

# ESSAYONS

*Forward*

U.S. Army Corps of Engineers

Gulf Region Division (Provisional), Iraq - Volume 2, Issue 8

September/October 2005

**Back to School —  
Reconstruction Lessons Learned**



September/October  
2005

Volume 2, Issue 8



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## Iraq Image....



Six new primary healthcare centers in Sadr City are taking shape. They are currently between 20-60 percent complete under contracts totaling \$3.7 million and are scheduled to open later this year. Each is a two-story, 1,155 square meter facility providing space for medical/dental examination and treatment, X-ray capabilities, vaccination, testing lab, pharmacy, and public education. Shown above is the Al Thalith Primary Healthcare Center. (Photo by Norris Jones)



**COVER:** Students at the Al Mada'in community in southeastern Baghdad begin another year of school in one of many recently remodeled schoolhouses. Gulf Region Central District has renovation or new construction work involving 107 schools totaling \$29 million. Of those schools, 58 have been completed. (Photo by SFC Troy Westerman)

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# KEEP IT LOCKED ON...

Al Asad	107.3 FM	Kirkush	107.3 FM
Ali Base	107.3 FM	Mosul	105.1 FM
Ar Ramadi	107.3 FM	Q-West	93.3 FM
Baghdad	107.7 FM	Taji	107.3 FM
Balad	107.3 FM	Tal Afar	107.3 FM
Fallujah	105.1 FM	Taqquadum	107.3 FM
Kirkuk	107.3 FM	Tikrit	100.1 FM

## Freedom Radio



## Commander's Column



I will long remember September 2005 as a month filled with extreme contradictions; a period when Americans and Iraqis of the Gulf Region Division (GRD) experienced tremendous devastation, loss, and heartbreak, all at the same time we were helping to put into effect widespread, significant, positive improvements in Iraq.

At one end of the spectrum, we watched helplessly as the lives of our fellow Americans were lost when Hurricane Katrina slammed into the Gulf Coast region of the United States, resulting in the largest natural catastrophe in our history. Our Iraqi friends and colleagues experienced the same shock and horror as suicide bombs shattered neighborhoods across Baghdad and the rest of the country and as a peaceful demonstration turned into a human stampede on the Al-Aimamah Bridge across the Tigris River.

We all paused to reflect on the fourth anniversary of events that took place on 9-11 ... once again, unprecedented events that brought about untold misery and devastation and launched the Global War on Terrorism.

As events such as these unfold before us, I challenge you to remain focused on two fundamentals. First, you are on perhaps the most important mission of your life – assisting in the establishment of peace, stability, and prosperity in Iraq – and you are making a difference every day! And second, our world is a wildly beautiful place and, despite the attempts by some to disrupt it and cause terror and fear, they will fail and we will once again experience the peace we all deserve.

For instance, during the same eventful month, almost as a tribute to the human spirit, we watched an infant nation take its first steps along the road to Democracy and struggle to form a Constitution. At the same time, a nation established nearly 230 years ago, took the time and effort to rededicate itself to its beloved Constitution and to strengthen its patriotism by declaring September 17 of each year as “Constitution Day and Citizenship Day.” This commemoration serves as a fitting tribute -- and a well-timed testimony for our Iraqi friends -- of the lasting importance of a well-written Constitution.

As of mid-September, the GRD Reconstruction program included 2,852 actual project starts valued at \$6.8 billion, 1,074 ongoing projects with a value of \$4.8 billion, and 1,778 project completions with a program value of \$2 billion that impact more than 22,000,000 Iraqi citizens.

These projects bring clean, potable water to villagers and city dwellers alike, lead to increased electrical power for both residences and industries, create or renovate hospitals and clinics for the sick, and result in schools and, therefore, future promise for Iraqis to realize their potential, where little opportunity existed before.

These wide-reaching improvements deliver a positive impact to all Iraqis, regardless of their ethnic or religious background – another unprecedented concept in a beleaguered country’s recent past. Since each of you has contributed to these worthwhile projects and their long-lasting, positive contributions, you have much for which you can be proud and thankful. I am very proud of you.

To the men and women of the Gulf Region Division, please keep in mind that two great Nations will forever be indebted to you for your sacrifices, volunteer spirit, steadfastness, and attention to duty.

Keep Safe.

**Brigadier Gen. William H. McCoy**

## Cmd. Sgt. Major's Column



During this month, I have traveled across Iraq in order to become more familiar with the people who make up the Gulf Region Division as well as the Reconstruction projects with which they are involved.

I have been most impressed with your hard work and dedication and the positive changes you are bringing to this country. Yet, the more I travel, the more I continue to be concerned about the issue of Force Protection.

All you have to do is glance at the television, read a newspaper, or have a PSD team escort you through the “wrong” neighborhood in order to realize the determination of our enemies. Better yet, talk with one of your Iraqi co-workers and have them describe the ordeals they face to get to work each day and the hardships they and their families have had to overcome. By now, you surely recognize that we assigned to GRD are front and center in the Global War Against Terrorism.

As your Command Sergeant Major, I am responsible for reminding you of the dangers surrounding you and the best ways to guard your safety and that of your colleagues.

First, I remind you that there are two rules of war. Those rules are:

1. people die in war
2. you can't change rule number one

You can, however, minimize your chances by being aware of your situation and adherent to Force Protection issues. Always know your Force Protection Level and remember that you were issued gear for your individual protection. The gear only works when you wear it, and when you wear it in the proper manner.

A Daily Situation Report is distributed to all units and sections; be sure to read it. It will educate you on recent circumstances and prepare you for changing conditions.

Don't be predictable; the enemy relies upon your habits and routines to assist in making you a target. Change your routes, your routines, and your departure and arrival times frequently in the interest of protecting yourself and those around you.

Come to know your surroundings so that the smallest change sticks out like the proverbial sore thumb. If something doesn't look right, then it probably isn't right. And if you find yourself beginning to feel comfortable with your surroundings or your routine, it is time to reevaluate the situation.

Remember, TEAM stands for Together Everyone Accomplishes More. Use the Buddy System to keep an eye out for yourself and for your friends and colleagues. When you are part of a team, you multiply your Force Protection awareness.

**Command Sgt. Maj. Gregory M. Glen**

## *Educated Iraqi youth make for a hopeful future*

**T**he Iraqi province of Ninawa's Ministry of Schools and the Mosul city Department of Education, aided by the U.S. Army Corps of Engineers (USACE), are building a hopeful future and serving as models of the ongoing reconstruction process in Iraq.

Out of 104 projects to renovate school buildings and construct new classrooms in Ninawa, 33 have been completed and 71 will be done by the start of the new school year in October. In Mosul alone, the 78 renovated schools will seat 11,610 primary grade students (through the fifth grade), who will attend classes in two shifts. As a result of these renovations, more than 385 new classrooms were added, and 3,870 Iraqis were put to work.

Most of these schools received a major face-lift that included: repairing and resealing the roofs; patching, plastering, and painting the walls and ceilings; installing new electrical systems to include updated lighting; refurbishing and building new bathrooms; installing a water tank and water fountains; building a perimeter wall around the property and, in some cases, building a playground. Many of the schools had new rooms added to the existing building. The schools were all built in the 1970s and received no maintenance or upkeep during the Saddami Baath regime.

Much of this success is due to the cooperation and coordination between Mosul school administrators, contractors, and the Corps' ability to work within the reimbursement system to pay for work done.

In early July, \$3 million was made available to renovate schools through Commanders Emergency Response Program (CERP) funds. By the end of July, all of those funds were under contract. Within the month, Mosul school administrators finalized design documents, generated scope of work requirements, compiled lists of building materials, and found contractors capable of doing the work.

Then, working closely with Pradip Patel, a USACE contract administrator, all the contracts were quickly let. In an unusual move, advance and interim payments were arranged to be made in cash, as the western system of making payments through electronic fund transfer was not feasible for paying contractors who still live in a cash-based society. Instead, arrangements were made for the contractor to receive cash payments (in Iraqi dinars) at the Maneuver Command's finance office.

According to Patel, this was all possible because of the "professional way the school administrators took to their tasks." There is in Mosul a definite determination to educate their children. When asked about the children's reaction, Patel said, "The children are happy, they really appreciate it."

All of the school projects in seven northern Iraq provinces are scheduled to be completed by November. At that time, Patel will focus his efforts on the contracts to build new medical clinics, which are going much slower than did the school projects.

Oil infrastructure is being repaired and power plants are being rebuilt to boost the economy and improve the quality of life for the Iraqi people. School and hospital renovations, sewer construction and water distribution projects demonstrate

visible progress to the Iraqi people and put them back to work. In the majority of the provinces, reconstruction is happening at a steady rate.

At the transfer of sovereignty in June 2004 there were just over 200 projects started. As of August 27, 2005 over 2,800 projects have started, valued at more than \$6.5 billion. Currently 1,100 projects are ongoing at a program value of \$4.6 billion. Over 1,700 projects valued at \$2 billion are complete. Construction will continue across Iraq as nearly \$12 billion of construction money is put to work.

**Claude D. McKinney , GRN**



**Before and after** photos depict typical changes to Iraqi learning environments. **Bottom photo: Classroom before renovation (photo taken last fall). Top: Newly renovated exterior.** (USACE Photos)



## Al Mada'in Schools

**S**ergeant First Class Troy Westerman helped with a site assessment of two schools in the Al Mada'in community in southeastern Baghdad and took the above photos. Westerman was activated with the Mo. National Guard's 35<sup>th</sup> Engineer Brigade, Cape Girardeau, Mo. He knows something about education as he's been a 7<sup>th</sup> grade math instructor at Lebanon Junior High School in Lebanon, Mo., for the past 12 years. He says the Al Mada'in schools had falling ceiling plaster, cracked walls, and were definitely in need of some extensive rehabilitation. Gulf Region Central has renovation or new construction work involving 107 schools totaling \$29 million. Of those schools, 58 have been completed. Westerman is currently the Non-Commissioned Officer in Charge at GRC's office at Loyalty Forward Operating Base near Sadr City.



## *Ekra, Ektom and Hesab – the Iraqi Three R's*



The smiling faces of Diwaniyah's future.  
(Photos by Tom Clarkson)

A battered piece of green metal serves as a classroom chalkboard.



If you peer closely into the “windows of their souls,” it is apparent that these are the eyes of children who have already lived a hard life. Theirs is a youth spent much closer to the razor's edge of unexpected death than that of their peers from Butte, Mont. or Lubbock, Texas. But those smiles! They are grins of such beauty that can warm the heart of the most grizzled individual.

These are the faces of the children of Iraq . . . the very future of this oft conquered country that was for so long dominated by grownups with misdirected objectives. In these small faces lies the direction for Iraq in the 21<sup>st</sup> century. And, to a large part, this goal is being helped by multinational Coalition force reconstruction efforts.

In fact, if the several thousand individuals who comprise the U.S. Army Corps of Engineers, Gulf Region Division (GRD) and its partner in country re-building, the Project and Contracting Office (PCO), have anything to say about it, these children will be masters of their own fate when they are grown.

The Corps' Gulf Region South (GRS), led by Col. Larry McCallister, is a prime example of the focused, community-by-community effort helping provide better environs in which these children may learn the Iraqi equivalent of “the three Rs: readin', 'ritin', and 'rithmetic.” In Arabic, the equivalent is “*ekra, ektom, and besab.*”

The variety of work being done on these schools varies from project to project. The actual determination of how much will be done is made by the local Provincial Regional Development Councils. In some cases, it may be a \$24,000 rehabilitation project of adding two rooms and upgrading or building a new toilet as are being done at the Saniyah School for Girls and at the school of Shahama.

As in the Diwaniyah neighborhood of Thalthah, it may be a totally new facility of nine rooms and a rest room facility costing \$93,000. In many cases, however, it seems not nearly enough. Having been so stated, Barry Stuard, construction representative, and Michael Osborne, project engineer, both of the Diwaniyah Resident Office, recognize anything is better than what typically existed.

McAllister affirms this sentiment saying, “Yes, there is so much more that we wish we could do but, tragically, virtually all manners of this country's infrastructure have been unattended for nearly three decades. As generous and giving as the U.S. and its Coalition partners are, there is only so much that can be done at this point.

Like others, he acknowledged the frustration that more cannot be done in specific areas, but that Coalition reconstruction efforts must address many other badly-needed services, to include water purification, sewage treatment facilities, medical clinics, hospitals, power generation projects, road paving efforts, and many more.

“It is heartbreaking to walk into some of these schools and see the building in, literally, utter disrepair and waste,” says Stuart. “Under Saddam Hussein's regime, institutions of learning appear to have not been of little to no priority as regards real education. Again and again we find that nothing has been done on these facilities for thirty years.”

In the Diwaniyah district, there are presently fourteen school construction projects in progress.

Most facilities are small and crowded, and lack even basic fans to circulate the air. For years, educators have tried to accommodate the massive need, but to no avail. With limited facilities and so many children wanting to learn, classes are taught in shifts. In the small city of Hussain, the 1,200 students cram into fourteen classrooms in two sessions, one morning and the other late afternoon.

Fortunately, as a result of the efforts of their military, civilian, and Iraqi national employees, GRD and PCO are contributing to help create a new, democratic country that is concerned with the basics of *Ekra, Ektom, and Hesab.*

**Tom Clarkson, GRS**

# Computer equipment heads off to Iraqi colleges

**E**ducation-related funds in Iraq are earmarked for others besides doe-eyed, elementary school children. Students bound for 25 colleges and technical schools across the country also will reap reconstruction benefits in the form of state-of-the-art computer equipment.

Iraqi secondary students soon will realize the advantages offered by 1,504 desktop computers, 100 laptops, 100 printers, 100 computer projectors, 500 cartridges and 1,511 - 15" flat screens in performing their class assignments. It is unlikely, however, that these students will ever realize the coordination and oversight put forth by managers in the Program and Contracting Office (PCO) Facilities and Transportation Sector to place this equipment in their classrooms.

According to USAF Maj. Bill Mann, PCO Government Lead, Non-Construction, the Department of State's Iraq Reconstruction Management Office (IRMO) liaises with the Iraqi Ministry of Education (MoE) to determine how Iraq Reconstruction Funds (IRF) should be prioritized and spent. The MoE determined that computers and related equipment constituted the most pressing need for secondary schools or universities and selected the 25 schools to receive the devices.

Even though the MoE set the spending priorities, it was not given free reign in the purchasing and delivery of the equipment. Instead, PCO provides oversight for those program responsibilities.

"Most of the people in this [PCO Non-Construction] are project managers with logistical backgrounds," says Mann. "The project manager follows a program from the inception of the need established by the ministries, through IRMO, to the ministries, to establish what is required. Then we start the process of obtaining whatever is needed."

The project managers are not authorized to select the vendors who will provide the equipment; regulations demand they use contract officers to obtain solicitations.

"We track from the awarding of the contract until the items are delivered to the client. In this case, the client is the Ministry of Education," says Mann.

As is usual with reconstruction projects in Iraq, security (both systemic and external) for non-construction programs is always a main consideration and, at times, a challenge. And security is particularly important in the case of a commodity as valuable as computer equipment.

"As project managers, we have accountability so that we can spot-check to see if these authorities have distributed

and received what they should have," says Tommy Moore, PCO Project Manager-Education. "They can't, for instance, just open a store with them. We have expectations of where these items are to go."

Moore further explained the security procedures involved and the lengths to which PCO will go to "deliver the goods."

"When I got here, the computers were in the storage system in place, in country. Our concern was that the ministry had provided a location that could be secured, so we sent out our Iraqi field rep who has the ability to move around freely," said Moore.

"The rep found the storage site to be deficient, so we provided a list of required repairs that the Ministry provided. "Ultimately, we provided the transportation for four or five truckloads of computers, but there was no one present to unload them. The field rep physically went out and hired people and equipment to unload the trucks in order to accomplish the mission."

**Denise Calabria, GRD**

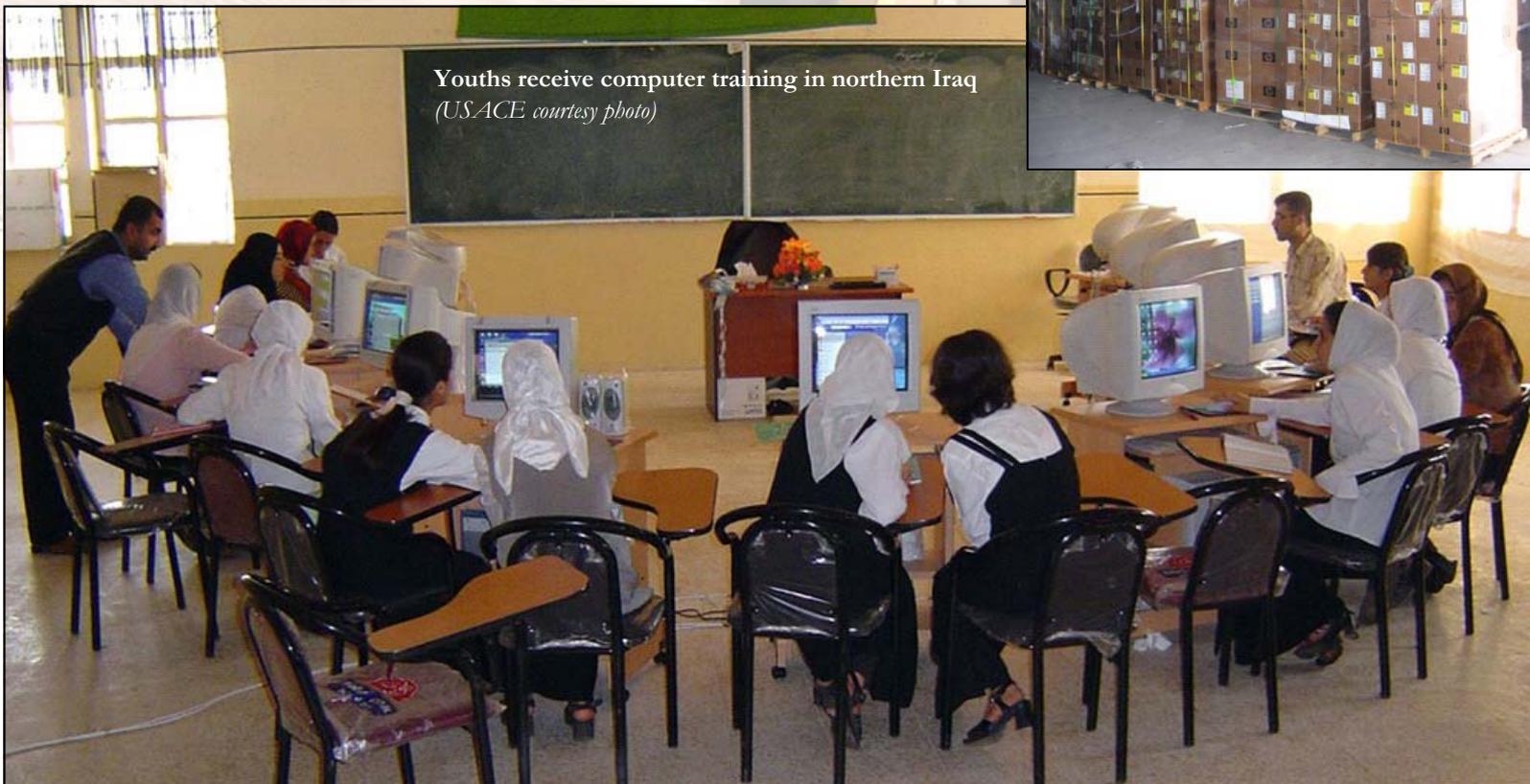
**Watermark: An Iraqi worker moves palletized computers into a warehouse where they will be stored until the Ministry of Education distributes them to various universities and trade schools across the country.**

**Right: Project managers from PCO ensure that non-construction equipment such as these computers are stored in secure environments before being distributed to their intended recipients.**

*(Photos courtesy of PCO Facilities and Transportation Sector)*



**Youths receive computer training in northern Iraq**  
*(USACE courtesy photo)*



# Reconstruction continues throughout Iraq

**Reconstruction continues throughout Iraq. At the transfer of sovereignty in June 2004 there were 200 projects started. To-day over 2,806 projects have started. Currently, over 1,703 projects have completed. The following projects were started in August.**

## Ninewa

A water compact unit.

## Sulaymaniyah

Nine school renovation projects. Several Iraqi companies have started work on intermediate and primary schools. Two of these are Intermediate Girls Schools. Work is scheduled to be completed between September and early December.

## Tameem

Two electrical substations will provide a site assessment, design, procurement, construction, installation and commissioning of the distribution network. The estimated completion date is Nov 22, 2005.

Two canal crossing projects. These projects are to construct a 40 foot oil pipe line across Riyad Irrigation Canal.

## Salah Al Din

Al Fathah Oil project involves 15 pipelines under the Tigris River; installation of nine oil and gas pipelines and connection of six existing pipelines. The pipelines will carry crude oil and natural gas from oil fields in the north to the Baiji and Duram refineries, to the Baiji power plant for power generation, and out for export to either Turkey or to southern Iraq. The pipelines will also carry products produced at the Baiji refinery back to the Kirkuk area for use. This pipeline crossing is considered the key to accessing crude oil and natural gas resources from oil fields in the north, and will provide for a long-term, safe and efficient crossing of the Tigris River, allowing the Iraqi government and people to maximize the production of crude oil and natural gas from the northern oil fields in and around Kirkuk. The project employs over 200 Iraqi workers.

Two new potable water plants will provide local improvement in quantity, quality, reliability and accessibility to treated potable water. The project work will train local operators on site in the technology and maintenance of the potable water systems. This work is contracted directly to Iraqi firms and employs approximately 40 Iraqi workers until mid-January 2006. Once completed the projects will benefit approximately 20,000 Samarra residents.

An electricity substation project in the Al Daur District has a scheduled completion date of Dec. 3, 2005. It has the potential to provide reliable service to 50,000 Iraqi homes and small businesses. The project is a 33 - 11 kilovolt substation with two 16 MVA transformers. The Iraqi subcontractor provides construction of the civil works and the electrical works, and employs approximately 20 Iraqi workers daily. That number will increase when the transformers are delivered.

A police facilities project for a 250-officer station will provide a presence to help stabilize law and order. Currently the contractor employs 25 Iraqi workers, and the project is scheduled for completion in November.

Four water compact units.

Tikrit Courthouse renovation project.

## Diyala

A prison project will house up to 3,600 inmates. The entire site is approximately 550,000 square meters, which includes an educational center, medical facilities and administration buildings. The project will employ approximately 1,000 Iraqi workers during construction. The only other project in the steep, mountainous Bani Sa'ad municipality is a fire station project, which is currently under construction.

A water treatment project that following the installation of 40 kilometers of transmission piping, will increase the capacity of the water treatment plant to serve 72,000 families compared to the current capacity of 1,100 families. This is the only water treatment project programmed in Balad Rooz. There are two additional projects programmed in Balad Rooz; a primary healthcare clinic which is ongoing, and a military base which is complete.

## Al Anbar

Construction of several radio station towers that will provide AM coverage.

Three schools are undergoing reconstruction in Abu Ghuraib. These projects will affect approximately 600 school children. The projects are scheduled to complete mid-September.

A primary health care clinic.

## Baghdad

Electrical distribution project for sectors 1 through 8 of Sadr City, Al Resafa District. When complete, it will service an estimated 128,000 people. The work includes installing a new 33 kilovolt feeder line from Jameela to Tharwa C (new Baghdad substation), giving Sadr City a reliable source of electricity; power lines, 3,040 power poles, 80 transformers, 2,400 street lights, and connecting power to individual homes, complete with meters. Many Iraqis will be part of the work crew in each sector as the work progresses.

The second part of the Sadr City electrical network project. The total project rehabilitates the electrical network in 76 sectors of Sadr City; about 60 percent of the municipality, impacting 1.2 million residents. Sadr City's current network has a lack of capacity, poor condition of distribution feeders, and outdated and undersized conductors, causing many power outages. This part of the overall contract is \$92.4M, 68 sectors, installing 27,132 power poles, power lines, 714 transformers, and 21,420 street lights. The Iraqi Ministry of Electricity will connect 71,400 homes in those sectors, as well as buy and install electricity meters.

Sadr City's Al Sadr fire station project. The project is scheduled for completion in March 2006. This three story structure is 925 square meters and features five bays; three for ladder trucks and two for SUVs. It includes a dormitory area for 20 firefighters, dining room for 30, commercial grade kitchenette to feed 40 people, a training room for 20, a locker room, a control room and a chief's office. An average of 10 Iraqis will work at the site daily.

Four schools in Baghdad. The schools will provide a more instructive environment for approximately 600 students in grades K through 8. Work is scheduled to be completed mid-September.

Central criminal court renovation project which will improve office space and prisoner and traffic movement measures.

A police station project also started in the governorate.

## Karbala

Nine school renovation projects. Three Iraqi companies have started renovation work that will consider structural repairs, electrical work, roof, ceiling, flooring, painting, and plumbing upgrades. Work is scheduled to be completed mid-September.

## Wassit

Water network project is to install 7,000 linear meters of pipe to connect the new water treatment plant to a village water network.

## Najaf

Electricity project, consisting of three substations in the Al Shorta, Al Jamia and Aden sections of Najaf City. Each substation will service 21,000 residences. The renovation project includes two new 31.5 MW transformers, which steps down high voltage, enabling distribution to happen much closer to the home. The contractor is performing the upgrade to Ministry of Electricity standards.

Phase III project of the Najaf Teaching Hospital. This Phase III contract is awarded to a local Iraqi design-build contractor in Najaf, and includes civil, mechanical, electrical and plumbing rehabilitation throughout the facility. Extra options picked up on the contract are physicians' residence building, sewer treatment plant, a morgue, storage and garages, and remodeling of the main entrance to the hospital.

Renovations started in ten schools in Najaf. Several Iraqi companies are involved in the renovation work on these schools.

## Qadisiyah

Renovations started in eight schools in Diwaniya. Several Iraqi companies are involved in the renovation work on these schools. Four of these schools are having additional classrooms constructed. Some of the schools are overcrowded, with classes held in two shifts, morning and evening. Two of them are undergoing repair work to replace electrical wiring and fixtures, plumbing, wall plaster, floor tile, doors, replace glass in windows and paint. Estimated completion date for this work is mid-September.

Additionally, six schools are undergoing repairs to include foundation, walls, plumbing, roof, doors, windows and utilities. Two of the schools are receiving two new 5 x 7 meter classrooms and one new 5 x 7 meter toilet to the existing facility. Estimated completion date for all of these schools is also mid-September.

## Dhi Qar

Three school renovation projects.

## Muthanna

Al Baida water supply project. This project will provide a new water line from the water tower in Al Warka to the community of Al Baida. The project is scheduled to be completed in late January 2006.

## Basrah

Construction started on the Al Faw Water Main project, in the Basrah District. The project entails installing approximately 2 kilometers of pipeline from the termination of an existing pipeline, and extending it to a planned industrial / commercial area. This pipeline extension will provide the needed water infrastructure for this development. The Iraqi contractor, employing approximately 10 Iraqi workers daily, has com-

pleted approximately 80 percent of the trenching work, and is on schedule.

The Al Ashaar Water network started this week in the Basrah Province. This project involved the placement of an additional 10,500 liner meters of piping to the existing Al Asheer water network for connections to approximately 650 individual homes. More than 5000 Iraqis citizens will benefit from the 250,000 gallons of potable water provided per day. The Iraqi contractor will employ 20 Iraqi workers daily. The estimated completion date is mid-Dec. 2005.

The Abo Al Kaseb Water mains project started this week in the Basrah Province. This project involved the placement of an additional 2,000 linear meters of piping to Abo Al Kaseb (from Mahela area to Hamdan area) water network for connections to approximately 400 individual homes. More than 3000 Iraqi citizens will benefit from the 150,000 gallons of potable water provided per day. The Iraqi contractor will employ 20 Iraqi workers daily. The estimated completion date is late Jan 2006.

A project started construction on the leak repair and pipe replacement to repair the existing Basrah water pipeline system.

An Iraqi company started construction on security upgrades for the Port of Umm Qasr.

Ten school projects. The construction work covers concrete and structural repairs, electrical work, roof, ceiling, flooring, painting, and plumbing upgrades to the existing facility. Seven of the ten schools will also receive additional classrooms as many of these schools are overcrowded. Three Iraqi companies are involved in the work.

**The following projects were completed in August.**

**Dahuk**

Two school renovation projects.

**Ninewa**

A potable water project in Mosul. This water system provides approximately 8,000 gallons of potable water daily to 50 homes and businesses and four fire hydrants. The contractor employed an average of 65 Iraqi workers daily.

Another potable water system in Mosul. This project replaced a 60-year-old waterline with a new galvanized pipe; the type required by the Mosul Water Authority. The new waterline has a life expectancy of 60-80 years and provides potable water to approximately 700 Iraqi homes.

**Sulaymaniyah**

Repairs of the Sulaymaniyah Water Network. The project repaired and improved the potable water distribution system in Sulaymaniyah.

**Tameem**

Daquq electric distribution and street lighting project in Kirkuk. This project is to supply, install, and test a new overhead power distribution lines and street lighting in Daquq.

Restoration of a fire station project in Kirkuk. The work now provides a secure facility and stable emergency services within Kirkuk. This fire station is the first of three and will serve approximately 295,000 people.

A project to inspect, service and maintain a turbine generator in Kirkuk.

School renovation in Kirkuk.

**Salah Al Din**

Five fire station renovation projects throughout the governorate.

Nine kilometers of village roads.

**Diyala**

Electrical sector network project will provide all engineering services, labor, supervision, equipment, and tools to place in service a residential power distribution system for several neighborhoods.

Two border fort projects will increase the build-up of security forts along the Iraqi-Iranian border.

**Al Anbar**

Installation of the Al Jazeera water treatment plant in Ramadi. This project was to design and construct a hypochlorite water treatment plant with service lines capable of producing at least three million gallons of approved potable drinking water per day.

Installation of the Al Zwegyr pumping unit in Al Zwegyr. This project was to design and install a 1,800 m<sup>3</sup> per day pumping unit, filtering, aluminum, and chlorine dosing system to service 30,000 people.

**Baghdad**

Trunk sewer line and its associated manholes and pumping stations. This project will restore the principal sewage collection elements in the Adhamiya, Sadr City and Nissan Districts and provide for the intended sewer flows to a wastewater treatment plant. This work is also intended to provide significant employment opportunities to residents in the neighborhoods affected by the project, approximately 2 million people.

Al Amari Water Distribution project has the potential to produce approximately 250 cubic meters of potable water daily, and to service approximately 2,000 families in the Al Amari and 9-Nissan area of Baghdad. The water for the plant comes from the Tigris River—halfway across the city—and there are so many illegal taps along the line, the contractor hasn't been able to get enough raw water to the plant to test it. Additionally, power outages have damaged the power supply to one of the pump stations. The contractor employs an average of 62 Iraqi workers daily.

A 132 kilovolt substation in Taji will improve the reliability of Northern Iraq transmission systems by rebuilding and expanding certain substations.

Three 33 kilovolt feeders signifying an important milestone in the reconstruction of Iraq's electrical infrastructure.

The new Baghdad police station and the Karkh patrol station renovation projects are also under construction.

A rifle range for the Sadr City police added a 25m rifle firing range and a 10m pistol firing range using a concrete pipe and concrete/sand bag backstop.

A 200 meter firing range complex at the Iraqi Military Base.

**Karbala**

A police checkpoint project that will allow the assigned police officers to perform their duties in a more professional manner and provides them a more comfortable work environment.

**Najaf**

Construction is complete on three water network projects valued in Najaf City, Najaf Province. Approximately 12,000 more Najaf residents have increased access to potable water following the completion of the Mualimeen, Al Jamhuriya, and Kenda Water Network projects. Each water network project supplies water to approximately 600 homes. An Iraqi company installed and connected over 36,000 linear meters of distribution lines to three of the cities water networks.

The installation of a new water treatment

unit is complete which will provide clean potable water for the residents of Manathara Village.

**Babil**

An Iraqi company completed construction on two projects for the installation of three Jurf Suqr checkpoints.

**Maysan**

Renovation of two 'mud schools' in the Missan Province is completed. The renovation to this school will benefit over 200 students.

Alozair town water network in the Missan Governorate is complete. This project involved the placement of 25,000 liner meters of piping, as well as 2,000 linear meters of piping for connections to individual homes. More than 5,000 Iraqi citizens will benefit from the over 13,200 gallons of potable water provided per hour. The Iraqi contractor averaged employing 20 Iraqi workers daily for eight months.

A border post also completed.

**Qadisiyah**

Two traffic police station renovation projects added an office building and perimeter wall to each of the stations.

**Dhi-Qar**

Dhi Qar village road project, Suq Al Shoyokh District. This project provides 7.1 kilometers of reliable, all-weather access road for thousands of residents in the Kermashi area.

A police station project provided new perimeter walls, replaced roof systems, installed a 2,000 liter water tank/piping for potable water storage, electrical and masonry work to the existing police station.

A police checkpoint. The project provided a new two story facility with guard towers.

**Muthanna**

Construction on a police station. The project provided new perimeter walls, replaced roof systems, installation of a 2,000 liter water tank/piping for potable water storage, electrical and masonry work to the existing police station.

**Basrah**

Gulf Region Division representatives turned over a turbine generator to an Iraq oil company at an Iraqi cluster pump station. This 18 MW generator is fully commissioned and operational. This will power the site's injector pumps that supply water to well heads in the area and booster pumps that supply water to the rest of the water injection sites in the South Rumaylah oil fields. The final commissioning of the injector pumps and motors is expected to be complete in the next few weeks.

Phase one of the Basrah Courthouse project. This five-phase project in the Abu Al-Khaseeb District, Basrah Governorate, is being completed concurrently with . Phase Two—93 percent complete, and Phase Three—28 percent completed. The project has an expected completion date of October 2005. This main courthouse in Basrah, expected to hold a number of high profile trials, continues to operate during construction. Three Iraqi subcontractors are working on the project, averaging 70 Iraqi employees daily.

Seven border post projects were also completed.

**Compiled by GRD PA.**

# PCO rolls out hospital beds and med

**S**peaking strictly by the numbers, the staff assigned to the Program and Contracting Office (PCO) Non-Construction-Health team could be considered small, yet mighty.

The immeasurable impact this team wields on the health and wellbeing of Iraqi citizens extends country wide, is massive in value, and life impacting in the most positive way – by providing medical equipment that, among other countless benefits, will contribute to lowering the Iraqi infant mortality rate.

As a result of determinations made by the Ministry of Health, the Health sector operates with a \$242 Million budget dedicated to the renovation of 20 hospitals and the construction of 142 brand new Primary Health Centers (PHC). Drawing from a base population of 35,000, each PHC focuses primarily on Maternity and Pediatrics, OBGYN, dental, and general health care.

Following Iraqi Ministry of Health determinations, PCO program managers oversee distribution, delivery, installation, and equipment training for 75 different types of equipment needed to modernize hospitals throughout 19 Iraqi governates. They ensure that the equipment ordered is high-quality and meets U.S. standards and specifications, as well as coordinate for appropriate training once the equipment is in place.

The PCO Non-Construction portion of the budget features \$90 Million in open distribution for hospitals, maternity and pediatric hospitals, as well as Tuberculosis and blood centers, the bulk of which is already ordered and now in a distribution process.

According to USAF Maj. Bill Mann, PCO Government Lead, Non-Construction, the Department of State's Iraq Reconstruction Management Office (IRMO) liaises with the Iraqi Ministry of Health (MoH) to determine how Iraq Reconstruction Funds (IRF) should be prioritized and spent. Thus, the MoH determined and prioritized the 75 different types of medical equipment that constituted the most pressing needs for the hospital system.

"Most of the people in PCO Non-Construction are project managers with logistical backgrounds," says Mann. "The project manager follows a program from the inception of the need established by the ministries, through IRMO, to the ministries, to establish what is required. Then we start the process of obtaining whatever is needed."

"When we are able to give the Iraqis something to make their lives a little easier, that's a good day," said Mann.

Kathy Harrington, PCO Non-Construction-Health, Project Manager, is visibly proud to be affiliated with her organization and the mission they perform.

"The best part of my job is seeing that we are making a difference here. We are focused to see what we can do for the Iraqi people today," she says.

Harrington shared work-related anecdotes typifying the importance of her work by mentioning the shipment of "796 hospital beds to the north" and the separate, timely delivery of "hospital beds to Medical City, Baghdad."

"They wheeled a bed into the room and, before they [the hospital staff] could put a sheet on it, they had a patient hooked

**Newly-arrived beds will not remain empty for long at Medical City, Baghdad. (PCO photo)**



# Medical equipment despite risks



Palletized hospital beds await their important mission at Medical City, Baghdad. (PCO Photo)

up to an IV and in the bed,” said Harrington.

The Program Manager regrets that she has only second-hand knowledge of this event. Although she wanted to be there to witness the beds being delivered, security risks prevented her from doing so.

“We were 100 yards away – we wanted to be present when our first orders were delivered, but couldn’t because we were confined to our vehicles [as shots were fired in the area],” she said.

“We directly touch the entire Iraqi population,” she continued, “yet security is driving our successes and failures. Insurgency makes things more difficult and greatly hinders what we can do because we can’t deliver if the security isn’t there.”

The PCO mission directly supports the IRMO Health mission to reduce the Infant Mortality Rate to below 50 percent.

“When I arrived here, it was at 67 percent,” says Harrington.

Yet, despite ever-present security challenges, steady progress is being made.

“Sixty-five percent of our budget already has been procured,” she said.

“Delivery mode began approximately one month ago and is in the infancy stage of 10 percent.”

**Denise Calabria, GRD**

**“The best part of my job is seeing that we are making a difference here. We are focused to see what we can do for the Iraqi people today”**

**—Harrington**

# Mosul Dam repairs: safety, electricity, and irrigation for the Tigris Basins

**S**tabilization of the Mosul Dam continues with an additional \$20 million in Iraq Reconstruction and Response Funds allocated this week for that purpose. The Iraq Ministry of Water Resources and the Ministry of Electricity have made the dam a top priority for the region.

The largest dam in Iraq, Mosul earthen dam holds back upwards of 12 billion cubic meters of water for the arid western Ninewah Province while creating hydroelectric power for the 1.7 million residents of Mosul. This reconstruction project includes an upgrade of specialized maintenance equipment, seismic monitors, materials and spare parts. A training element is included with the aid package, which will help make the project self-sustaining in the future.

Completed in 1983, the dam has required maintenance to plug or “grout” areas of leakage on a regular basis. Without this needed work, the dam could develop problems over time with the possibility of a catastrophic failure. An event of this magnitude would be profound, devastating the rich agricultural valley of the Tigris and endangering the population

of Mosul.

New automatic grout-injection equipment included in the project will help arrest seepage under the dam. Seismic equipment will provide information to monitor the dam’s stability. Both types of work are critical in continuing flood protection, irrigating farmland, and maintaining sufficient water to generate 320 MW of electricity.

An Iraqi contractor has been selected for this important work as part of an effort to encourage local economic development and jobs. The U.S. Army Corps of Engineers will provide engineering and quality-control oversight from Gulf Region North near the city of Mosul. The project is scheduled for completion in early 2006.

At the time of transfer of sovereignty in June 2004 to the Iraqi Interim Government, there were just over 200 reconstruction projects started in Iraq. Today 2,827 projects have started - valued at about \$6.6B. Currently 1,099 projects are ongoing at a program value of about \$4.6B, and 1,728 projects are completed - valued at about \$2B.

**Lu Anne Fantasia, GRD**

**Watermark: The Mosul Dam holds back upwards of 12 billion cubic meters of water for the arid western Ninewah Province, while creating hydroelectric power for the 1.7 million residents of Mosul.**

**Below: Water rushing out one of the chute spillways at the Mosul Dam. The concrete-lined chute exits to a ski jump section for energy dissipation. (PCO photos)**



## *Economic hopes soar with new airfield tower*

**T**he U.S. Army Corp of Engineers (USACE) is working hard to assist Ninawa Province in becoming a major commercial center in northern Iraq.

The USACE is providing quality assurance oversight as a Turkish contractor, EMTA Construction Co., builds a new air traffic control tower (ATCT) at Mosul Airport, on FOB Diamondback, Iraq.

Iraq Air has committed to providing air service to this airport when the tower is completed in June 2006. This commitment will bring international air travel to the Ninawa Province, which will attract international commerce. In turn, the increase in commerce will strengthen and should help stabilize the economy.

Frank Scopa, the Corps' Mosul Office Area Engineer, spoke of the positive social changes increased commerce will bring.

"With an improvement in commerce, there will be significant alternatives to joining the insurgency, which should lead to a reduction in violence," said Scopa. "There will be choices not available today due to the extreme unemployment in Ninawa."

According to Scopa, this project should lead the effort for the economic recovery of Ninawa Province. There is very little capital investment in the area, but projects like the building of this tower should help the local economy to expand.

However, most of the money paid to these construction workers is not being spent in Mosul. The company's Turkish workmen come to Iraq because there is work here and they can earn premium wages, which they take back to Turkey to support their families.

Scopa explains, "Right now, the Ninewa economy is flat lined or, more realistically, negative. If Ninewa Governorate were a more permissive area in which to work, local companies would be supplying building workers and building materials to the ATCT in lieu of foreign countries."

During construction, this project employs 150 workers daily for approximately seven months. Once completed, the ATCT will employ approximately 50 workers in permanent airfield maintenance, operations, and air traffic control jobs.

Tower construction is not the only improvement planned for the Mosul airfield. Other improvements consist of new navigation aids for the Instrument Landing System, which includes the Distance Measuring Equipment, Glide Slope Approach, and the Control and Monitor System. The new system will also include a Precision Approach Path Indicator and new communications equipment. Additionally, there will be new lighting for the existing runways and taxiways, as well as new signage.

**Polli Keller, GRN**



**When the burlap ran out, Turkish rugs were applied and wet down as an expedient solution to keep the concrete cool while curing during tower's foundation construction.**  
(Photo by Jim Gordon, GRD)

## Ramadi to get \$8.4 million waste water treatment plant

*(Sheik killed working to get project started)*

Construction will soon start on Ramadi's new \$8.4 million waste water treatment plant. Two Ramadi leaders saw the benefits to their community, realized the current contractor needed assistance, and agreed to work together to make it happen.

They stepped forward despite ongoing threats. One of those two leaders, Sheik Mohammed Abu Resha, owner of Al Umraniyah Group, had kept a low profile after his brother was killed in December by insurgents. But in late April, he along with another city leader contacted the U.S. Army Corps of Engineers, Gulf Region Central (GRC) about the project. A meeting was held in May to discuss specifics and the two offered to donate 100 acres of land upon which the plant could be built, along with other concessions, to remain within budget.

Following the meeting, GRC contract specialist Ron Wassom says Sheik Mohammed spoke to him after the negotiations. Was-

som recalls that Sheik Mohammed said, "This is a dangerous time for my people in Ramadi, but we must face the danger head on. They look to me for leadership and I cannot disappoint them; they have had so many disappointments for so long. But now is a time of hope in Iraq – we have come through the worst. What we all thought was impossible has happened – Saddam Hussein is gone and now we might, for the first time in my life, find a chance for peace and progress."

Wassom says the Sheik told him how important the project was to his people. "They must have work and they must make money, or else the insurgents will control them. We have talked about this among ourselves, and we know that the future cannot be with the insurgents. We have to work with the Americans and confront those who would hurt us and send them back to Syria or Iran. You are helping us and we must have that help. But, in the end, it is up to us Iraqis - this we know."

Later that evening, Sheik Mohammed was killed by gunmen in Baghdad. It was a tragedy for all involved.

The other business associate of Sheik Mohammed re-evaluated the situation and, after a few months, said he would consider taking on the project alone. He since received a letter from the Al Anbar Director General for Sewers approving his proposal and was issued the Notice to Proceed in late August. He hopes to begin and complete the lagoon construction before the rainy season and estimates it will take 200 days to finish the job.

The waste water treatment plant will be capable of treating 30,000 cubic meters per day of effluent - large enough to serve both Ramadi (in excess of 200,000 people) and Tameem (with a 100,000 population) on the other side of the river.

Ramadi residents will be kept informed about the project's long-term, positive environmental impact on the Euphrates River, as well as what this construction project means for local jobs and the economy.

**Norris Jones, GRC**

**Among those attending the weekly Provincial Reconstruction and Development Committee (PRDC) meeting in Ramadi Aug. 28, were Iraqi Al Anbar Governor Ma'Moun Sami Rasheed (left), one of his Director Generals and an interpreter, Ron Wassom, contract specialist, GRC II MEF Area Office, Fallujah; Lt. Cmdr. James Robbins, II MEF's Regional Reconstruction Operations Center team, and Lt. Col. William Brown, Commander, Governance Support Team, Det 5-1, 5th Civil Affairs Group, II MEF. Wassom attended the meeting to discuss the start of an \$8.4 million waste water treatment plant for Ramadi, as well as to bring bids for water treatment plants for five towns with populations of 2,500 to 6,000. The plants, each capable of producing one million gallons of water a day, are estimated to cost \$1 million apiece. (Photo by Norris Jones)**



# Corps of Engineers work to pave “Silk Road”

In the eighth century, Baghdad was the western end of the “Silk Road”, a trade route reaching to China. Ironically, conditions on some village roads in Iraq have yet to progress much beyond those of that centuries-old road.

While, overall, Iraq has an extensive road network extending more than 25,000 miles, the transportation network is still in dire straits. Little maintenance was done on the road infrastructure built in the 1970s and 1980s. Neglect and a lack of new construction left many roads in deplorable condition with many rural roads little more than one- or two-lane dirt paths rendered impassable when the rains come.

Today in southern Iraq, nearly \$42 million is being invested to upgrade this infrastructure. The U.S. Army Corps of Engineers, Gulf Region South (GRS); the Programs and Contracting Office; the Iraqi Ministry of Housing and Construction, and local deputy governors coordinate continuing efforts to target and remedy the lack of improved roads between many villages and to connect them to improved roads. These roads, often referred to as “farm-to-market roads” are vital to rural areas’ economy because they provide a reliable route for residents to transport goods, not only from farm to market, but between towns.

Now as reconstruction is gaining momentum, the need is essential for a transportation network that provides efficient movement of essential products such as construction materials and equipment, fuel, and other supplies.

“Some of the areas to receive roads improvements currently have only trails that support foot traffic and donkey carts, and [sustain] hundreds of villagers along their routes. The intent of these projects is to construct paved roads for everyday use by the local population,” said Art Bennett, project manager, GRS Transportation and Facilities sector.

“We are working closely with the director general (DG) in each of the gover-



norates to facilitate construction and to resolve disputes. The DGs best know the local situation and their knowledge is critical in making the right choices,” said Bennett, who is temporarily deployed to Iraq from the Jacksonville District in Florida.

As with nearly all reconstruction efforts, this program uses local contractors, thereby directly contributing to rebuilding Iraq’s infrastructure by providing work for local businesses and putting money directly into the local economy.

Bennett said the majority of the roads are being built over existing dirt roads. While actual work may vary from site to site, in general, it includes construction of two-lane roads and soil shoulders on each side. While GRS provides quality assurance oversight, the roads must meet Iraqi Ministry of Housing and Construction specifications.

Engineers from GRS said the paving of the rural roads should boost the region’s economy by making it easier to transport goods. Rural areas will then have easier access to nearby towns and villages, and will no longer have to rely on the “Silk Road.”

**Pat Jones, GRS**

**Iraqi contractors work to pave a “farm-to-market” road near Diwanyah Province in southern Iraq.**

*(Photo by Pat Jones)*

## Medical improvements in Ani Sifni

**A** U.S. Army Corps of Engineers, Gulf Region North (GRN) reconstruction project costing \$289,894 is just the prescription needed to improve medical care in Ani Sifni, Iraq. Under GRN oversight, several new buildings (a pharmacy, doctors' residence, and lobby) and a large wing (ward rooms and specialized doctors' offices) will increase the size of the Al Shekhan General Hospital by 984 square meters (10591 square feet). Equipment and electrical circuitry will also experience upgrades.

According to a hospital administrator, the 50-bed facility sees on average 5,000 patients each month, most on an outpatient basis. These improvements will greatly increase the hospital's capability, and hospital administrators hope to attract additional physicians as a result of the enhancements.

The hospital opened as a clinic in 1978, and was upgraded to hospital status in the mid-1990s. It currently features four wards: surgical, pediatric, general medicine, and obstetrics. The main structure addition will allow all of these wards to be expanded and add new wards as well. One of the new, free-standing buildings will become a pharmacy; the other will be a new residence for on-duty physicians. The current physicians' residence will continue to house male physicians while the new residence building will house female physicians.

Hospital generators currently are tied into the city's power grid system. According to Michael Carney, GRN Resident Office project engineer, the hospital's largest generator should have the capacity to power the entire complex when the upgrades are completed. The generator is unable to do so currently, and the hospital often must depend upon its two smaller back-up generators.

Recently, the hospital received a new, automatic X-ray film processing machine that will process a single film in about five minutes. This was a big step forward as developing previously took more than 15 minutes per single film.

The X-ray department, however, still faces some limitations. The present camera is a portable model and one of the upgrades planned is a new X-ray camera and table setup. Staff Sgt. Krista Englert, Mosul Civil Military Operations Center, accompanied Carney on the visit specifically to remedy the equipment deficiencies and to determine if the hospital's medical library can be updated by donations from several private organizations.

**Claude D. McKinney**



**New 984 sq meter hospital wing under construction.** (Photo by Claude McKinney)

## Mosul substation expansion will benefit more than six million people

**A** substation expansion project in Mosul will increase the existing capacity of the 400 kV Mosul substation to allow for an additional 400 kV transmission line between Mosul and Baghdad. The Mosul substation expansion is a critical, electric grid system element to increase the amount of available power to the entire country. The expansion provides the capacity to distribute power more reliably, thereby affecting six million people.

The project serves a dual purpose. It will efficiently distribute an estimated 2000 MW of power from the northern to the central regions and it will allow connection and transmission of power from Turkey. This project has the potential for increased transmission capacity of 2000 MW and the addition of an average of two hours of power nationwide.

Work is estimated to complete in about one year at an estimated costs of \$29 million, and will be performed by Iraqi subcontractors. The expanded substation will be operated and maintained by the Iraqi Ministry of Electricity. Included in the work will be operations and maintenance training and one year of spare parts.

The project is part of an ongoing effort by the Minister of Electricity (ME), Dr. Mohsen Shlash, to continue to improve Iraqi's electrical power infrastructure.

**Maj. Jim Hawkins, GRD**



**This 400kV substation in Diyala is similar to the substation that will be built in Mosul.**

## 33 kilovolt Substation Feeders – 69,000 Iraqi citizens benefit

**O**ver 69,000 Iraqi citizens in Baghdad will benefit from five 33KV substation feeder projects worth \$3.2M. The feeder project will enhance Baghdad's existing electrical grid system and assist in the distribution of power to homes and businesses.

Electrical feeder cables run underground and connect 33 KV substations to 400 volt transformers across Baghdad. The 400V transfers feed electricity to homes in what has become known as the "last mile" where light switches are located.

This project is part of the overall electrical system upgrade to bring power from the larger 132KV substations to smaller 33/11 KV substations for low voltage feeder lines to distribute power to the neighborhoods.

The project is part of an ongoing effort by the Minister of Electricity (ME), Dr. Mohsen Shlash, to increase electricity to Baghdad homes. The ME rated the feeder projects as his top priority. His office will oversee the project and complete the work with Iraqi companies.

Over three hundred distribution projects similar to this effort are ongoing to place feeder lines across Baghdad.

Officials estimate the project will be completed in December 2005.

**Lt. Col. Stan Heath**



**Feeder lines like this one help distribute electricity to homes and businesses in Baghdad.** (PCO photo)

# West passes cash to Iraqi contractors

**H**ow is it possible to give someone a million dollars? The largest U.S. bill in circulation is the hundred dollar bill, and it takes 10,000 of those to make one million dollars. That's ten thousand bills!

How about \$22 million? That is the amount of cash that Roberta "Bobbie" West, accountant at the U.S. Army Corps of Engineers, Gulf Region Southern (GRS), and three Soldiers from the Mass. Army National Guard paid in cash to hundreds of Iraqi contractors.

West is responsible for paying contractors who completed the construction or renovation of a school, hospital, road, police station, fire station, water plant, electrical system or any one of more than a thousand contracts awarded in the nine southern provinces of Iraq. She prepared paperwork for transfer of cash after engineers notified her that the work was completed at the construction site.

Sergeant Craig Chisholm, Spec. Luis Alvarez and Spec. Theodore Giannino, 747<sup>th</sup> Finance Detachment, 18<sup>th</sup> SSG Airborne, prepared the transfer of cold, hard cash. Chisholm and Giannino took turns acting as the paying agent and certifying officer. Alvarez reviewed all documentation submitted for payment to ensure accountability.

"This payment system is a bit out of the ordinary, but it gets the money into the hands of small contractors who otherwise couldn't compete," said Nick Ash, GRS Resource Manager. "These cash payments helped prevent work stoppages and developed lasting, positive working relationships with the Iraqi people."

In order to boost the fledgling Iraq economy and provide entrepreneur contractors with the opportunities to compete, the Corps arranged to pay contractors in cash after they completed a certain portion of the contract. In this way, more small contractors are able to bid and complete construction contracts to enhance the quality of life for the Iraqi people. Small contractors hire local Iraqi workers, so the money goes back into the local economy through families that reside in the vicinity where the work is being done.

"Bobbie is a hard worker, talented, and made the process of cash payments flow smoothly," said Ash. "It will be tough to replace her when she goes home."

In a few months, when West returns to her home in Tenn., friends and family may not realize the role she played as an accountant to help the Iraqi reconstruction efforts by paying out \$22 million in cash.

**Suzanne M. Fournier, GRS**

**Roberta "Bobbie" West (standing) points out terms of the contract to an Iraqi contractor before he signs acceptance of the cash sitting on the table. Specialist Luis Alvarez, Spec. Theodore Giannino, and Sgt. Craig Chisholm (left to right) of the Mass. Army National Guard are waiting to give the contractor his cash payment. (PCO Photo)**



**Construction of the new Zakho Military Academy barracks building.** (USACE file photos)



## Zakho Military Academy

**A**ccording to the U.S. Army Corps of Engineers (USACE), Gulf Region North, the first phase of the Zakho Military Academy renovation project is near completion.

Phase I renovations include 14 new major constructions and renovations. This \$9.5 million project located in the Dahuk Governorate, Iraq, consists of two phases. Phase I includes the construction of a new cadet living barracks, headquarters building, security wall, portable water treatment plant, packaged waste treatment plant, 400-meter track and soccer field, obstacle course, parade field with stadium lighting, sanitary sewer system, and new water supply and distribution system.

Phase II, the last phase of the project, is scheduled for completion by mid November. This phase includes construction of a new gymnasium, perimeter lighting around the academy, and the design and implementation of a new power generation and distribution system. Phase II will also consist of a new military urban warfare training facility, grenade training field, and an im-

proved firing range, as well as the construction of a new cadet weapons training building.

When the project is complete, local workers will be employed at the facility in order to maintain the new state-of-the-art water and sewer treatment plant and other academy infrastructure. The academy will determine its staffing needs to support these new facilities after the commissioning and turnover to the Iraqi government. Phase I provided jobs for approximately 200 local nationals while Phase II will employ 150.

A contractor from Turkey worked diligently to finish Phase I of this project on schedule. Phase II will be completed by five Iraqi contractors from Dahuk and Zakho. Phase II construction began late February 2005 and is scheduled to be completed by late November 2005.

Two of the largest challenges in building this facility were the hindered movement of needed building materials and dealing with inclement weather. Time was lost moving materials and equipment through border checkpoints from Turkey to Iraq. Over 80 percent of the building materials for this project were trucked in from Turkey.

When asked what was most interesting about this project, Joshua Adekanbi, project engineer said, "I enjoyed working with different people of different nationalities and cultures and everyone working together as a team with common objectives. It was a wonderful experience."

Economically, completion of all new construction is expected to create new employment opportunities in the local area. New personnel will be needed to operate and maintain new packaged systems and facilities that are currently under construction.

In addition to the new construction and renovation projects for the academy, the USACE, Dahuk Resident Office, also manages construction and renovation of several primary and secondary schools, clinics, and courthouses in the Dahuk and Zakho areas. Currently, there are 15 new constructions and five renovation projects ongoing at the Zakho Military Academy.

**Polli Keller, GRN**



**The academy's packaged wastewater treatment plant under construction.** (USACE file photo)





# Hail and Farewell

**Hailing:**

SGT William Bacon, GRD  
William Barna, GRC  
Christopher Beaman, GRC  
CTR1 Rannie Bond, GRC  
Jennifer Bordelon, GRC  
William Boswell, GRC  
David Breichbach, GRS  
LTC Charles Busch, GRD  
Daniel Cahill, GRC  
Thomas Chamberlain, GRC  
SPC Clifford Cline, GRD  
Steve Cole, GRS  
Michael Cotton, GRD  
Allen Craigmyle  
Donna Decker, GRD  
LCDR Scott Dyer, GRC

Tom Edison, GRS  
Billie (BJ) Fagan, GRD  
SGT Ronald Faris, GRD  
Suzanna Fournier, GRS  
LCDR Robert Gersh, GRC  
Stephen Gibbs, GRC  
CSM Gregory Glen, GRD  
Jose Gonzales, GRC  
SSG David Grass, GRD  
Robert Harris, GRC  
MAJ John Hudson, GRC  
COL Bjarne Iverson, GRD  
Dorothy Ivey, GRC  
SPC James Jones, GRD  
MAJ Nicholas Katers, GRC  
SGM Michael Leogrande, GRD

Rick Long, GRS  
Chester Lowry, GRC  
SSG Joe Mason, GRC  
LTC Col. Greg Melton, GRD  
SPC Timothy Miller, GRD  
Patty Mixon, GRC  
CPT Chad Neidig, GRD  
LTC Alden Neva, GRD  
LCDR Michael Obermiller, GRC  
Richard Osterman, GRC  
CPT Jack Parker, GRD  
Robin Parks, GRS  
David Pennington, GRC  
Kevin Powell, GRC  
MSG Richard Pylypuw, GRC  
Rodney Raley, GRS  
Sandy Rayl, GRS

Ed Schilling, GRC  
Shirley Slone-Dehon  
SPC Andrew Smith, GRD  
BMCS Dexter Smith, GRC  
SPC Aaron Stout, GRD  
Wanda Sutton, GRD  
Michael Taylor, GRD  
Stephen Thomas, GRC  
Robyn Thomas, GRC  
SPC Dustin (Rex) Thompson, GRD  
Doug VanBeauge, GRS  
Todd Wesson, GRC  
Rod Whittinger, GRC  
Stephen Zerbin, GRS

**Farewelling:**



LTC Stan Heath  
GRD



Fernando Aguilar  
GRS



Torrey Leinen  
GRS



Cy Simons  
GRS



MAJ Dan Hibner  
GRC



SSG C. Kozikowski  
GRC



CPT Shaun Frost  
GRC



Bryan Raper  
GRC



Gib Owen  
GRC



Carl Baughman  
GRC



Roberto Rodriguez  
GRC



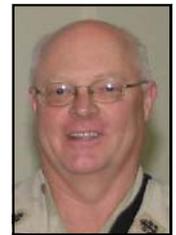
LT Martin Mavis  
GRC



MSG Martin Foss  
GRC



Danny Thurmond  
GRC



UTC Joseph Segar  
GRC



Carl Gaston  
GRC



Doug Foster  
GRC



Jay Klassen  
GRC



LTC Craig Wells  
GRC



Deborah Spidle-Laub  
GRC



Don Simmons  
GRC



MSG Wreco Reese,  
GRC



Mike Likavec  
GRS



Henry Shelton  
GRC



CDR Peter Moran  
GRC



Lauren Newsome  
GRC



LTC Tim Griffin  
GRC



Dr. A.H.M. Shah  
Alam, GRS



Anton Dattilo  
GRS



LCDR Karl Wenner,  
GRC



Debbie Lucas  
GRS



Chuck Anthony  
GRS



MAJ Brian Phillips  
GRS



Russell Homer  
GRS



SFC Terry Baker  
GRS



Art Bennett  
GRS



Becky Eberhardt  
GRS



SGM Wilbur Knight  
GRS



William Hettchen  
GRS



Betsy Weiner  
GRS



Chris Stack  
GRS



James Dalton  
GRD



COL Francis Kosich  
GRD



LTC John McElree  
GRD



LTC John Geider  
GRD



Joe Mincz  
GRD



LTC Gary Pease  
GRD