

t was anticipated in 2005 that if U.S. forces remained in Iraq, they would occupy four large contingency operations bases (COBs). This assumption lead to the sourcing of four facility engineer teams (FETs) to supplement the anticipated Directorate of Public Works (DPW) cells of mayor's sections created from the respective area support groups. By late 2007, U.S. forces had more than 50 bases throughout Iraq, some of them exceeding the concept of a COB, and all requiring more facilities engineering expertise than was available.

DPW Challenges

hile each base is slightly different, Logistical Support Area (LSA) Anaconda will serve as an example. The mayor's section—an ad hoc unit



A Soldier modifies a manhole to add to an existing drainage system to accommodate the COB's expanding needs.

responsible for the administration of the base—has a DPW cell consisting of three officers, supported by a FET, which is responsible for the management of a COB with the population of a small city. The challenges facing this team are—

- Delivery of utilities.
- Planning for the growth of new programs.
- Competing interests for real estate.
- Improvements to quality of life.
- Quality of contract construction.

Working closely with this team are-

- KBR, the Logistics Civil Augmentation Program (LOGCAP) operations and maintenance contractor.
- The Gulf Region Division office of the United States Army Corps of Engineers (USACE).
- Local contractors.

Even with these enablers, the staff is challenged by the requirements of running the facility.

The FET has been assigned to provide master planning support and develop and execute construction projects for the COB tenant units and organizations. The FET has some design capability and provides expertise in facilities engineering and construction management. However, there are many more locations in-country that need FET assistance with everything from drainage issues to building design such as ammunition holding and transfer point placement and construction.

The LOGCAP contract provides the basis for obtaining critical logistic and life sustainment services in the operational environment. This is a proven concept and has reduced the number of Soldiers providing logistics, enabling the Army to use its personnel for combat power and direct combat support roles. It should be remembered, however, that this effort is a contract and the purpose of any business bidding on work is to make a profit. KBR provides its services for a fee. The government's representative, whether military or civilian, should know the facilities operations and management business just as well as the contractor to ensure the implementation of the most efficient solution that meets mission requirements. Independent government estimates and engineering designs should be developed by experienced engineers who know the facilities business. Contract oversight is still required by the customer to ensure that services are delivered.

Long-Term Solutions Required

ince U.S. forces were working in a tactical environment, originally it was believed that long-term solutions were not required. The relatively short deployment cycles of Army and Air Force DPW units helped perpetuate that outlook. Those cycles focused on providing immediate needs and responding to the tactical fight, rather than planning for future requirements. The longterm focus has been provided by the Multinational Corps-Iraq (MNC-I) engineer staff (C7) in the development of some military construction (MILCON) projects such as power plants and incinerators. The result of this is a lack of focus on some installation-level infrastructure concerns such as water distribution, storm water management, and other issues that require a longer-term approach to design and construction.

I believe that the cause of these problems is the lack of a professional DPW staff that is sized

appropriately for the COB population. The Army should provide a phased approach to a civilian DPW with a military director. This approach would be no different from the evolution of support in Bosnia or for the bases in Kuwait. Early in the Iraq War, FETs were deployed to Kuwait as the DPW cell for bases there, and that support was phased out by Army Central Command as those bases evolved. The target for implementation of the phased plan in Iraq should be fiscal year 2009, which would correspond to the current FET deployments. This DPW organization could work for either the theater engineer or the corps support command.

The initial step is for the FET and mayor's section to hire civilian engineers (either vetted local nationals or expatriates) to augment the DPW workforce. The hiring of local nationals could provide a secure environment for professionals to return to Iraq with opportunities for long-term employment. Positions required would include construction management professionals and design engineers of all disciplines. This would facilitate improvement of services on those COBs that have FETs, allowing for a complete implementation of the current plan to have the FETs provide services in general support to the support command and multinational divisions. By thickening the engineer force with additional workers, Army and Air Force engineers could leave the COB work to a civilian workforce and focus their own efforts on the more remote forward operating bases (FOBs) and combat outposts that need engineering assistance.



Unmarked buried utilities create a challenge for trenching operations during base improvements.

The follow-on organization should be developed by the theater engineer and Army Central Command to manage this high-cost area of infrastructure support. A Directorate of Facilities Engineering-Iraq, headed by a colonel and charged with management of the COBs in Iraq, should be established. Initially, this could be an expanded engineering and reconstruction (G7) section of the corps support command, providing logistics support to the major COBs.

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This management task should include authority for the operations and maintenance budget, which would provide central management, command emphasis, and visibility of the costs associated with the COBs. In addition, this new directorate should be the conduit of good ideas from one COB to another and the repository of successful statements of work for service contracts. The force structure would include officers who would report to the directorate but work for each COB. These officers would manage a civilian DPW organization consisting of Department of the Army civilians and contractors (or local national workers, as appropriate).

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