of the project's SOW under Task Order 0008, was to rehabilitate maternity and pediatric hospitals located throughout Governorates in south central Iraq. Specifically, to provide new, repair, or replace prioritized building systems, as identified in property assessment surveys, and to provide new authorized equipment.

The overall objective of the project's SOW under Task Order 0012 was to provide for the design and construction of 60 primary health care centers. There was to be a standard model with two variations, the first being a clinic with teaching facilities and the second a clinic with emergency and labor facilities.

#### Scope of Work of the Task Order

<u>Task Order 0006:</u> The SOW for the Maternity & Pediatric Hospital at Nassriya included demolition and clean up, and the installation of a water purification system. The repair or replacement of the sewer/septic system, heating and air conditioning system, electrical and plumbing systems, plumbing fixtures, water storage and distribution system, windows, doors, elevators, and roof, were also included in the SOW. The SOW also called for the repair and/or refinishing work of ceilings, floors, walls, and perimeter fence. In addition, the SOW requires the design, procurement and installation of communications service, emergency lighting, a fire alarm system, and a public address system.

<sup>&</sup>lt;sup>7</sup> Ibid. Al Nasiraya, as noted in project documentation will henceforth be referred to as Nassriya.

<sup>&</sup>lt;sup>8</sup> Ibid. Al Diwaniyah, as noted in project documentation will henceforth be referred to as Diwaniya.

<u>Task Order 0008:</u> The SOW for the Maternity & Children's Hospital at Diwaniya included the clearing of debris and cleaning of water tanks. Additionally, the SOW called for the installation of a packaged sewer treatment plant and pipes, plumbing fixtures, windows, four elevators, equipment including all ancillary structures, utilities, and supplemental equipment (medical incinerator, reverse osmosis water treatment system, and a central medical gas system for the emergency department). The SOW also called for the replacement of the roof, repair of electrical and plumbing systems and the repair and/or refinishing work of ceilings, floors, walls, and the perimeter fence.

<u>Task Order 0012:</u> The SOW for the four clinics surveyed included the design of sidewalks, parking, fencing, lighting, roads, sewer/septic, electrical distribution and a water supply system. The SOW also included the architectural design, which specified a design and construction that would provide a life expectancy of 40-years, and consider the needs of security and disabled access.

#### **Current Project Design and Specifications**

<u>Task Order 0006</u> and <u>Task Order 0008</u>: The SOW states that all new and renovated work must comply with the following codes and standards to the extent practical. The publications considered should be those of the most recent editions. The Contractor may propose equipment, material, and works that meet the intent of the publications listed here, if the contractors provide documented justification requesting such alternates and receives approval from the Sector Program Management Office

International Building Code (IBC) International Electrotechnical Commission (IEC) International Health Code Standards International Mechanical Code (IMC) International Plumbing Code (IPC) National Fire Protection Association (NFPA) Sheet Metal and Air Conditioning Contractor's National Association (SMACNA).

<u>Task Order 0012:</u> The SOW states that all work under the contract must comply with the applicable IBC, and that the equipment and finishes are to be of basic style, neutral color, and durable quality.

# Warranties

#### Task Order 0006

The contract requires the provision and certification of manufacturer warranty(s) for all equipment, to include any mechanical, electrical and/or electronic devices, and all operations for 24 months after issuance of the Taking-Over-Certificate to the Construction Manager. In addition, the contractor is required to provide a 24-month contractor-certified construction warranty for all building equipment, construction and components, and a 20-year construction warranty for the new roofing systems.

#### Task Order 0008

The contract requires the provision and certification of manufacturer warranty(s) for all equipment, to include any mechanical, electrical and/or electronic devices, and all operations for 12-months after issuance of the Taking-Over-Certificate to the Construction Manager. In addition, the contractor is required to provide a 24-month contractor-certified construction warranty for all building equipment, construction and components, and a 10-year construction warranty for new roofing systems.

#### Task Order 0012

The contract requires the provision and certification of warranties for all equipment, to include any mechanical, electrical and/or electronic devices, and all operations for 12 months after issuance of the Taking-Over-Certificate. In addition, the contractor is to provide any other commonly offered extended warranties for equipment and machinery purchased.

### **Ground Surveys**

#### Maternity and Children's Hospitals

#### Project 1270: Hospital, Maternity & Children's Diwaniya (Qadissiya)

This building appeared to be an existing structure with renovations on going at the time of the site visit. A new reverse osmosis water purification unit, medical incinerator, and two generators were observed at the facility. Site Photo 19 shows the containerized reverse osmosis water purification unit with exterior pumps and water tanks. Renovation had not begun or was only partially complete on the plumbing, fixtures, electrical, and waste water systems. Observations during the site visit were:

- The interior finish is poor in some areas and there is staining on the ceiling and floors indicating water leakage either from pipes or from the roof. The floors require repair before tiling can be completed.
- New electrical boards are on site but not installed. Power cables were inappropriately passed through a window into the electrical room.



Site Photo 19: Containerized reverse osmosis unit with exterior pumps and storage tanks at Project 1270

#### Project 10318: Hospital, Maternity & Pediatric (Nassriya)

The renovation of the hospital was on going at the time of the assessment. Work included replacement of gypsum board, installation of drop ceilings, interior painting, installation of electrical wiring and circuit breaker panels, and installation of ductwork and mechanical systems. The work also included the removal and replacement of damaged floor tiles and the removal and replacement of concrete roof tiles. Overall, interior and exterior construction looks modern, and the material appeared new

throughout the facility. Site Photo 20 shows a renovated hallway. Construction of a new sewer is underway; however, there were concerns about the elevated groundwater level and the direction of drainage relative to the road.



Site Photo 20: Renovated hallway at Project 10318

# Clinics

# Project 11866: Clinic in Basrah - Hai Al Hussein

New construction was in-progress at the time of the site visit. Structural concrete beams, columns, and slabs were either complete or in progress. Brickwork for the exterior walls appeared completed, although exterior plastering was not complete.

# Project 11897: Clinic in Najaf - Hai Kinda

The site visit verified construction was in-progress. The structural concrete columns, beams, and slabs appeared complete. Site Photo 21 shows front exterior of the clinic. Brickwork for the exterior walls appeared completed with external plastering initiated. Installation of mechanical ductwork was complete and installation of electrical wiring was in-progress.



Site Photo 21: Exterior front of Project 11897

#### Project 11941: Clinic in Thi-Qar – Al Zahra

The project was in-progress at the time of the site visit. The QCQA teams observed completed concrete footers and ground level reinforced concrete columns. Burlap surrounded several columns, presumably used to keep the surface moist for curing purposes. Several construction workers were on site during the site visit. Site Photo 22 shows construction of columns and footers.



Site Photo 22: Construction of columns and footers at Project 11941

# Project 11943: Clinic in Thi-Qar - Qal' At Sukkar

During the site visit new construction was in-progress. Concrete footers and ground level concrete reinforced columns appeared to be complete. Form work for the concrete reinforced beams were in place, although it could not be determined if the concrete beams had been poured. Concrete column surfaces appeared free of segregation. Rebar and crushed aggregate, both course and fine, were observed stockpiled on site. Site Photo 23 shows form work and Site Photo 24 shows aggregate stockpiled at Project 11943.





Site Photo 23: Form work at Project 11943

Site Photo 24: Aggregate stockpile at Project 11943

#### **Conclusions**

We conducted site visits at two Maternity and Children's Hospitals and four Primary Health Care Clinics. All projects were in-progress at the time of the site visit. Based on a review of the project surveys, we noted no significant deficiencies. Both hospitals and all four clinics are covered under contract warranties.

# **Public Safety Facilities Projects**

We conducted ground project surveys of 1 fire station and 20 police stations/checkpoints located in the Governorates of Basrah, Qadissiya, and Thi-Qar. The 21 public safety facilities projects surveyed listed below were or will be completed under various contracts awarded to Iraqi contractors. The GRD-Southern District, the Multi National Force-Iraq Contracting Office, and the MNSTC-I Contracting Activity awarded the contracts related to the public safety facilities projects.

	Project	Actual/Estimated	Construction		GRD
<b>Public Safety Facility</b>	ID	<b>Completion Date</b>	Cost	<b>Contract Number</b>	Region
Fire Station	10072	9-Apr-06	\$559,680	W917BK-05-C-0008	South
Police Station B032	18223	15-Jun-05	\$154,565	W27P4K-05-M-0025	South
Police Station B029	18241	23-Apr-05	\$157,545	W27P4K-05-M-0023	South
Police Station B044	18243	3-May-05	\$166,018	W27P4K-05-M-0040	South
Police Station B024	18248	2-Jun-05	\$157,415	W27P4K-05-M-0014	South
Police Station B038	18263	5-Jun-05	\$202,725	W27P4K-05-M-0031	South
Police Station B033	18268	15-Jun-05	\$154,825	W27P4K-05-M-0026	South
Police Station B040	18273	10-Jun-05	\$172,625	W27P4K-05-M-0042	South
Police Station Q066	18346	23-Aug-05	\$223,546	W27P4I-05-C-0128	South
Police Station D145	19114	19-Oct-05	\$194,461	W917BK-05-C-0047	South
Police Checkpoint D405	19217	2-Feb-06	\$275,967	W27P4I-05-C-0137	South
Police Checkpoint D408	19218	3-Sep-05	\$368,299	W27P4I-05-C-0136	South
Police Checkpoint D407	19219	24-Jul-05	\$322,709	W27P4I-05-C-0130	South
Police Checkpoint D409	19220	21-Jul-05	\$392,603	W27P4I-05-C-0132	South
Police Checkpoint D410	19221	20-Aug-05	\$331,521	W27P4I-05-C-0131	South
Police Checkpoint D411	19222	21-Jul-05	\$355,179	W27P4I-05-C-0135	South
Police Checkpoint D412	19223	9-Jun-05	\$144,518	W27P4I-05-C-0155	South
Police Station B043	19480	21-Sep-05	\$194,459	W27P4K-05-M-0039	South
Police Station D144	19990	13-Oct-05	\$302,635	W917BK-05-P-0046	South
Police Station D156	20333	9-Oct-05	\$211,769	W917BK-05-C-0032	South
Police Barracks D414	20347	17-Jan-06	\$487,485	W27P4I-05-C-0218	South

# **Project Objective**

The overall objective of the projects' SOW under the contract associated with the fire station was to construct a fire station that would accommodate twenty firefighters and eleven daytime administrative staff members.

The overall objective of the projects' SOW under the contracts associated with the police station projects was to renovate the existing police station facility or construct a new police station facility.

### Scope of Work of the Task Order

The SOW under the contract for the firehouse project included all necessary facility structures including, but not limited to, general building construction, structural, electrical, plumbing, heating and air conditioning, flooring, roofing, painting, administration and support areas, parking lots, pedestrian/vehicular circulation, and additional security to include perimeter controls, standoffs, and blast protection as required.

The SOW under the contracts for 13 police station projects included construction services for the new construction or renovation of building(s) and/or facilities located on an existing/new site in Iraq. The construction includes a masonry security wall around the compound, berms, vehicle and personnel gates, guard towers, driveways and parking area, sidewalks, plumbing, electrical and mechanical work, roof, ceiling, doors, windows, walls, floors, interior and exterior painting, and the purchase and installation of a diesel powered back-up generator.

The SOW under the contracts for seven police checkpoint projects included construction services for some or all of the following: a checkpoint plot plan, a checkpoint support station, a covered parking stall for the commander, a generator shed, sun shade islands and checkpoints, a perimeter wall, break room, and checkpoint guard towers.

#### **Current Project Design and Specifications**

#### Fire Station

The SOW for the contract states that the design and installation of equipment, material, and works covered under this task order shall conform to the following standards, codes and regulations where applicable except where otherwise indicated.

- International Building Code (IBC)
- International Mechanical Code (IMC)
- International Electrotechnical Commission (IEC)
- International Plumbing Code (IPC)
- International Fire Code (IFC)
- National Fire Protection Association (NFPA)
- Sheet Metal and Air Conditioning Contractor's National Association (SMACNA)
- Underwriter's Laboratories (UL)
- ASTM International Standards
- American Society Mechanical Engineers (ASME)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc. Standard 52 (ASHRAE 52)
- Iraqi Building Code

However, the SOW offers a code waiver that states that if meeting of any referenced building code is impractical or impossible, a request of waiver must be made by the contractor, in writing, stating the specific condition the request is being made for, including the specific code requested to be waived and the justification for the waiver.

#### Police Stations

The SOW for the contracts to rehabilitate or construct new police stations states that materials and equipment shall be installed by workmen skilled in the type of work required and in accordance with the recommendations of the manufacturer, good construction practice, and in accordance with all applicable building codes.

#### Police Station Checkpoints

The SOW for the contracts to rehabilitate or construct police station checkpoints requires that contractors follow International and Iraqi Building Codes.

#### **Warranties**

At least 9 of the 21 public safety contracts reviewed contained warranty clauses covering workmanship and mechanical equipment for a period of at least one year.

#### **Ground Surveys**

#### Project 10072: Fire Station - New - Nassriya

Construction of the facility was on-going at the time of the site visit. The QCQA team observed constructed structural concrete columns, beams, and elevated slabs on the ground, first, and second floor. Several columns were wrapped with burlap, presumably for curing purposes. Review of photos showed no areas of segregation, although we did not document the entire facility. Interior and exterior block walls were partially complete with external plastering in progress. Installation of window frames on the first floor rear of the building was on-going. We noted no discrepancies. Site Photo 25 shows Project 10072 under construction.



Site Photo 25: Project 10072 under construction

### Project 18223: Police Station - Abu Al Khaseeb - BO32

The IRMS database listed the project as 100 percent complete on 15 June 2005. A new-looking generator was in a wire security cage, located on site. Deficiencies noted were:

- The contract required the repair or replacement of all existing sidewalks. Sidewalks were either not completely repaired or repaired with low quality work.
- The contract required replacement or repair of plumbing systems. Exterior water pipe fixtures showed signs of leaks.
- The contract required all roofs to be free from leakage and in good condition. The facility had a deteriorating parapet and signs of water leakage inside. Site Photo 26 shows exterior roof drain and deteriorating parapet. Site Photo 27 shows interior staining due to roof leaks.
- This renovation project did not appear to be consistent with contract requirements.



Site Photo 26: Exterior roof drain and deteriorated parapet at Project 18223



Site Photo 27: Interior staining due to roof leak at Project 18223

# Project 18241: Police Station - Al Midaina - B029

The IRMS database listed the project as 100 percent complete on 23 April 2005. A generator was located on a concrete pad and enclosed in a security cage. A steel frame constructed parking area, with a corrugated roof, was located on site. Deficiencies noted were:

- Light fixtures were not properly mounted and they hung from electrical wires. The electrical circuit box showed poorly installed wiring as seen by partially uninsulated splices. The wall around the electrical circuit box showed signs of burn marks, indicating previous shortages and/or small fires. Site Photo 28 shows the electrical circuit breaker panel.
- No sidewalks were located at the facility.
- There were cracks in the walls and areas with peeling paint. There were unfinished surfaces on walls near the front of the facility. Site Photo 29 shows an unfinished wall section.
- Work did not appear consistent with contract requirements.



Site Photo 28: Electrical circuit breaker panel at Project 18223



Site Photo 29: Unfinished exterior wall at Project 18223

#### Project 18243: Police Station - Al Huwayr - Al Midaina - B044

The IRMS database listed the project as 100 percent complete on 3 May 2005. The site contained a perimeter security wall and gates, along with a generator with what appeared to be a correctly installed modern circuit breaker box and system. The site also contained a completed steel frame constructed parking area with a corrugated roof and elevated water tanks located on the roof on top of a tower. We observed some deterioration of plastering on exterior surfaces of the facility but did not note any significant deficiencies. Site Photo 30 shows water tanks installed on towers and Site Photo 31 shows the generator electrical panel at Project 18243.



Site Photo 30: Water tanks installed on tower at Project 18243



Site Photo 31: Generator electrical panel at Project 18243

# Project 18248: Police Station Al Qurna - B024

The IRMS database listed the project as 100 percent complete on 5 June 2005. The project specific Bill of Quantity was not available for review. Good quality work was apparent in the courtyard area. Site Photo 32 shows the courtyard. Deficiencies noted were:

• The QCQA team observed staining and peeling of paint, reported to be the result of water leakage, although the contract requirements included the repair and resealing of the roof.

- The exterior perimeter wall did not have plaster finishing or paint.
- The exterior doorway had incomplete finishing work. Site Photo 33 shows the exterior doorway requiring finishing work.



Site Photo 32: Courtyard at Project 18248



Site Photo 33: Exterior doorway with incomplete finishing work at Project 18248

#### Project 18263: Police Station - Az Zubayr - B038

The IRMS database listed the project as 100 percent complete on 5 June 2005. A 65 Kilovolt-amp (kVA) generator was located on site and appeared new. Water tanks were located on the roof. The site contained a tiled courtyard. Sidewalks were located around the building. A perimeter security wall and gates were located on site. We did not note any significant deficiencies.

# Project 18268: Police Station - Al Faw - B033

The IRMS database listed the project as 100 percent complete on 15 June 2005. A perimeter security wall with concertina wire, entrance gates, and guard towers was located on site. Site Photo 34 shows the perimeter security wall with a guard tower. The site also contained a covered 6-bay parking area and water tanks with a small installed pump. In addition, a central courtyard, constructed of a concrete pad and tiles, was located near the entrance of the main building. Deficiencies noted were:

- The exterior and interior walls contained cracks.
- The electrical circuit breaker panel appeared disorganized and was discolored, possibly due to an electrical fire (Site Photo 35).



Site Photo 34: Perimeter Security wall with concertina wire and guard post at Project 18268



Site Photo 35: Electrical circuit breaker panel at Project 18268

#### Project 18273: Police Station B040 Safwan

The IRMS database listed the project as 100 percent complete on 10 June 2005. The facility contained a 50 kVA generator, a covered parking area, and water tanks, which were consistent with contract requirements. Site Photo 36 shows the generator. Deficiencies noted were:

- The contract required the repair of the interior and exterior walls however, the exterior and interior walls contained numerous cracks (Site Photo 37).
- Exterior tiles showed signs of deterioration, indicating the tiles were not replaced.



Site Photo 36: Generator at Project 18273



Site Photo 37: Cracks in exterior wall at Project 18273

# Project 18346: Police Station - Diwaniya - Traffic Police - Q066

The IRMS database listed the project as 100 percent complete on 23 August 2005. The site contained perimeter security walls, corner guard towers, and security lighting. A generator was located inside an enclosed unit. Roof mounted water tanks, a hot water heater, and covered water pumps were on site. Deficiencies noted were:

- The site contained improperly installed electrical panels and outlets.
- The circuit breaker panels contained disorganized electrical lines and improperly trimmed wire insulation.
• Plaster and paint covered electrical switches.

## Project 19114: Police Station - Nassriya - Police Intelligence - D145

The IRMS database listed the project as 90 percent complete on 10 September 2005. A 30 kVA generator was on site and appeared new. Perimeter security walls, gates, and guard towers were also located on site. In addition, water tanks were located on the roof and ground level, and a covered pump was present. A steel frame constructed parking area with a corrugated roof was also on site. We did not note any significant discrepancies.

## **Project 19217:** Police Station - Checkpoint - Tampa - Jackson Intersection - D405

The IRMS database listed the project as 98 percent complete on 10 September 2005. The site contained perimeter security walls with entrance gates, concertina wire, and security lighting. An apparently new 30 kVA generator and a fuel tank were located under a protective shed. Six checkpoints with security lighting were located outside the security perimeter. Deficiencies noted were:

- Numerous cracks were visible in the perimeter wall. Site Photos 38 and 39 show cracks in the perimeter security walls.
- The finishing paint on the checkpoint structures appeared to be incomplete.



Site Photo 38: Cracks in perimeter security wall at Project 19217



Site Photo 39: Cracks in perimeter security wall at Project 19217

## Project 19218: Police - Checkpoint - Suk Ash Shuyuck - D408

The IRMS database listed the project as 91 percent complete on 10 September 2005. A new or recently renovated building with sidewalks, security walls, security lighting and gates was at the location. Numerous checkpoint facilities were located outside the perimeter of the facility. In addition, a generator and a fuel tank were on site. The quality of construction appeared very good and we noted no discrepancies. Site Photo 40 shows the exterior of the building and Site Photo 41 shows the checkpoints at Project 19218.



Site Photo 40: Exterior of building at Project 19218



Site Photo 41: Checkpoint at Project 19218

## Project 19219: Police Station - Checkpoint - Tallil Lahem - D407

The IRMS database listed the project as 100 percent complete on 24 July 2005. Construction appeared new and included a main building with sidewalks, perimeter security walls, and ten checkpoint guard towers with security lighting. Two 30 kVA generators were located on site. Numerous jersey barriers were also located in the checkpoint area. There was a crack in the perimeter wall. We did not note any significant deficiencies.

## Project 19220: Police Station - Checkpoint - Islah - Chebayish - D409

The IRMS database listed the project as 100 percent complete on 21 July 2005. The facility appeared to be new construction and consisted of a building, perimeter security wall, guard posts and checkpoint guardhouses. External security lighting was present, and two 30 kVA generators with fuel tanks were located on site. Site Photo 42 shows the two generators located on site. Deficiencies noted were:

- Lack of conduit for electrical wiring that was routed outside the building.
- Improper installation of circuit breakers and missing electrical outlets at switch locations. Site Photo 43 shows the circuit breaker panel at Project 19220.
- A door was inoperable and a ceiling area appeared unfinished.



Site Photo 42: Two 30 kVA generators at Project 19220



Site Photo 43: Circuit breakers at Project 19220

### Project 19221: Police Station - Checkpoint - Nassriya Prison - D410

The IRMS database listed the project as 100 percent complete on 20 August 2005. The construction appeared complete at the time of the site visit. The site contained perimeter security walls with entrance gates and the main building included guard towers and security lighting. Two 30 kVA generators were located on site. Nine security checkpoints with jersey barriers were located outside of the perimeter walls along the roadway. The quality of materials was good, and the installation of the plumbing and tile appeared professional. The QCQA team learned during the site visit that there were some problems with the generator and external lighting. Site Photo 44 shows interior bathroom fixtures and Site Photo 45 shows tile work at Project 19221.



Site Photo 44: Interior bathroom fixtures at Project 19221



Site Photo 45: Interior tiles at Project 19221

### Project 19222: Police Station - Checkpoint - Nasir - D411

The IRMS database listed the project as 100 percent complete on 21 July 2005. Perimeter security walls with entrance gates were located on site. The main structure is located within the perimeter wall and includes corner guard towers with security lighting. Two generators were located on a concrete pad with a shed covering. Checkpoints and jersey barriers were located outside the perimeter wall and included security lighting. Site Photo 46 shows one of the checkpoints. Deficiencies noted were:

- The sidewalk showed numerous cracks.
- Covers were missing on electrical components.
- A portion of the external wall appeared damaged. Site Photo 47 shows exterior wall damage.



Site Photo 46: Checkpoint at Project 19222



Site Photo 47: Wall damage at Project 19222

## Project 19223: Police Station - Checkpoint - Al Fajr - D412

The IRMS database listed the project as 100 percent complete on 9 June 2005. A concrete slab parking area was located within the perimeter and surrounded the facility. Site Photo 48 shows the perimeter security wall and concrete pad. A generator and fuel storage tank were also located on site. Deficiencies noted were:

- Roof repair was not a line item in the contract, although the roof was in need of renovation.
- The main building showed no apparent sign of recent painting, although the contract stated, "paint entire exterior of building with 3 coats of good quality exterior enamel paint."
- Electrical work was of poor quality as evidenced by several wires lacking conduit, and improperly completed electrical connections. Site Photo 49 shows an example of electrical connections at Project 19223.



Site Photo 48: Perimeter security wall and concrete pad at Project 19223



Site Photo 49: Electrical wires without proper connections at Project 19223

## Project 19480: Police Station - Al Quibla - B043

The IRMS database listed the project as 100 percent complete on 21 September 2005. Perimeter security walls, guard towers, and entrance gates were located at the facility. A generator, contained in a metal mesh security cage, and a covered parking area were also located at the facility. Deficiencies noted were:

- Grout in exterior tile was deteriorating.
- Paint was peeling in interior rooms of the building.

#### Project 19990: Police Station - Suq Al Shoyokh - D144

The IRMS database listed the project as 95 percent complete on 10 September 2005. The site contained a perimeter security wall topped with concertina wire, guard post towers, security lighting, and covered parking areas. A small, apparently new generator was located at the main building. The main building appeared recently painted. Discrepancies noted included several leaks in the water system.

#### Project 20333: Police Station - Al Nassriya - Anti Crime IPS - D156

The IRMS database listed the project as 93 percent complete on 10 September 2005. Perimeter security walls with concertina wire, entrance gates, and guard towers were located on site, along with a 30 kVA generator. Deficiencies noted were:

- Improper cementing of floor tiles, as well as several broken floor tiles.
- Roof work consisted of reused broken roof tiles, which might account for an interior room showing signs of water damage. Site Photo 50 shows broken tiles.
- Plaster covered electrical switch surfaces. Site Photo 51 shows electrical switches covered with plaster.
- Electrical, plumbing, and finishing work was of poor quality throughout the building.



Site Photo 50: Broken roof tiles at Project 20333



Site Photo 51: Light switch with plaster over surface at Project 20333

#### Project 20347: Police Station - Tsu Barracks Phase I - D414

The IRMS database listed the project as 68 percent complete on 10 September 2005. New construction and renovation of buildings was in progress at the time of the site visit. Buildings were in different stages of completion from initial framing to nearly complete. The perimeter appeared complete with concertina wire, entrance gates, and guard towers. Several buildings showed installation of interior electrical components and lights, although the electrical system was not completed. We did not note any significant deficiencies. Site Photo 52 shows a building under construction and Site Photo 53 shows the perimeter security wall and guard tower at Project 20347.



Site Photo 52: Building under construction at Project 20347



Site Photo 53: Perimeter security wall and guard tower at Project 20347

## **Conclusions**

We assessed 21 public safety projects, to include one fire station and 20 police stations and checkpoints. The IRMS database listed 14 of the projects as 100 percent complete, and 5 projects were listed as 90 percent or more complete at the time of the site visit. We observed completed or on-going renovation and/or new construction work at all the locations surveyed. Our assessment determined that the quality of electrical, plumbing, and finishing work at a majority of the projects surveyed was deficient. At least 9 of the 21 public safety projects reviewed were covered under warranties.

## **Transportation Projects**

We conducted ground project surveys of road construction in Basrah and Thi Qar, and a railway station rehabilitation in Basrah, under our surveys of transportation projects. PCO awarded Iraqi contractors three separate contracts, W914NS-05-C-0038, W914NS-05-C-0039, and W914NS-05-C-0011, to accomplish the work on the projects surveyed.

On 29 November 2004, PCO awarded a firm fixed price contract, Contract W914NS-05-C-0038, for the Basrah Village Road project.

On 2 December 2004, PCO awarded a firm fixed price contract, Contract W914NS-05-C-0039, for the Thi-Qar Village Roads project.

On 30 November 2004, PCO awarded a firm fixed price contract, Contract W914NS-05-C-0011 for the rehabilitation of the Basrah Railway Station. However, the U. S. Government terminated the contract for convenience on 23 October 2005. The following table lists the transportation projects associated with Contracts W914NS-05-C-0038, W914NS-05-C-0039 and W914NS-05-C-0011, as well as the cost per project.

Transportation	Project ID	Actual or Estimated Completion Date	Construction Cost	Contract Number	GRD Region
Basrah Village Roads	17783	28-Dec-05	\$444,400	W914NS-05-C-0038	South
Thi-Qar Village Roads	17867	26-Jul-05	\$1,421,858	W914NS-05-C-0039	South
Railway Station					
Rehabilitation (Basrah)	21251	1-Feb-06	\$291,125	W914NS-05-C-0011	South

## **Project Objective**

The overall objective of the project's SOW under Contract W914NS-05-C-0038 is to complete 19 km of paved rural village roads located throughout the Governorate of Basrah for everyday use by the local population. The 19 km of paved road encompassed five locations throughout the Governorate; however, our ground project survey looked at only a 3.5 km section from Talha to Balha.

The overall objective of the project's SOW under Contract W914NS-05-C-0039 is to complete 7.1 km of paved rural village roads located throughout the Governorate of Thi-Qar for everyday use by the local population.

### Scope of Work of the Task Order

The SOW provides that the Basrah Village Roads project is to include a review of the existing design, making revisions or completing the design as necessary. Using the completed design, the contractor is to construct a two lane bituminous roadway, with each lane being 3.0 m wide, and a 1.75 m wide soil shoulder on each side of the highway. The sub-base is to be comprised of crushed aggregate, with a thickness of 30 centimeter (cm) and a 6.5 m width. The base course is to be comprised of asphalt bituminous, with a total compacted thickness of 10 cm, with a 6 m width. The SOW also required the completion of structural excavations to accommodate concrete works for bedding and surrounding headwalls and for the installation of reinforced double concrete pipe culverts, measuring 0.75 m.

The SOW provides that the Thi-Qar Village Roads project is to include a review of the existing design, making revisions, or completing the design as necessary. Using the completed design, the contractor is to construct a two lane bituminous roadway, with each lane being 3.0 m wide, and a 1.75 m wide soil shoulder on each side of the highway. The sub-base is to be comprised of crushed aggregate, with a thickness of 30 cm and the base course is to be comprised of asphalt bituminous, with a total compacted thickness of 10 cm. In addition, the completion of structural excavations was required to accommodate concrete works for bedding and surrounding headwalls for the installation of reinforced double concrete pipe culverts.

#### **Current Project Design and Specifications**

The SOW for Contracts W914NS-05-C-0038 and W914NS-05-C-0039 requires that the design conform to the specifications in the design criteria manual "Republic of Iraq; Ministry of Housing & Construction; State Organization of Roads & Bridges; Highway Design Manual; 1982 Design & Study Department; Road & Traffic Division." The SOW also requires that the design conform to standard Iraqi specifications found in the publication "Republic of Iraq; Ministry of Housing & Construction; State Organization of Roads & Bridges; Standard Specifications for Roads & Bridges; Department of Design & Studies, 1983."

#### **Warranties**

The contracts covering Projects 17783 and 17867 both contained warranty of construction clauses.

#### **Ground Surveys**

#### Project 17783: Basrah Village Roads Segment 2 Talha

The survey team verified that road construction was in progress at the time of the visit. Installation of the sub base and asphalt surface appeared to be consistent with the design requirements. Additional road surface and shoulder work was still required at the time of the visit. We did not note any major discrepancies. Site Photo 54 shows the asphalt road at Project 17783.



Site Photo 54: Asphalt surface of Project 17783

## Project 17867: Thi-Qar Village Roads, Segment 3, Hashin ad Dukhi

Although the IRMS database listed the project as 100 percent complete, the site visited by the survey team was not a completed road. The site visited was within 725 m from the reported location and intersected the location of the road as shown in the contract. The site visited consisted of 3.5 km of road, with recent sub base installed and no culverts or shoulders. No section of road contained any asphalt pavement. Site Photo 55 shows new road base at the location of Project 17867.



Site Photo 55: Road surface at the location of Project 17867

#### **Project 21251:** Basrah Railway Station Rehabilitation (Basrah)

The renovation project was in-progress at the time of the survey site visit. Placement of exterior patio brick over sand base was partially complete. Site Photo 56 shows the brick installation. The survey team observed brick and cement manholes and trenches between the manholes. Site Photo 57 shows manholes under construction. Minor electrical work had also begun. Discrepancies noted were:

• Manholes appeared to be of poor quality.

- According to the contract files, PCO terminated the contract for this project one day after the site visit. If this is still the case, there may be safety concerns leaving the site in the condition observed during the site survey.
- Wiring on the exterior of the building lacked conduit and in some places wiring hangs freely and passes through windows.
- Some tiles were missing from the hanging ceiling.



Site Photo 56: Installation of brickwork at Project 21251



Site Photo 57: Manholes and excavation at Project 21251

## **Conclusions**

Project 17783 and Project 21251 were in-progress at the time of the survey team visit. We did not note any significant deficiencies. We could not determine the completion of Project 17867, as the survey team could not locate the project at the reported grid coordinates. Road projects 17783 and 17867 were covered under contract warranties.

## **Summary Conclusions**

Our ground survey teams visited fifty-five sites between September and December 2005. The purpose of the ground surveys was to verify reported project locations and to determine compliance with contract requirements. The following are general conclusions resulting from our review of the 55 ground surveys.

## **Project locations**

The grid coordinates provided by GRD/PCO for the projects surveyed were not always accurate. The difference in the distance between the GRD/PCO provided site locations and the actual site locations recorded by the QCQA teams ranged from 300 m to 13 km.

## **Contract Documentation and Data**

MNSTC-I was unable to identify or locate the contract documents for five border post projects inspected. In addition, the MNSTC-I data contained in IRMS was not complete.

## **Deficiencies and Warranty Coverage**

Common deficiencies noted in our project surveys consisted of plumbing, electrical, and finishing work. A review of the contracts determined that construction warranties covered 34 of the 55 projects surveyed. In general coverage amounted to a period of at least one year, although the warranties for each project differed slightly. As such,

projects listed in the IRMS database as being 100 percent complete would benefit by follow-up procedures to ensure the correction of noted deficiencies prior to warranty expiration.

## Recommendations

We recommend that the Commander, Gulf Region Division, U.S Army Corps of Engineers and Director, Project and Contracting Office:

- 1. Assess the accuracy of its project location grid coordinates, and make the necessary changes in its database to reflect the actual project locations.
- 2. Develop and implement procedures to follow up on projects covered by contract warranties, to ensure needed repairs are corrected prior to warranty expiration.

We recommend that the Commanding General, Multi-National Security Transition Command – Iraq

- 1. Require Major Subordinate Commands responsible for maintaining contract documents to locate and provide to the Special Inspector General for Iraq Reconstruction, the five unaccounted for contract documents related to border posts addressed in this report.
- 2. Assess the accuracy and completeness of the data in the Iraq Reconstruction Management System database relating to Multi National Security Transition Command-Iraq projects and make the necessary changes and updates to ensure the accuracy and completeness of the database.

## **Management Comments**

The Commander, Gulf Region Division, U.S Army Corps of Engineers and Director, Project and Contracting Office, concurred with our conclusions and recommendations and provided the following comments:

1. Concur with comments. Since SIGIR did not provide the coordinates in their report, there is no way to confirm the validity of the coordinates. However, we assume that if the coordinates were provided, they would probably be the same as in the current data bank. The best way to confirm actual location is to send someone to the site with a hand-held GPS instrument to read the coordinates. There is a benefit to having the accurate coordinates as a means of identifying the specific facility. This will assure the reference to the documents turned over to the Government of Iraq relate specifically to that facility. However, the cost to identify the specific facility will have to be considered for such an endeavor. A determination would have to be made whether the benefit outweighs the cost. In addition to costs, security issues, and available labor force would also have to be considered.

Here are the ongoing actions to update the grid coordinates:

• Personnel, such as security teams, who visit construction sites, will verify grid coordinates with GPS.

- LNs<sup>9</sup> and contractors who use commercial GPS will double-check the latitude and longitude when they transcribe the information to make sure they do so correctly. (LNs and contractors cannot use military GPS.)
- Military personnel who transcribe grid coordinates will double-check figures to ensure they did not transpose any numbers.
- Contractors will notify us of the new grid coordinates if a project location was changed from the originally planned location.
- When project grid coordinates are plotted by province and we find a project in a wrong location, e.g. a project that is supposed to be in the Wassit province that when plotted is in the Maysan province, we will notify the responsible party and the Area/Resident Office to get clarification. Sometimes the problem is as simple as the map designator or transposed numbers.
- When project grid coordinates are plotted by city and we detect incorrect coordinates, we will take the same action as discussed in the previous bullet.
- When necessary, we will contact the Topographic Engineering Center (the Center)—a part of the Engineering Research and Development Center— to help validate the accuracy of grid coordinates. For example, if we provide the Center with grid coordinates, the Center can give us the satellite imagery of the border fort. If a border fort is not at the specified grid coordinates, the Center can conduct a 20-mile radius sweep of the area to locate the facility. If the Center cannot locate a border fort, they will report back to us, and we will coordinate with MNSTC-I to obtain clarification. An additional benefit of the satellite imagery is to confirm the construction status of the border forts.
- 2. Concur with comments. When the turnover documents are provided to the Government of Iraq, any warranties are to be provided at that time with a point of contact in the event problems occur that are covered by the warranty. The GRD-PCO (Programs Directorate) does not become involved in warranty issues after turnover, but rather it is the responsibility of the owner to follow up with the provider of the warranty. Many deficiencies result from poor maintenance schedules and/or excessive wear and tear, which are not contractor responsibilities. It is often difficult to distinguish damage from customer abuse from problems covered under warranty. To undertake the warranty inspections that are typically performed in the U.S. would require a great deal of resources. Actions being undertaken by the districts include:
  - Following up with warranty work where significant problems exist, including settlement and structural issues. These issues have been identified through communications from U.S. and Iraqi customers and through inspections.
  - Writing better contract specifications and requiring strict adherence.
  - Discussing warranty issues during the Senior Leaders Conferences.
  - Establishing and implementing policy to ensure projects are periodically inspected and deficiencies corrected before the applicable warranty period expires.

<sup>&</sup>lt;sup>9</sup> Local Nationals

The Commanding General, Multi-National Security Transition Command – Iraq, concurred with our conclusions and recommendations and provided the following comments:

"MNSTC-I is making every effort to locate the SIGIR requested contract documentation which is not presently available. We have contacted the Major Subordinate Command who actually contracted the construction of these five Border Forts and have requested copies of the contracts be forwarded to MNSTC-I. We anticipate the research should be completed by 15 Apr 06, and the data, if located, will be provided to SIGIR upon receipt."

"The current Memorandum of Understanding (MOU) between MNSTC-I and IRMO<sup>10</sup> regarding IRMS/Maximo provides for recurring updates by executing agencies. Current executing agencies for MNSTC-I include JCCI<sup>11</sup>, USACE<sup>12</sup> and AFCEE<sup>13</sup>; all of which provide data, via flat files, to be uploaded in the IRMS/Maximo database on a recurring basis. MNSTC-I is currently working with IRMO and the executing agencies to ensure verified and validated data is uploaded regularly into the IRMS/Maximo database. We will continue our efforts and work with the executing agencies to refine our procedures and validation processes to ensure that the information is accurate and complete."

## **Evaluation of Management Comments**

Management comments addressed the issues raised in our conclusions and actions taken should correct the deficiencies.

<sup>&</sup>lt;sup>10</sup> Iraq Reconstruction Management Office<sup>11</sup> Joint Contracting Command-Iraq

<sup>&</sup>lt;sup>12</sup> United States Corps of Engineers

<sup>&</sup>lt;sup>13</sup> Air Force Center for Environmental Excellence

## **Appendix A. Scope and Methodology**

We performed 55 ground project surveys between 3 September 2005 and 5 December 2005, in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. We conducted these surveys as part of our continuing assessments of selected sector reconstruction activities. These surveys focused on the Facilities and Transportation sectors, to include border control, education, medical and public safety facilities, as well as roads and railways. We documented site conditions using our Quality Control and Quality Assessment (QCQA) teams. A team comprised of a SIGIR engineer and auditor reviewed and analyzed reports and photographs provided by the QCQA teams.

We eliminated five of the sites selected for ground project surveys from this report because we could not confirm that the projects visited by our QCQA teams were actually the projects selected due to differences between the projects encountered and the statements of work in contracting documents. We will follow-up on the five projects eliminated on more comprehensive project assessments.

The 55 ground project surveys summarized in this report consist of 22 border posts located in Basrah and Sulaymaniyah, Iraq, along the Iraq-Iran border. Three schools located in the Governorate of Thi-Qar, six medical facilities located in the Governorates of Basrah, Qadissiya, Najaf and Thi-Qar, one fire station and 20 police stations located in the Governorates of Basrah, Qadissiya and Thi-Qar, two road construction projects in Basrah and Thi Qar, and one railway station rehabilitation in Basrah.

In addition to reviewing the site assessment reports, the assessment team obtained and reviewed contract documentation, including the contract and/or task order, contract modifications, and Scope of Work (SOW) for 49 of the 55 projects surveyed. The SOW for one contract was not available, and Multi National Security Transition Command-Iraq (MNSTC-I) was unable to identify or locate the contract documents for five of the projects surveyed.

## **Appendix B.** Acronyms

cm	Centimeter
CPA	Coalition Provisional Authority
GPS	Global Positioning System
GRD	Gulf Region Division
IBC	International Building Code
IRMS	Iraq Reconstruction Management System
km	Kilometer
kVA	Kilovolt-Amp
m	Meters
MNSTC-I	Multi National Security Transition Command-Iraq
PCO	Project and Contracting Office
QCQA	Quality Control Quality Assessment
SIGIR	Special Inspector General for Iraq Reconstruction
SOW	Scope of Work

## **Appendix C. Report Distribution**

## **Department of State**

Secretary of State Senior Advisor to the Secretary and Coordinator for Iraq U.S. Ambassador to Iraq Director, Iraq Reconstruction Management Office Mission Director-Iraq, U.S. Agency for International Development Inspector General, Department of State

## **Department of Defense**

Secretary of Defense
Deputy Secretary of Defense
Director, Defense Reconstruction Support Office
Under Secretary of Defense (Comptroller)/Chief Financial Officer
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Inspector General, Department of Defense
Director, Defense Contract Audit Agency
Director, Defense Finance and Accounting Service

## Department of the Army

Assistant Secretary of the Army for Acquisition, Logistics, and Technology Principal Deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology Deputy Assistant Secretary of the Army (Policy and Procurement) Director, Project and Contracting Office Commanding General, Joint Contracting Command-Iraq/Afghanistan Assistant Secretary of the Army for Financial Management and Comptroller Chief of Engineers and Commander, U.S. Army Corps of Engineers Commanding General, Gulf Region Division Auditor General of the Army

## **U.S. Central Command**

Commanding General, Multi-National Force-Iraq Commanding General, Multi-National Security Transition Command-Iraq Commander, Joint Area Support Group-Central

## **Other Federal Government Organizations**

Director, Office of Management and Budget Comptroller General of the United States Inspector General, Department of the Treasury Inspector General, Department of Commerce Inspector General, Department of Health and Human Services Inspector General, U.S. Agency for International Development President, Overseas Private Investment Corporation President, U.S. Institute for Peace

# **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

#### U.S. Senate

Senate Committee on Appropriations
Subcommittee on Defense
Subcommittee on State, Foreign Operations and Related Programs
Senate Committee on Armed Services
Senate Committee on Foreign Relations
Subcommittee on International Operations and Terrorism
Subcommittee on Near Eastern and South Asian Affairs
Senate Committee on Homeland Security and Governmental Affairs
Subcommittee on Federal Financial Management, Government Information and International Security
Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia

#### **U.S. House of Representatives**

House Committee on Appropriations Subcommittee on Defense Subcommittee on Foreign Operations, Export Financing and Related Programs Subcommittee on Science, State, Justice and Commerce and Related Agencies
House Committee on Armed Services
House Committee on Government Reform Subcommittee on Management, Finance and Accountability Subcommittee on National Security, Emerging Threats and International Relations
House Committee on International Relations Subcommittee on Middle East and Central Asia

## **Appendix D. Project Assessment Team Members**

The Office of the Assistant Inspector General for Inspections, Office of the Special Inspector General for Iraq Reconstruction, prepared this report. The principal staff members who contributed to the report were:

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