



# ESSAYONS

*Forward*

U.S. Army Corps of Engineers

Gulf Region Division (Provisional), Iraq - Volume 3, Issue 2

November 2006

**From Obligation to Completion—  
Building the foundation for Iraq's future**



November 2006  
Volume 3, Issue 2

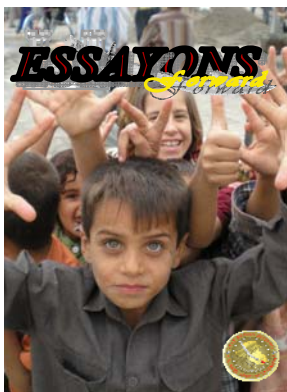
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*Iraq Image....*

Lt. Col. Robert D. Johnson (second from left), area engineer with the Adder Area Office, assisted by Construction Representative Rick Mers (left), brief Brig. Gen. Michael Walsh, Gulf Region Division commander, on construction progress at the Nasiriyah (Maximum Security) Correctional Facility. Sgt. Maj. Benny L. Hubbard, South District, looks on in. (Photo by Thomas O'Hara)



**COVER: Children gather at the construction of the Zakros Primary School in Kirkuk, Iraq.**  
(Photo by Mike Bransford, USACE Area engineer, Kirkuk))

**ESSAYONS FORWARD**  
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**KEEP IT LOCKED ON...**

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Baghdad	107.7 FM	Taji	107.3 FM
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Fallujah	105.1 FM	Taqqadum	107.3 FM
Kirkuk	107.3 FM	Tikrit	100.1 FM

**Freedom Radio**

## Commander's Two Bits



The hard part is yet to come. Last month, we celebrated the full commitment of IRRF dollars toward projects to help build a foundation for the country of Iraq. I don't want to be a curmudgeon, but the celebration is over. Time for the hard work is just beginning.

The easy part was getting the projects identified, taskers out and contracts awarded. Now comes the tough part, getting those obligations to completions of actual projects that positively impact the people of Iraq.

It's nothing new, we've done it before. However, this year we are going to shoot to accomplish nearly twice as many completions as this division has ever done. Twice as many.

For those of you who have been here awhile, it would be a fair reaction to ask how we can accomplish so much in so little time with just a fraction of the people we need on the ground.

ESSAYONS is how.

Ahead of us are nearly \$4 billion worth of completions. If you look at the "measles" chart in the center of this issue, you'll see there is a lot of "red" yet to get done. That is our focus.

Furthermore, the task before us is not to simply complete the projects, but to ensure they are completed correctly and at a quality commensurate with the level of integrity within our organization. I realize we live and work in an austere environment, but therein are the challenges.

It would be a fair question to ask how we can ensure quality products, considering the limitations of the current security situation.

ESSAYONS is how.

Lastly, while accomplishing this unparalleled mission, we also will proactively work with the Iraqi people to build their own human infrastructure to pick up where we will one day leave off. We cannot build an entire country for the people of Iraq, but we can help them get it started.

The Iraqis have the will and ability, we simply need to help show our friends the way.

In providing quality construction oversight, proper operations and maintenance programs and long-term planning processes, this country is assured to reach incredible heights in the years ahead thanks.

Before you ask how...ESSAYONS is how.

**Brig. Gen. Michael Walsh**  
Gulf Region Division  
Commander



## Cmd. Sgt. Major's Message



We are fast approaching the end of the 2006 calendar year. For some, this year brought us here; for others, it took us home; and then there are those that extended

their tour of duty. Whatever the case, we should all stop, capture the moment and reflect on our personal sacrifice, the sacrifices of our families and our collective accomplishments throughout this last year.

The division has accomplished a lot this year and there is nothing that we do that we do by ourselves ... a total team effort by all! We have so many people to thank for all the effort put forth in either providing us our security, maintaining our life support needs, obligating the money, writing the contracts, overseeing the contracts, and finally the construction and program management.

Many of us have reached the point in our tour of duty to start the rotation back for rest and recuperation (R&R) leave. I know this will be an important time for all, especially those who are able to return during the holidays. I hope that everyone will reunite with loved ones, enjoy their time with family and share their experiences.

However, it is equally important that everyone get rested and recharged so upon your return you are ready to tackle the difficult year ahead. Now is the time to concentrate our efforts toward the placement of new construction. With a total of mre than 2400 projects this year; we clearly have a lot of work ahead us.

Recently, we had an Engineer Muster during our Division's Senior Leader Conference. This event reminded us all of the importance of our history within the U.S. Army Corps of Engineers' and the Engineer Regiment. As we all listened to our long and distinctive 231 year history, it became apparent that we are all very much a part of that history.

Then as I read the names of our fallen comrades of this last year, it reminded us all just how dangerous and unforgiving this country can be at times. Let us never forget those who have gone before us, those who have sacrificed so much and those who have paid the ultimate sacrifice with their lives.

I have always felt it is important to give thanks. So with that said, I say thanks be to God for his ever presence in our lives, for all the new people who have joined the GRD Team, for all the people reading this that have rotated safely to other parts of the world and for our family and friends who join us everyday in thought and prayer. We, the Gulf Region Division Team, say thank you!!!

Again, we should all feel extremely proud to be associated with and work so hard at the monumental historic reconstruction mission here in Iraq. I know we all look forward to making a positive difference every day in the reconstruction mission and the lives of the Iraqi people who are seeking security, independence from dictatorship, and freedom.

God bless.

**Cmd. Sgt. Maj. Bill McDaniel**  
Gulf Region Division  
Command Sergeant Major

# U.S. Officers Provide Lecture for Basrah Engineering Graduates

**Navy Lt. Cmdr. Scott King discusses various aspects of the construction of the new Basrah Children's Hospital.**  
(Photo by Lt. Col. Kenneth McDonald)



**T**he U.S. Army Corps of Engineers plays many roles in shaping the future of Iraq for her people. The big effort is the reconstruction of Iraq's infrastructure and the U.S. assistance projects helping to improve the quality of life for hundreds of thousands of Iraqis.

But sometimes it's the smaller, more personal interactions with the people that yield the bigger benefit.

Recently two officers assigned to the Army Corps of Engineers in the Gulf Region South District, stationed near the port city of Basrah, served as guest lecturers to six Iraqi graduate engineering students and their professor from the University of Basrah.

Army Lt. Col. Kenneth McDonald and Navy Lt. Cmdr. Scott King covered the history of the Army Corps of Engineers, and the new construction project to build the Basrah Children's Hospital.

"The intent of the lecture to the civil engineering graduate students was to provide an understanding of the U.S. Army Corps of Engineers, its history and its current role in the U.S. and Iraq," said McDonald, the GRS deputy commander in the Multinational Forces-Southeast sector.

"The students really had no idea what the Army Corps of Engineers was all about," he said, "They were very impressed with the concept of a military and civilian run organization."

"I received a number of questions concerning our labs and our inner-coastal waterways mission," he explained.

McDonald was joined by King, who is serving with the USACE as the resident engineer overseeing the massive \$32.3 million Basrah Children's Hospital construction contract.

"It helped to further build on our relationships within the Basrah community," King said, "It not only brought Iraqi and

American engineers together, but also helped by educating them on a complex project that will bring critical medical care to their children."

"It was also intended to lessen the suspension of our intentions with the Basrah Children's Hospital," McDonald said.

"At one time a good portion of the local Basrah population believed the hospital was a CIA headquarters," he explained, "We needed to get information out to the local population so suspensions are alleviated."

"It's hoped that they will be able to counter or at least provide input when they engage with other Iraqis.

Another focus of the lecture was a discussion on the USACE capacity development initiative, which works with the Iraqi government to assess, analyze and determine what construction projects are needed and the priority for each one.

"This lecture is an engagement strategy. We have to leverage at different levels and angles to get this information out and this lecture was just one piece in that process," McDonald said.

McDonald also said it helps with ensuring security for the contractors and USACE people working at various construction sites.

"The more information they [Iraqis] have on us and our projects, the better. It is hoped that they will be able to counter or at least provide input when they engage with other Iraqis," he said.

McDonald said that he thought the exchange benefited the Iraqis in two ways, with the first being "Education...from the standpoint of understanding who we [USACE] are and what we do," he said, "and information from the perspective of knowing what is going on in their community."

King added by saying, "The knowledge gained by the Iraqi engineers will hopefully spread to the others in the community and help us to gain support for the hospital's construction."

**Jim Bullinger, GRS**

**Army Lt. Col. Kenneth McDonald gives a presentation to engineering graduate students on the history of the U.S. Army Corps of Engineers Oct. 14 in Basrah. Watermark: Class listens to presentation (images concealed for security reasons)**

(Photo by Lt. Cmdr. Scott King)



# Army Engineers Rebuild Two Rumaylah Gas Compressor Stations

To bolster the economic position of Iraq in the global marketplace, the U.S. Army Corps of Engineers (USACE) recently modernized two gas compressor stations in Basrah.

“The new project increases the gas pressure and removes moisture from the gas before it is pumped in to the North Rumaylah Natural Gas Liquid (NGL) plant and the Khor Az Zubair Liquid Petroleum Gas (LPG) production plant,” said Bob Tillisch, a USACE oil program manager with the Basrah Area Office.

The CS-2 and CS-5 compressor stations operated by the South Oil Company were built in the late 1980s.

Tillisch noted that the \$5.5 million project enables gas to be processed from the two gas-oil separator-degassing stations at four pressure levels, with a capacity of 2.2 million standard cubic feet per hour.

“The CS-2 and CS-5 are two of nine gas compressor stations refurbished in southern Iraq,” Tillisch explained. “Five of them are located in north Rumaylah and the remaining four are located in south Rumaylah. Those nine compressor stations experienced varying degrees of looting and damage after the war.”

He added that most of the units of those stations were in fair mechanical condition; however, the facilities had aging equipment, obsolete technology and lacked adequate spare parts for repairs.



**Sgt. 1st Class David Adland with the U.S. Army Corps of Engineers checks the construction and installation of an in-line moisture analyzer at Gas Compression Station 2 near the North Rumaylah Natural Gas Liquid (NGL) plant in the Al Basrah Province, Iraq. (Army photo)**

The electrical systems repairs ranged from minor fixes to major refurbishment to replacement of transformers and switchgears.

“This effort is part of an overall refurbishment package to support the production of 3,000 metric tons per day of liquid petroleum gas to meet Iraq’s cooking and heating needs through the winter season,” Tillisch said. “Improvements at CS-2 and CS-5 aid in the recovery of flared gas and contribute 188 and 164

metric tons of LPG per day, respectively.”

Tillisch said that, according to the *Oil and Gas Journal*, Iraq has 110 trillion cubic feet of proven natural gas reserves and roughly 150 trillion cubic feet of possible reserves.

“Currently, Iraq burns about \$10 million of natural gas per day (because of the lack of refinement ability). By increasing Iraq’s natural gas production, oil can be freed up for other purposes such as petrochemical production and export,” he said.

Ray Gonzales, a Basrah Area Office construction representative, said, “The renovation of CS-2 and CS-5 will increase the refurbished stations reliability and capacity to produce more gas, which will stimulate Iraq’s economy and support Iraq’s needs of the LPG for domestic use.”

The Corps has repaired and started up the compressor stations and the dehydration train projects, he added.

**By A. Al Bahrani, GRS**



**U.S. Army Corps of Engineers representative Ray Gonzales, center with beard, completes the project completion paperwork with the contractor and Southern Oil Company members at Compressor Station 5 in Rumaylah, Iraq. (Army photo)**

## The Limits of Power

The American-led effort to put the lights on in Iraq is like everything else here: complicated, but coming along.

Everybody knows the bad news: In September, the lights were on in Baghdad for around four hours a day. One study has October's levels so far at 2.4, the lowest since the invasion. A lot of Iraqi public opinion runs on rumors, and those with their ears pricked will tell you that after three-plus years and billions of reconstruction dollars, there's a sneaking suspicion out in town that the United States, who's been putting men in orbit for four decades, could have had Baghdad twinkling like Times Square years ago if they wanted to. The conspiracy theory goes that the Americans have, insidiously, chosen not to. That they're keeping Iraqis down, man. Either that, or we just don't care.

So the big question at a recent Iraqi media roundtable on electricity, hosted by the U.S. Army Corps of Engineers' Gulf Regional Division, was -- translated roughly from the Arabic -- "It's been three years and \$4 billion. What gives?"

Leaning slowly forward to take it was Al Herman, a senior consultant with the Department of State's Iraq Reconstruction Management Office (IRMO) who works with the Ministry of Electricity on project management and system planning. Herman has rebuilt and rehabbed electricity grids in 36 countries in 30 years -- if he just didn't care, he'd probably have retired by now. And if he was evil (colleagues have nicknamed him "The Prince of Darkness," but that's just blackout humor), well, he'd probably have gotten himself an easier job.

But he sure had an answer.

"Nine of the transmission lines bringing power into Baghdad have been interdicted. Blown up. Down and out." If those lines were up and operating, Herman said, Baghdad would have in excess of 12 hours of power per day. "The minister and his people have tried on numerous occasions to repair these lines. They keep getting attacked, killed, kidnapped and threatened."

Security trumps a lot in Baghdad. And as far as infrastructure targets go, the transmission towers and wires that bring power into the capital make fairly juicy ones. They're exposed. They're pretty fragile. A tower, Herman explained, is easy to find, easy to knock down and not too hard to put back up. The bad guys can demonstrate their disruptive abilities, keep Ministry of Electricity manpower tied up and keep Baghdad dark without, say, taking out an entire power plant -- which would make it spectacularly obvious that they, and not U.S. or Iraqi incompetence, are to blame for the lights being out.

"It's a game of cat and mouse," Herman said. "We're hoping over the next few months that we will be able to repair

most of these lines and get them up and operating. And we need the help of all Iraqis in keeping them up and operating."

But there's more to the story than violence. Baghdad also is short on power because the rest of Iraq's population is enjoying levels of electricity its never seen before.

Electricity and politics do tend to function in tandem. A light switch may not care who's flipping it, but the way infrastructure is distributed in a nation is a pretty reliable sign of where the power lies. Under Saddam Hussein, the lights in Baghdad were on all day and night. Favored Baathists were even allowed air conditioners and satellite TVs. Outside the capital? They got the scraps.

But just as the new Iraq constitution has devolved much political power away from the capital, reconstruction efforts have focused on making sure the spoils of power are spread around too. So even as demand for electricity -- those now-legal air-conditioners and satellite TVs, and the momentum of consumerism -- has risen steadily since the invasion, three-quarters of Iraqis have twice as much power as they did before the war.

"Under Saddam Hussein, Baghdad pulled its power away from the rest of Iraq. We've gone to a policy to try and equitably distribute that power across the country," said Army Col. Jon Christensen, GRD's electricity sector lead. "So now, outside of Baghdad, they have gone from zero in some cases, up to 12 to 14 hours of power a day."

Overall, the GRD has started 520 electricity-related projects and completed 220 of them. The peak generation capacity of Iraq's nationwide network is now 4,500 megawatts -- still short of the goal of 6,000 megawatts, but higher than the pre-war levels of 4,200. And much better-distributed by much better equipment.

"Unfortunately," said Christensen, "Baghdad has paid the price for that."

So what's next? In the short term, Christensen focuses his smaller projects in specific areas after they have been cleared by Baghdad Security Plan operations -- moving as quickly as possible to take advantage of the drop in violence after an operation moves through (and trying to demonstrate to citizens that U.S. and Iraqi officials have more on their minds than checkpoints and house searches). And Herman has plans to "harden" the transmission towers, along with other measures, to make the "weak links" of Baghdad's power chain a little harder to snap.

But the longer-term vision, Herman said, is for IRMO and the MoE to spend 2007 putting Baghdad on its own power footing, with more generation and more facilities in the so-called "Baghdad Ring," so that there's no chain to break. "We don't want the over-reliance on the grid that Baghdad has now," he said.

As with just about everything else the United States is trying to do in Iraq, IRMO, USAID and GRD are fast turning the job of building, maintaining, and fueling an Iraqi electricity system worthy of the 21<sup>st</sup> century over to the Iraqis. GRD expects to complete its remaining 300 construction projects in the next year or two. USAID, after contributing 1,292 megawatts of generation (half from new plants and half from rehabilitated ones) to this point, will devote its efforts for the next few years to training Iraqi workers and contractors to maintain and repair modern turbine generation systems that they haven't seen before. Although Herman likes what he's seen in the MoE and its engineers so far.

"When they go out and repair transmission lines, they do a marvelous job, even compared to what we do in the United States. They are actually quicker at recovering from blackouts than we are in the United States," he said. "They have experience in this."

The future, the Prince of Darkness said, "looks brighter." But bringing 24 hours of power to all 18 provinces will take "anywhere from \$20 billion to \$30 billion over the next seven years," and with the United States no longer budgeting for new construction that money will have to come from the Iraqis.

Even if the security situation were to improve overnight -- "If you can promise me no one will come and blow up the transmission lines, I can promise you we'll get power into Baghdad," Herman said at one point -- Iraqis who may have expected miracles when the United States arrived in March 2003 are going to have to settle for the best we can do in the time we've had.

"What you need to understand," Herman told the journalists, "is that the \$4 billion that we have spent on electricity here in Iraq in the three years has done nothing more than what I would call kick-start the system."

"You don't rebuild an electric system as bad as this one was, in a short period of time."

Turns out electricity in Iraq is pretty much like, well, like everything else in Iraq. Held hostage in Baghdad. Better in the rest of the country. A long way and a lot of work from reaching first-world standards, but all in all, far from hopeless. Yet rapidly proving that even the mighty Americans will need the Iraqis to finish the job.

Heck, it took us almost a decade just to put a man on the moon.

**Sgt. Frank Pellegrini, CPIC**



*Iraqis taking lead in getting out the word of construction in Baghdad*

Deputy Prime Minister Dr. Barham Salih addresses reconstruction efforts with Iraqi and Coalition leaders during a press conference Nov. 14 in Baghdad. (GRD Photo)

Details of reconstruction efforts in Baghdad were discussed at a press event hosted by Iraq’s Deputy Prime Minister Dr. Barham Salih, on Nov. 14.

The purpose of the event was to showcase the collaborative accomplishments of the Iraqi government and Coalition forces’ reconstruction efforts on Baghdad’s municipal infrastructure.

Following an investment of \$2 billion, the projects discussed have provided basic services to include potable water, electricity, waste disposal, transportation and health services to Baghdad’s seven million residents.

The effort came after decades of neglect of Baghdad’s municipal infrastructure. “We have done more work in the last four months than in the last 21 years,” said Baghdad Mayor Sabbir al-Essawe through an interpreter.

Sabbir talked about the team working late hours to plan the reconstruction and outlined some examples of their work. Among the projects he pointed out, the mayor highlighted that water is now available to the 20 percent of Baghdad that never had access to potable running water before.

Other major projects showcased at the event included a project that will expand and retrofit the Doura sewage treatment plant, which will result in a significant reduction in the principle pollutant of the Tigris River – human waste.

Another project will build four new sewage treatment plants, which will collect and compress raw sewage that will then be processed into organic fertilizer at two new production facilities.

Sabbir spoke of the new strategic plan to build 200 parks and public gardens for Baghdad’s citizens. In the 1970s, Sabbir said there were 10 square meters of green space for every Baghdad resident. This was reduced to less than half a meter per capita after Saddam distributed many of the lands to his cronies. To complement the parks and public gardens, the strategic plan also

calls for purchasing 600 street sweepers to clean Baghdad’s neighborhood streets.

Sabbir mentioned four key factors to Baghdad’s development: there is a new and democratically elected government; funds exist to build and maintain the new systems, buildings and equipment; the projects have strong support and input from the people; and there are Iraqis with critical technical knowledge to maintain the new infrastructure.

The revitalization and reconstruction projects are being fueled by several sources managed by the U.S. Department of State.

The Provincial Reconstruction Team works closely with provincial governments in planning, prioritizing and funding of projects, and helps to ensure that the projects meet the needs of all local citizens.

There is an additional benefit – employment for local Iraqi contractors and workers, which contributes to the economic prosperity of the region.

The Iraq Relief and Reconstruction Fund, at \$1.66 billion, funds major construction projects throughout the country. As an example, the Sadr city water treatment plant, at a cost of \$7 million, will provide 4,000 cubic meters per hour of clean water to 200,000 residents, or 26 gallons of clean water to each person.

Another IRRF undertaking is the \$37 million Al Rashid electrical substation. With a capacity of 400 kilovolts, it will provide electricity to 200,000 Baghdad residents. Other IRRF projects include sewage treatment plants and court facilities.

The Community Stabilization Program is specifically designed to fund small community development projects. It provides jobs and training to local Iraqis and “increases the quality of life for residents,” said U.S. Army Lt. Gen. Peter Chiarelli, Commanding General of Multi-National Corps – Iraq. In addi-

## Coming Soon to Kirkuk, Iraq-Zakros Primary School



**Above:** Funded through the Commander's Emergency Relief Program (CERP), this project will maximize employment opportunities for local Iraqi suppliers, craftsmen and laborers in the neighborhood where the work is executed.

**Right:** Excited with anticipation, local children watch as the concrete walls are laid and the rebar for columns are installed.



Construction of a \$269,000 primary school that will educate approximately 300 children began September 2006 in a newly developed area of Kirkuk. Working through the Provincial Reconstruction Development Council and the local maneuver unit, the 25<sup>th</sup> Infantry Division, the Governorate of Kirkuk requested the construction of a permanent facility to replace the tent school in Zakros.

Funded through the Commander's Emergency Relief Program (CERP), this project will maximize employment opportunities for local Iraqi suppliers, craftsmen and laborers in the neighborhood where the work is executed. CERP projects were developed to meet the immediate needs of the Iraqi citizens and have a direct and immediate impact on the local communities. Not only will this project increase employment opportunities for the local population, it will promote the employment of women as well.

The construction of this facility will include four buildings: two classroom structures that house six classrooms each, an administrative building and a bathroom. Also contained in the construction package are a playground, a 75 kva backup generator and furniture to fill the rooms, as well as a perimeter fence surrounding all.

The larger and more technical projects, like this one, that will outlast the maneuver unit deployment periods are often managed by the U.S. Army Corps of Engineers. Assuring quality workmanship and adherence to safety requirements, USACE provides Contracting and Construction Management as well as Quality Assurance for the overall project.

"Because we are not on a rotation schedule," says Lt. Col. Thatch Shepard, USACE Deputy Commander, Gulf Region North District, "we provide the continuity required to see this project, and the many others, to fruition. Our technical assets and experience in theater provide the maneuver units that sense of comfort that their project (and promises to the Iraqis) will be accomplished to standard."

The Government of Iraq with the help of the coalition forces continues to make improvements in providing basic services to the Iraqi people. To date, 833 building and education projects have been completed at the cost of \$126 million in the North District.

Mike Bransford, the Kirkuk USACE Area Engineer speaks of the reconstruction effort, "We are making a difference here, little by little. The true meaning of why we are here, looking toward the future, is for the children. Without a doubt, the future of Iraq is the children."

It will be years before Iraq is running on its own. Yet each day they are getting a better life thanks to the dedicated U.S. Soldiers and civilians working to rebuild their country. The use of funds from the CERP paves the way for local and regional stabilization by allowing for small rebuilding projects that have an immediate impact on the local population.

**Polli Keller Barnes, GRN**

**Below:** Zakro's neighborhood turns out to watch the construction of the new school. Working through the Provincial Reconstruction Development Council and the local maneuver unit, the 25<sup>th</sup> Infantry Division, the Governorate of Kirkuk requested the construction of a permanent facility to replace the tent school in Zakros.

*(All photos by Mike Bransford, USACE Engineer)*







# Gulf Region Division

## Reconstruction in Iraq Special Pullout Briefing Section

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November, 2006



**US Army Corps  
of Engineers®**

# *From Obligation to Completion— There is plenty of work left to do!*

While the Gulf Region Division, U.S. Army Corps of Engineers has completed 2,620 projects at a construction cost of \$3.38 billion, there is still much work left to do. As of Nov. 24, 2007, more than 690 projects are under construction at a construction cost of \$2.61 billion, more than a 140 left to start (Not including CERP projects).

### Electricity Sector – as of Nov. 27, 2006

The World Bank estimate to rebuild the electrical system in Iraq is \$20 billion. Of that amount, the Iraq Relief and Reconstruction Fund II will provide \$4.3B. The estimated completion date for the last GRD managed, non-Project Partnership Agreement electrical projects is April 09. The metrics and goals for the electrical program are:

Metric	Goals	Last two week average
Hours of electricity per Day throughout Iraq	10-12 hours	10.4 hours of electricity for Iraq
Hours of electricity per Day for Baghdad	10-12 hours	5.9 hours of electricity for Baghdad
MW power generated (Peak)	6,000 MW	4,048 MW of power generated
MW of reliable Transmission Capacity	6,000 MW	5,500 MW of reliable Transmission Capacity

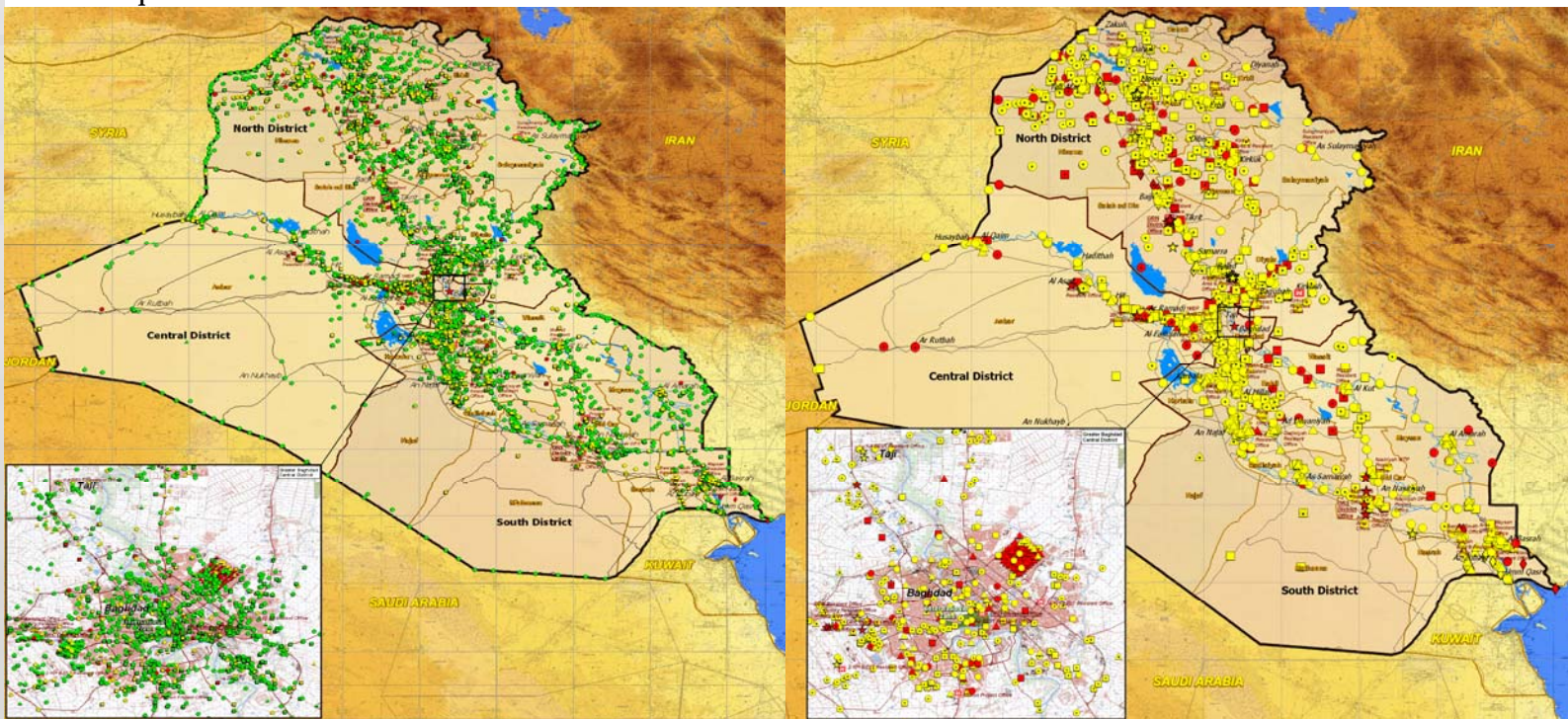
**Generation:** Of the 20 projects (\$590M) programmed to generate electricity in Iraq, 19 projects (\$424M) are complete, 1 project (\$166M) is in progress. The estimated completion date for the last generation project is October 2007.

**Generation Operation, Maintenance and Sustainment (OMS):** Of the 23 projects (\$250M) programmed for electrical OMS in Iraq, 18 projects (\$230M) are in progress and 5 (\$20M) are complete. The estimated completion date for the last OMS project is April 2009.

**Transmission:** Of the 58 projects (\$900M) programmed to transmit electricity in Iraq, 46 projects (\$683M) are in progress and 12 projects (\$217M) are complete. The estimated completion date for the last electrical transmission project is November 2007; however, Project Partnership Agreement projects could stretch into 2009.

**Distribution:** Of the 411 projects (\$892M) programmed to distribute electricity in Iraq, 164 projects (\$394M) are in progress and 247 projects (\$498M) are complete. The estimated completion date for the last electrical distribution project is August 2007.

(Below left) While the U.S. Army Corps of Engineers in Iraq has completed 2,620 projects at a construction cost of \$3.38 billion (as illustrated by the green projects on the lower left map), there is still much work left to do. As the map on the lower right indicates, as of Nov. 24, 2007, more than 690 projects are under construction (indicated in yellow) a construction cost of \$2.61 billion, more than a 140 left to start (indicated in red). The map on the next page, showing only the projects left to start, indicate there is still plenty of work left for the Corps in Iraq.





Saydea Fire Station Paving and security fencing project – Baghdad Province – completed Nov. 23



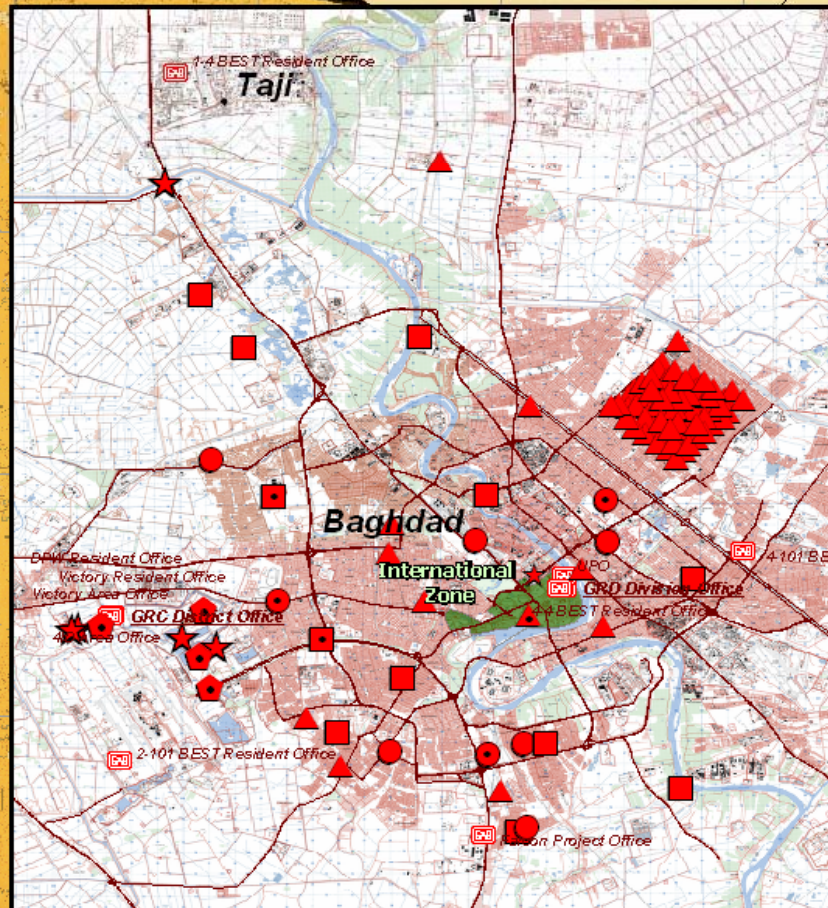
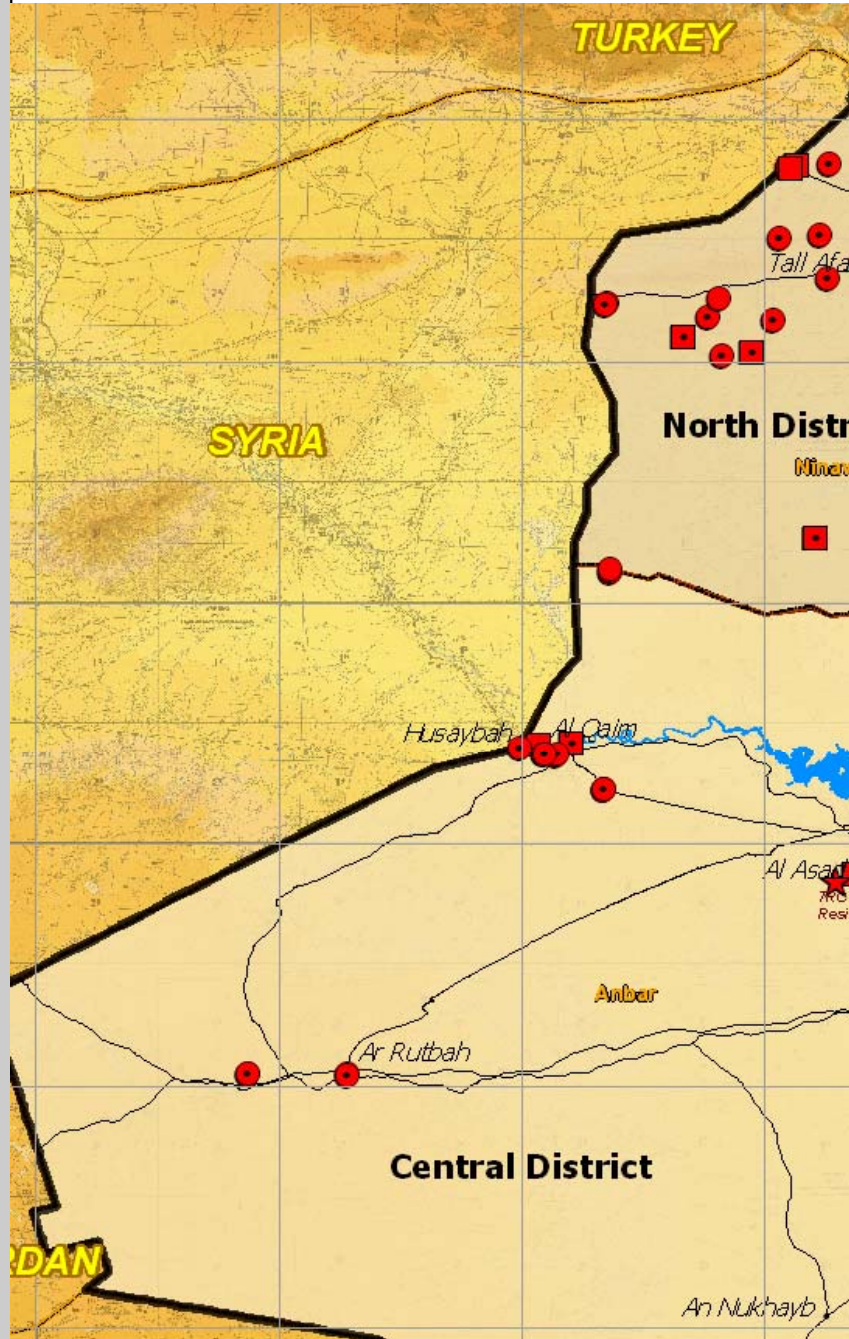
Uruk Highway Patrol Station – Muthanna Province – completed Nov. 16



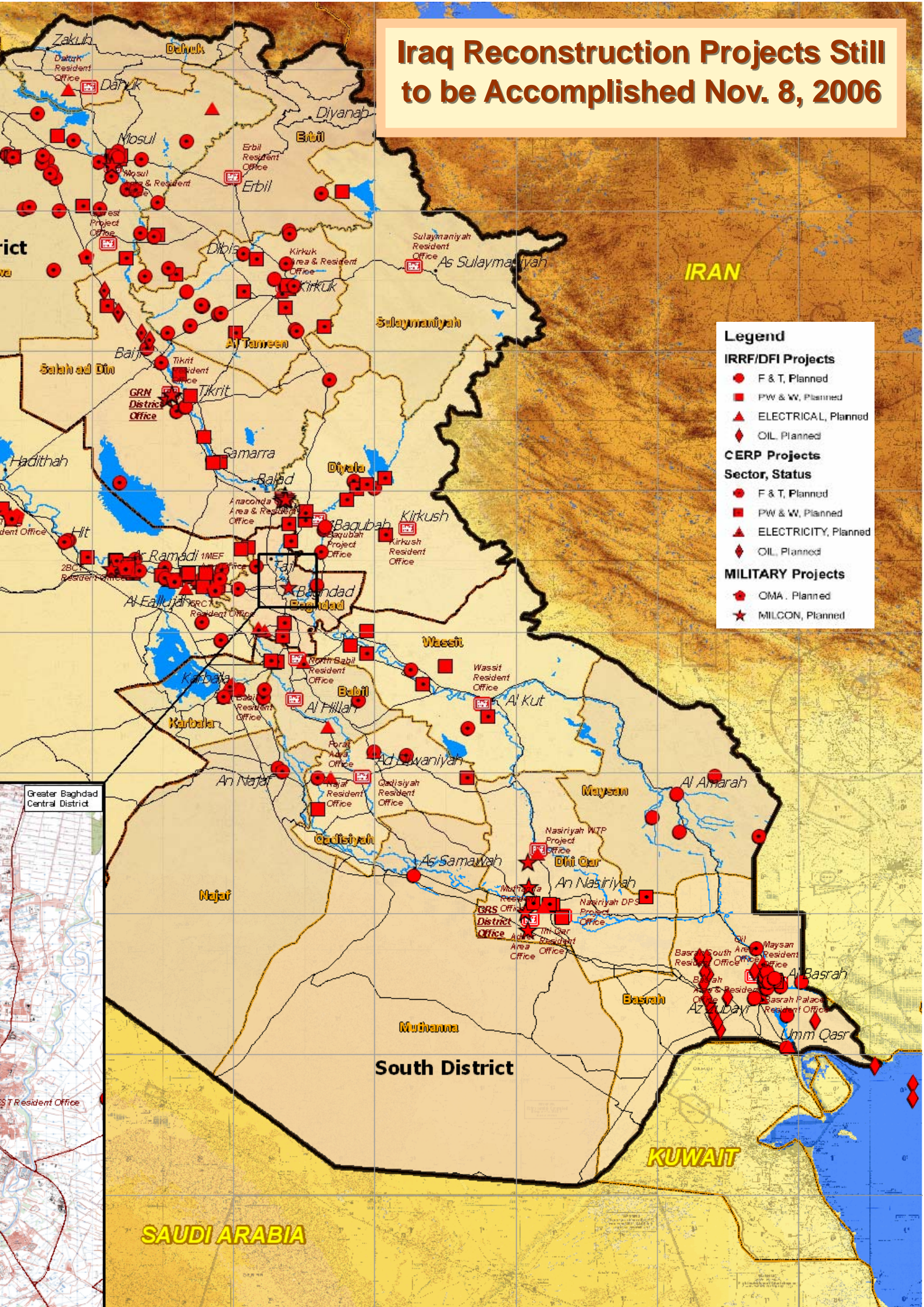
NGL/LPG Plant Repair – Basrah Province – estimated completion date — June 2007.



Ag Nimrud Agricultural Building – Ninewa Province – completed Nov. 4



# Iraq Reconstruction Projects Still to be Accomplished Nov. 8, 2006



**Legend**

**IRRF/DFI Projects**

- F & T, Planned
- PW & W, Planned
- ▲ ELECTRICAL, Planned
- ◆ OIL, Planned

**CERP Projects**

**Sector, Status**

- F & T, Planned
- PW & W, Planned
- ▲ ELECTRICITY, Planned
- ◆ OIL, Planned

**MILITARY Projects**

- OMA, Planned
- ★ MILCON, Planned

Greater Baghdad Central District

South District

SAUDI ARABIA

IRAN

KUWAIT

**Oil Sector – as of Nov. 27, 2006**

The Coalition Provisional Authority estimate to rebuild the oil infrastructure in Iraq would cost \$8 billion. Of the 187 projects valued at \$1.3B programmed to improve the production and exportation of oil and gas in Iraq, 56 projects are engineering, procurement and construction projects (EPC) valued at \$333M and 131 are non-construction valued at \$933M.

The non-construction projects include 61 engineering and procurement (EP) valued at \$359M, 24 government procurement (GP) valued at \$57M, 17 capacity development valued at \$11M and 29 Administrative Task Orders (ATOs) valued at \$506M.

Of the 56 EPC projects, 30 are in progress and 26 are complete. Of the 131 non-construction projects, 59 are in progress, and 72 are complete. The estimated completion date for the last oil construction project is June 2007.

Metric	Goal	Current Capacity
Crude Oil Production Capacity	3M barrels per day	2.5M barrels per day
LPG Production Capacity	3,000 metric tons per day	1,200 metric tons per day
Natural Gas Production Capacity	800M SCF/day	600M SCF/day

**Public Works and Water Sector – as of Nov. 27, 2006**

The World Bank estimate to rebuild the public works and water system in Iraq is \$14.4 billion. Of that, the United States has funded \$2.4B. The GRD Reconstruction Program share for construction projects is \$1.1B, which consists of 402 projects - 370 projects (\$1B) have been started, and 222 of these projects (\$445M) are complete. The estimated completion date for the last water sector project is October 2008.

Goal	Last two week average
1.1 M m³/day water treatment capacity	422.5 K m³/day water treatment capacity
5.2 M additional Iraqis with access to potable water	2.1 M additional Iraqis with access to potable water
387,006 ha irrigated land	30,600 ha additional irrigated land

**Potable Water:** Of the 375 projects (\$834M) programmed to increase potable water in Iraq, 348 projects have started (\$795M) and 210 projects have been completed (\$344M).

**Sewage:** Of the 19 projects (\$127M) programmed to increase sewage treatment in Iraq, 15 have started (\$93M), 10 (\$80M) are complete.

**Irrigation/Water Resources:** Of the eight projects (\$174M) programmed to increase irrigation in Iraq, seven have started (\$136M), two (\$20M) are complete.

**Facilities Sector – as of Nov. 27, 2006**

The World Bank estimates it will cost \$11.7 billion to rebuild the facilities and transportation systems in Iraq. The GRD portion is \$1.2 billion in construction value and consists of 1,532 projects programmed to improve the facilities and transportation systems in Iraq - 1,248 projects (\$505M) are complete, and 260 projects (\$661M) are in progress, and 19 projects (\$16M) are awarded, but not started. The estimated completion date for the last facilities project is December 2008.

**Buildings, Health and Education:** The BH&E program includes 986 GRD projects (\$388M) to provide improved educational facilities and quality of healthcare at maternity, pediatric, and general healthcare facilities - 834 projects are complete (\$128M), and 149 projects are in progress (\$258M) and three projects (\$1.4M) are awarded, but not started. The estimated completion date for the last BH&E project (not including Basrah Children’s Hospital) is December 2007.

**Security and Justice:** The S&J program includes 274 projects (\$498M), and is intended to establish the rule of law and provide security to the country of Iraq -243 projects are complete (\$286M), 26 projects are in progress (\$210M) and 5 projects (\$3M) are awarded, but not started. The estimated completion date for the last S&J project is March 2008.

**Transportation and Communication:** The T&C program includes 272 projects (\$295M) and is intended to increase the safety and operational efficiency of transportation systems, as well as providing state-of-the-art communication systems in Iraq - 176 projects are complete (\$91M), 85 projects (\$193M) are in progress, and 11 projects (\$11M) are awarded, but not started. The estimated completion date for the last T&C project is December 2008.

**Non-Construction:** The Non-Construction Program includes 19 project codes (\$732M) comprised of 732 contracts. Non-Construction procures and delivers equipment, including installation and training, and various support services and capacity development contracts. The procurement lists comprises equipment for hospitals, prisons, courts, ports, fire stations, railroads, airports, communications, schools, and other critical facilities. Equipment valued at \$464M was delivered to the end-users throughout Iraq with \$268M in transit/pending delivery.

***“What have you done today for the people of Iraq?”***

## *U.S. Army Corps of Engineers Helps Iraq Keep Waterways and Borders Safe*

The U.S. Army Corps of Engineers (USACE) recently turned over another newly constructed facility to Iraqi law enforcement on the Al-Faw peninsula south of the City of Basrah. The intended facility is to enhance security, unity and prosperity.

“This \$550,000 project, completed on Oct. 16, has been designed and constructed to support the Iraqi Coast Guard, the Border Police and the Customs Police,” said Russell Holeman, chief of Engineering and Construction for the Gulf Region South District.

“The new facility provides the Iraqi police with a secure forward operating base along the Sha’at al-Arab waterway,” he said.

Holeman explained that the construction project includes a joint operations center, administrative offices, medical areas, sleeping areas and a dining facility; along with water, electric and sewer systems for the facility.

“The project also includes a boat ramp and pier with a floating dock. Watch towers provide improved visibility of the waterway and port operations,” Holeman said, “The new construction will enhance the capabilities of the coast guard, border police and customs police to stem the flow of riverborne smuggling activities, such as oil, weapons or terrorists,” he said.

According to Holeman, the USACE has been constructing many border forts and coastal police stations throughout Iraq to help the Iraqis control their country and keep it safe from insurgents and criminals.

“Al Faw peninsula is a marshy region adjoining the Persian Gulf in the extreme southeast of Iraq. Its chief importance is its strategic location, which is controlling access to the Sha’at al-Arab waterways and access to the port of Basrah,” he said.

For Holeman, Al Faw also is a site for a number of important oil installations.

It has two main oil tanker terminals: Khor Al-Amaya and Mina Al-Bakr, which are notably supporting Iraq’s oil resources.

The new facility on Al Faw peninsula will increase port level security at both the ports of Umm Qasr and Khor Az Zubair.

“For Iraqis, the military construction projects are the keys to stability in Iraq and one of the first steps to protecting the country from the influx of terrorists and increase in criminal activities,” Holeman said.

He added that USACE cooperates with the Iraqi ministries of the Interior and Oil to provide them with new facilities needed for more security support.

“The duties of the joint police include protecting the territorial integrity of Iraq, providing security for fixed points of entry and patrolling the borders, which include mountainous, desert, marshy and coastal areas,” he said. “USACE is working to help rebuild Iraq’s infrastructure and to help restore law and order by building and refurbishing military facilities, border posts, and police and fire stations.”



**Russell Holeman is the chief of Engineering and Construction for the Gulf Region South District, U.S. Army Corps of Engineers.** *(Army photo)*

Holeman said when the Iraqi police control waterways and borders, that they will have control of those key strategic, commercial and economic targets.

**Mohammed Aliwi , GRS**

**Below: The new Al Faw Forward Operating Base supports the Iraqi Coast Guard, the Border Police and the Customs Police.**

*(Photo by A. Al Babrani)*



**Left: The Al Faw Forward Operating Base along the Sha’at Al Arab waterway includes a pier with a floating dock for watercraft.** *(Photo by A. Al Babrani)*



Above: Air Force 2nd Lt. Richard Hallon, center, checks his project notes during a meeting with the contractor's representative at the Al Rifa'ee Primary Healthcare Center construction site recently.



The Primary Healthcare Center in Qal at Sukkar will provide area residents with medical and dental services.

## The Importance of Primary Healthcare Centers in Iraq

The U.S. Army Corps of Engineers (USACE) continues to make progress with the construction of primary healthcare centers (PHC) throughout Iraq.

According to U.S. Air Force 2nd Lt. Richard L. Hallon, a project engineer with the Dhi Qar Residence Office of the Gulf Region South (GRS) District, PHCs for Iraqis are considered a high priority in the budget of the Iraq Relief and Reconstruction Fund.

"The improvement of medical services and the quality of basic healthcare of the Iraqi people is important to the new government and to us," Hallon said.

"The aim is to develop the medical services infrastructure and provide the environment, people and equipment to raise the quality of life for all the people," he said.

The primary healthcare centers are regarded as something of importance on all levels.

An Iraqi physician, who requested to remain anonymous for security reasons, said, "Due to the fact that national policy has been geared toward centralization, most healthcare efforts are not directed at the rural areas, as the higher population lives in the cities."

Hallon reflected on this point also.

"The building of primary healthcare centers in rural areas was neglected in the past and has created a shortage of quality medical care for many people," he said. "Other reasons why rural areas have so few PHCs is that it is not commercially attractive to many health workers who are only interested in working in the larger cities."

He also mentioned that humanitarian organizations like Red Crescent and Red Cross are usually more oriented toward the PHC providing vaccinations, educational and sanitation training support, and are sometimes funded by foreign organizations to back up healthcare in Iraq.

"There is no question that the future will present a very different set of demands on the Iraqi healthcare delivery system to meet the rapidly growing medical needs," Hallon explained.

"The Army Corps of Engineers' efforts to increase the number of healthcare centers and provide access to quality healthcare are critical to the Iraqis' future," he said. "GRS is building 58 clinics in different areas in all the southern provinces."

Hallon said that the new centers, which are built in the rural areas, will be more accessible to the urban population; moreover it will have a bigger impact and help eliminate people having to travel long distances to seek medical examinations and treatments typically provided in the cities.

"The standard services that will be provided include medical and dental examinations and X-ray services, an on-site laboratory, a pharmacy, classrooms for providing local education and training, and a cafeteria for staff," Hallon said.

"The PHCs projects that the [Corps of Engineers] has been working on will integrate healthcare education with patient care, resulting in an overall improvement in community health," he said.

**Mohammed Aliwi, GRS**

Below: Dhi-Qar Resident Office Project Engineer (front), 2nd Lt. Richard Hallon, accompanied by Sgt. Maj. Benny Hubbard, (third from bottom), conducts a construction site inspection visit with contractor representatives at the Al Rifa'ee PHC.

*(All photos by Jim Bullinger, GRS)*



# Riyadh Water Project



**Governor of Kirkuk, Abdu Al Rahmin Mustafa (left) with local officials and Col. Patrick Stockpole, of the 25<sup>th</sup> Brigade Combat Team officially open the water distribution system. (GRN photos)**

The U.S. Army Corps of Engineers, along with the 25<sup>th</sup> Infantry Brigade Combat Team, USAID and other organizations, have spent the last several years working to provide clean drinking water to the residents of Kirkuk.

The end of October marked the completion of another water compact unit and distribution system in the remote areas of Kirkuk. The Riyadh Water Project consists of three compact water units that provide water to eight outlying villages along 40 kilometers of what is the most difficult area of the Province to secure from anti-Iraqi forces. Each compact water unit can process up to 100m<sup>3</sup> of water per hour, taking raw untreated water from local canals, processing it through filter media and chlorination, and then distributing it through a network of underground pipes to the local villages. These smaller facilities, made up of pumps, tanks and a few small buildings, are the best method to provide clean water to the more remote areas of the Province.

Unhindered by the three Improvised Explosive Devices (IEDs) detonated as the ground units arrived to the opening ceremonies for the water project, Col. Patrick T. Stockpole, Commander of the 3<sup>rd</sup> Brigade Combat Team, 25<sup>th</sup> Infantry Division, stood together with the governor of the province and mayor of the city as he highlighted that “today we have the opportunity to help the many with the completion of the Riyadh Water Project—60,000 residents of this area will have clean drinking water, protecting children from illness caused through the consumption of contaminated water and alleviating long distances for the elderly to travel for water.”

Also attending the ceremony at the request of the local government and traveling with members of the BCT was Mike Bransford, USACE area engineer and Joe Domingo, USACE project engineer. As their convoy approached the water project, one of the vehicles struck an IED, causing minor damage to the vehicle, followed by two other explosions around the project site that caused no damage. After the site was rendered safe by a team of soldiers and a bomb dog, the event continued.

Bransford stated that despite those few individuals that may object to U.S. involvement in the area most resi-

dents want the best for their children.

“This project provides clean drinking water to residents of an area that have little else,” said Bransford. “To witness the completion of a project, especially a community water distribution system, makes all of this worthwhile.”

Bransford went on to say, “Seeing a system at work and knowing we have increased the quality of life for the citizens of Iraq is very gratifying. This is one of the good things happening in Iraq, I wish more would focus on these aspects, instead of the negative issues.”

The Corps of Engineers in the Kirkuk Province currently has \$17 million of water projects under construction. It is one of many coordinated efforts to providing a comprehensive approach to repair decades of neglect by the former regime and post-war looting. Despite the risks of working in some of the areas supportive of anti-Iraqi forces, the Corps continues its mission of improving the quality of life for the citizens.

Previous to the commissioning of this water project, there was no other reliable method of providing potable water to residents. In a 2003 study conducted by the United Nations, 70 percent of childhood illnesses in Iraq were the direct result of consumption of contaminated water. Despite the completion of many such water projects, improving the water quality continues to remain a key focus of the reconstruction effort today.

Kirkuk, capital of the Province of the same name, lies 156 miles to the north Baghdad just below the former coalition No-Fly Zone that protected the Kurds in the northern regions of Iraq. It is regarded as the center of the northern Iraqi petroleum industry, containing up to 25 percent of the nation’s oil reserves. It is a historically and ethnically mixed city populated by Kurds, Turkmens, Assyrians, Arabs and Armenians.

It is a contested city both historically and presently. Under Saddam Hussein, Kurds were removed from the city and their homes given or sold to Arabs. Today in a region that is struggling with establishing its government, control of the city and the vast oil reserves fuel the strife between the Kurds in the northern part of the city and the Arabs to the south.

**Capt. Albert Soliz, Deputy Area Engineer, Kirkuk Area Office, USACE**

**Almunshed Group, project engineer, flanked with USACE project engineer, Joe Domingo (Left) and Kirkuk Area Office, area engineer, Mike Bransford**



## Contracting, Networking Opportunity Day draws large Iraqi turnout

U.S. Army Corps of Engineers contract specialist Susan Newby provides information during the Contracting and Networking Opportunity Day. (All photos by Norris Jones)



About 300 Iraqi contractors attended the Iraqi Business Forum Contracting and Networking Opportunity Day hosted by U.S. Army Corps of Engineers Gulf Region Division (GRD) Nov. 4 at the Al Rasheed Hotel in Baghdad in November.

During his opening remarks, Terry F. Bautista, GRD's Director of Business Management, encouraged those attending to take every opportunity to share their business cards and information on what they and their company can do, "We need partnerships, associations, and collective gatherings like today's conference to develop a successful road map for the future."

He noted, "Iraq needs every engineer, carpenter, steel worker, brick mason, architect, and contractor ... skilled people willing and able to apply their craft toward rebuilding Iraq. As contractors, your role is to bring these essential trades and crafts together into the Iraqi companies that will carry out the construction effort."

"Without our contractors we will not be able to complete our mission," Bautista continued. "We can't do the job without you." He pointed out that about 683 projects are ongoing today. "Will the reconstruction effort be complete when all these planned projects are signed and delivered? No, it is not enough. Early United Nations and World Bank estimates approximated Iraq's infrastructure needs to be about \$60 billion. But this was before we had an opportunity to fully assess the condition of Iraq's infrastructure. After careful analysis, the infrastructure needs have been estimated well over \$100 billion."

He noted that the Government of Iraq is dedicating more and more financial resources to rebuilding. For example, the Ministry of Electricity is doubling its 2006 reconstruction budget in 2007 and other Government of Iraq Ministries are doing the same.

He asked all attending to continue to be leaders and seize the opportunities that are in the new Iraq. "I encourage you to stay motivated and network with the people, companies, and government representatives here today. You are making Iraq a better place ... for yourselves, your children, and your children's children."

Also speaking was Col. Debra M. Lewis, U.S. Army Corps of Engineers Gulf Region Central District Commander, whose staff oversees projects in Baghdad and Al Anbar Provinces. "We're on your team. I want you to know I've been in this beautiful country for six months. I've been allowed to meet and work with a number of you on some very important projects. What has inspired me the most is that we see so much potential in your ability to be the most prosperous nation in the Middle East. I would like you to consider one thought as we work together ... it takes each of us to make a better world for all of us. One person with one idea has the power to change the world. The way you will do that, I hope today, you will find people here who can help you."

Organizing the event was Azza Khalil-Humadi (Project Manager of the Women's Advocate Initiative with Stanley Baker Hill LLC.) She told the audience that turning the economy around was the way to improve security. "It is clear that if people are employed they will be involved in their daily work and will not participate in terrorism."

Also attending was her husband, Dr. Zuhair Humadi (Senior Advisor to Iraq's Vice President), Kathye Johnson (GRD's Director of Transition), and Sidney Hymes (Program Manager with Stanley Baker Hill LLC.)

For those unable to attend the conference and who want additional information about contracting and construction opportunities, visit [www.baghdadbusinesscenter.org](http://www.baghdadbusinesscenter.org).

**Norris Jones, GRC**

Rt: Azza Khalil-Humadi is interviewed by Iraq's Al Hurria TV. Watermark: The Nov. 4th event attracted three dozen local media representatives.





## GRD Director of Transition Moves On



**Kathye Johnson receives the de Fleury Medal from Brig. Gen. Michael Walsh, commander of the U.S. Army Corps of Engineers, Gulf Region Division in Baghdad, Iraq. (GRD photo)**

**K**athye Johnson, a member of the Senior Executive Service, recently completed her assignment as Director of Transition for the U.S. Army Corps of Engineers, Gulf Region Division in Baghdad, Iraq. Johnson joined the Gulf Region Division in August 2005 as the Director of Reconstruction Programs, overseeing more than 2,800 construction projects throughout Iraq. When Johnson moved to her current position as Director of Transition, GRD had more than 3,700 projects planned with a construction budget in excess of \$9 billion.

As Director of Transition, Johnson worked with the Ministries of Iraq and the Iraq Reconstruction Management Office to assist the Government of Iraq in setting up contracting policies and procedures.

At a farewell ceremony, Johnson was awarded the Bronze de Fleury Medal for significant service or support to an element of the Engineer Regiment, by Brig. Gen. Michael Walsh, commander of the Gulf Region Division. Johnson was cited for her exemplary work in overseeing project management and funding during her tenure as Director of Reconstruction Programs.

The de Fleury Medal is awarded in the name of Francois Louis Tesseidre de Fleury, a French engineer who volunteered to serve in the American Army in its fights for independence from Britain in 1777. The U.S. Corps of Engineers began presenting the medal in 1989.

Johnson heads to Washington, DC, to become the senior executive vice president of operations for PADCO, an arm of AECOM that provides construction management and consulting services to developing and transitional countries.

## Baghdad Press Conference, continued from page 7

tion, the CSP “helps provide vocational training so Iraqis can get trained in areas that will allow them better job opportunities,” Chiarelli said.

In addition to those funding sources, Coalition commanders have funding available through the Commander’s Emergency Relief Program – an emergency source of funding that can be used to finance projects with an immediate impact on local infrastructure such as water distribution, sewer systems, electricity, garbage removal, fuel distribution and health care.

More than \$700 million of CERP funds have been used over the last three years in Baghdad. There are now 150 CERP projects underway or planned for early 2007.

According to Deputy Chief of Mission, Ambassador Daniel Speckhard, the cornerstone of CERP is what he calls “the last mile.” He said the original plan was that IRRF funds would be used for power generation, power transmission, water treatment and sewage disposal projects. The goal was that the funding and construction for the final phase of a project – the final connection to a home, for example – would be provided by the government ministries. This however, did not occur as quickly as originally planned, so CERP was implemented, “so that the water isn’t just clean and ready to go,” said Speckhard, “but that when someone connects to it, the connection actually takes place, or that the last wire is connected to the house so they can turn on the light switch.”

To date, the funding programs have provided for 1,112 reconstruction projects at a cost of almost \$2 billion. Of those, 924 projects are already in-progress, and 186 are planned and two others have been proposed. *(Editor’s note: numbers current at time of press conference)*

### U.S. Navy Mass Communication Specialist 2nd Class Elisandro Diaz MNSTC-I Public Affairs



**Lt. Col. Lorenzo Valenzuela, from the Army Corps of Engineers, makes some new friends in Afak, Iraq.**

# Training Eliminates Safety Violations

Army Safety Officer Russell E. Fennema, center, and Project Engineer Margaret Williams, left, listen as an Iraqi contractor discusses safety issues at one of the U.S. Army Corps of Engineers Gulf Region South project sites in An Nasiriyah.

(All US Army photos)



The U.S. Army Corps of Engineers (USACE) faces many challenges in Iraq, but one of the most important ones that they focus on daily is the elimination of safety violations by the Iraqi workforce at their different construction projects.

Local nationals have endless complaints and excuses for not wanting to wear safety equipments. While many of these complaints are not valid, the USACE safety engineers patiently listen to them and make adjustments where possible. Personal safety equipment such as goggles, safety shoes, hard hats, gloves, and other protective items eliminate, if not prevent, accidents and safety violations while performing various construction tasks.

Accidents represent inefficiencies and cause increased costs, lost production and time delays. Safety violations can waste money and time, and represents a failure by management to control construction operations.

According to Russell E. Fennema, the chief of the Safety and Occupational Health Office with the Gulf Region South (GRS) District, safety is why he came to Iraq.

"The aim of my safety training was to help Iraq become a safer place to work and build," he said, "I came here with the idea that, as an American, I needed to share what talent I have to better the lives of the workers in Iraq."

The time spent on safety training will actually save time. Accidents cause a far greater amount of lost productivity than the small amount of time required to be devoted to safety training and other accident prevention activities.

"The only way to do this was to teach and train workers. To show them that being injured on the job was not OK," Fennema said.

"I wanted to give to people the skills I have in order for them to be able to recognize hazards and the solutions to preventing injuries," he said.

One of the USACE's commitments toward the Iraqi workers is to purchase the best equipment possible and teach the local associates why it is necessary and how to properly use it, and consistently enforce the wearing of the equipment when and where it is needed.

Fennema said that he supplies safety equipment to his Iraqi associates the same as he does for any worker coming from the United States.

They are given hard hats, gloves, shoes, glasses and, in some instances, face masks for dust control.

Any safety equipment that may be needed to help them do their jobs safely can be obtained by Fennema.

"There are instances where I spent my own [government funded] money to acquire the right equipment for the safety engineers. The reason I do is the equipment I could get from supply may not be appropriate for them to wear in public, considering the threats to people

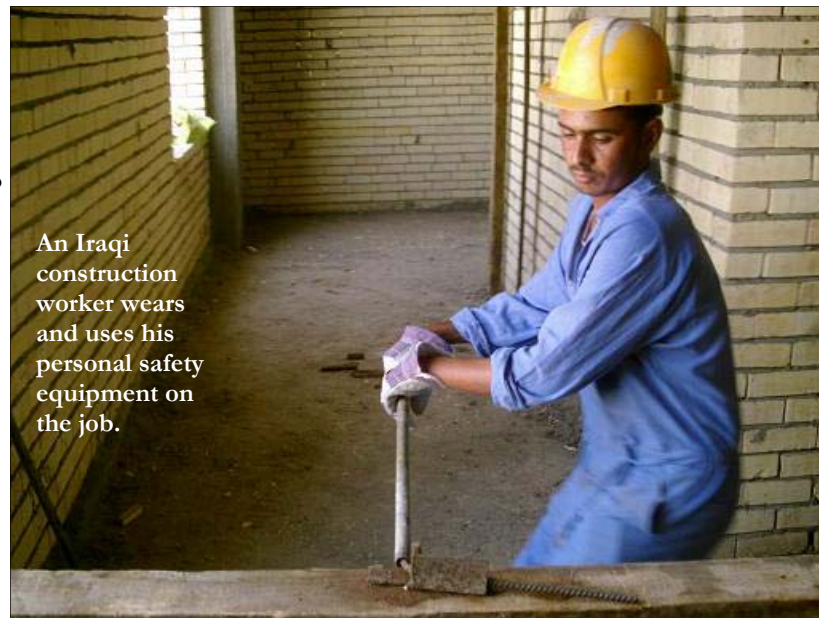
for working with the Americans," Fennema explained.

The Gulf Region Division Chief of Safety and Occupational Health Daniel Fujimoto said, "The mission of the district safety officer is to provide technical guidance and direction to the command elements relating to safety and occupational health."

"Safety is a team effort. Everyone is a safety officer from top management to the personnel in the field," Fujimoto said, "Our mission is to review and observe the contractor's safety program and provide guidance to the contractor or Army representative about the safety program for the project."

"Sometimes we are viewed as the technical experts in the field and need to provide direction to correct an unsafe act or condition to allow the work to continue. Everyone is a safety officer and

*Continued next page*



An Iraqi construction worker wears and uses his personal safety equipment on the job.



**Left: GRD Safety and Occupational Health Chief Daniel Fujimoto travels frequently to conduct safety checks at construction sites. Right: GRC Safety Officer Catharine Bosold at Al Taji Air Base take a moment from discussing safety issues for a photo.**

has the authority to stop work or phase of work for immediately dangerous conditions or environments to life and health that could cause serious injury, death or property damage,” Fujimoto said.

The GRD safety and occupational health office and the safety officers in the three district headquarters, work hard to train the Iraqi associates how to prevent safety violations and eliminate accidents at the construction sites, and ensure that training is provided for everyone involved in construction.

Jerry A. Cummings, a safety and occupational officer with Gulf Region North, said that he conducted two training sessions on construction safety in Kirkuk in October, and that he also provided construction safety classes at Camp Anaconda and the headquarter in Tikrit.

“We show the Iraqi associates what is wrong and why it is a hazard. Here in Iraq, it is important to come up with alternatives to fix the problems,” Cummings said.

“It may not be exactly like we would fix a problem at locations in the States because the locals don’t have the same resources we have, but we always try to find some alternatives to help keep the job site safe,” he added.

The USACE and the Iraqi safety engineers often ask the main contractors and the subcontractors to provide their work-

ers with weekly safety training and to investigate and report on any accidents that may happen throughout the construction cycle.

Fujimoto said that all contractors are required by contract to implement a safety program that meets or exceeds contract requirements.

“Quality assurance representatives are the eyes and ears of the Area and Resident Offices for quality and safety,” he said “They’re not the safety officers for the project, but they do report safety findings on their quality assurance reports. They also partner with the contractors to address unsafe acts or activities.”

Fujimoto encouraged in addition to filing accident investigation reports to supervisors, these reports also be coordinated with the appropriate safety officer to ensure safe guards or better practices are adopted. Otherwise, these reports provide only an account of the incident and not an opportunity to prevent future similar occurrences from happening.

Fujimoto said that if the safety findings cannot be resolved in the field, then the Area or Resident Office usually gets involved to rectify the situation or issue.

He also explained that they have vital Iraqi assets for the USACE safety program. These Iraqi safety engineers travel all around Iraq to inspect project sites, while risking possible enemy attacks everyday for safety.

“That is truly amazing to me and I admire their dedication,” Fujimoto said, “I view the Iraqi safety engineers as pioneers and founders of establishing a safety culture here in Iraq.”

All accident investigators are taught that the purpose of the investigation is to determine the cause of an accident and to develop corrective actions to prevent similar accidents in the future.

The aims of the safety training are to improve safety performance, reduce accidents and injuries, and have better safety accountability. This is how one makes the workplace as safe as possible.

“There are many things that I have taught, but the most important one was teaching three Iraqi engineers who work for me in the safety office to go out and teach others,” Fennema said. “They have gone from being students in safety to training many different safety topics on their own.”

**Mohammed Aliwi , GRS**

## Hillah Federal Courthouse Construction Started

**R**ecently the Babil Area Office participated in a groundbreaking ceremony to commemorate the start of the Hillah Federal Courthouse. The \$6.5 million project will provide a quality state of the art justice complex serving the Babil Province.

“I’m proud to be a part of this project to help bring security and justice to the Babil Province,” said Maj. Kevin Stoll, Babil Resident Engineer.

The Courthouse is a multi-floor structure constructed primarily of concrete and masonry materials. The site provides several challenges in its low elevation and flat topography. It will require removal of existing soil and additional fill to provide an adequate foundation and drainage.

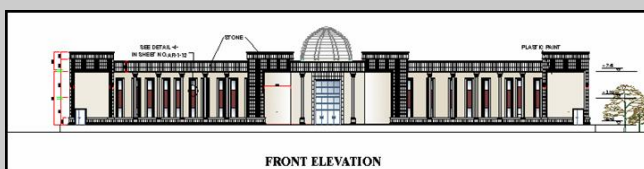
The interior and exterior spaces are efficiently organized for a user friendly environment and will be emblematic of a quality Courthouse. The project is estimated to require 16 months to construct, which will allow for operations to begin in 2008.

The project will provide a courthouse that will symbolize a good and fair justice system for more than 5 million residents of the Babil Province and South Eastern Region.

**Ken Holder, GRS**



**Maj. Kevin Stoll (from left); Gary Jones, Babil RO Construction Rep; Architect Abass Ismael, Deputy Babil RE; Chuck Riley, Forat Area Engineer; Lt. Col. Gus Washington, GRS MNSTC-I PM; Lt. Col. Lorenzo Valenzuela, GRS Deputy Commander; and Lt. Col. Kirk Stemple, Babil Deputy PRT Leader. Below is an artist’s rendering of the courthouse’s front view after construction (Photo by Ken Holder)**





*Hail and Farewell*

**Hailing:**

George Afram, GRC  
 Shirwan Aran, GRC  
 Antonio Bastidas, GRS  
 Charles Bauer, GRS  
 Crystal Bond, GRS  
 Julie Davis, GRS  
 Norma Dean, GRS  
 Maj. Gerald Dull, GRN  
 Paul Farley, GRS  
 Michael Fellenz, GRS  
 James Foster, GRC  
 Tony Fox, GRS  
 Sherry Gaylor, GRC  
 CDR Jerry Gompers, GRC  
 Stephen Grandison, GRC  
 Maj. Chris Hahn, GRN  
 Frank Heaton, GRN  
 Rich Holeman, GRS  
 Jenny Hughes, GRS

Robert Jackson, GRS  
 Matthew Johnson, GRS  
 MA1 Robin Jones, GRC  
 Larry King, GRC  
 ENS Robert McCharen, GRC  
 LCDR Jay Mitchell, GRC  
 Julie Meyer, GRN  
 Joseph Nolin, GRC  
 Roger Nowicki, GRC  
 Robin Parks, GRS  
 Tosca Patchus, GRS  
 LCDR Jeffrey Powell, GRC  
 Natasha Priddle, GRS  
 Saber Qader, GRC  
 Ruth Richmond, GRS  
 Chuck Riley, GRN  
 Frank Sanchez, GRS  
 CDR Geoffrey Schuller, GRC  
 Michael Scott, GRS  
 Brian Smith, GRS  
 Tony Soliz, GRN  
 Inhui Spann, GRS  
 Ricardo Vazquez, GRC  
 Jeremy Way, GRC  
 MMCS Bruce White, GRC

**Farewelling:**



**Diane "DeDe" Pacheco**



**CPT Mark Slate**



**CPT Chad Nichols**



**MSG Danny Huffman**



**CH Autumn Trainer**  
Virginia Beach, VA



**Martin Munoz**  
Fayetteville, NC



**CH Michael Yule**  
Norfolk, VA



**Bruce Moore**



**Stanley Brown**



**Connie Burris**  
Seattle District



**Eugene Flemming**



**Brian Brobson**  
TAC



**James Ruyak**  
Remer, MN



**Thomas Weber**  
Tampa, FL



**Steve Strength**  
Annapolis, MD



**LCDR Gregor Bo**  
Washington Navy



**Bonnie Tudor**  
Fredericksburg, VA



**Stephen Gibbs**  
Helendale, CA



**CDR Keith White**  
Muscatine, IA



**Joseph Moody**  
Mobile District



**Kenny Carleton**



**Kathy Pehnke**



**Tom Armstrong**



**Gwen Armstrong**



**Ruby Pierce**



**Linda Page**



**LT Michael Chucran**  
Naples, Italy



**Celestino Mercado**  
Las Vegas, NV



**John Wessel**



**Jerry Cummings**



**Dan Klopp**



**Bernice Chavez**  
Albuquerque District



**Michael Costello**



**Russell Fennema**



**Jesus Alvarado**



**Thell Robinson**