

U.S. ARMY CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY

TESTIMONY OF

**LLOYD C. CALDWELL, P.E.
U.S. ARMY CORPS OF ENGINEERS
BEFORE THE**

**COMMITTEE ON VETERANS AFFAIRS
UNITED STATES HOUSE OF REPRESENTATIVES**

ON

**BUILDING VA'S FUTURE – CONFRONTING PERSISTENT
CHALLENGES IN VA'S MAJOR CONSTRUCTION AND LEASE
PROGRAMS**

November 20, 2013

Mr. Chairman and Members of the Committee, I am Lloyd Caldwell, Director of Military Programs for the U.S. Army Corps of Engineers (Corps). I provide leadership for execution of the Corps' engineering and construction programs in support of the Department of Defense (DOD), other agencies of the Federal Government in the United States and around the globe. Lieutenant General Thomas Bostick, Chief of Engineers, leads the Corps. Thank you for the opportunity to testify here today.

The Corps fully recognizes the importance of the service of members of the armed forces, the support of their families, and the service of our veterans, in sustaining the strength of our nation. We understand the vital link between the goals of their service and missions and the technical capabilities we provide, from consultation to delivery of infrastructure. Members of our team have had the opportunity these past several months to engage some of your staff members as they have conducted fact-finding on the Corps' construction capabilities and experience with delivering medical facilities. Today we have been asked by the committee to address our approach to delivering construction; more specifically construction of medical facilities.

DOD's construction program utilizes designated construction agents, of which the Corps is one; who procure and execute design and construction of projects to deliver the Department's infrastructure requirements authorized by law. All construction is acquired by contracting with the private sector. The Corps is also known for the Civil Works mission it provides for the Nation, and the Corps' capabilities are perhaps uniquely developed to fulfill both military and civil engineering responsibilities. Interagency collaboration is an important element of the Corps' work, and the Corps provides interagency support as a part of its service to the nation.

My testimony will address the Corps' project delivery process, with specific attention to medical facility construction and the interagency relationship with the Department of Veterans Affairs (VA). First, I will provide an overview of the principles and processes our teams use as they plan and execute the projects that we undertake. That will be followed by a discussion of the relationship the Corps has with the VA and how we support their mission through the work we do on their behalf across the nation.

CONSTRUCTION PROCESS

The Corps has a long history of executing some of the nation's most challenging construction projects and programs, whether through our military missions or Civil Works responsibilities. The past 12 years have been especially demanding as we have simultaneously provided support to operations in Iraq, Afghanistan and to DOD as it transforms and realigns. During this period, the Corps completed 2,165 military construction projects with a value of \$50.3 billion. The Corps has delivered, or is in the process of designing and constructing, a full range of medical facilities for DOD, to include very large hospitals valued near a billion dollars, and capable of delivering world-class medical services. A summary of some of the recently completed and ongoing Corps work of significant medical facilities follows.

Location	Description	Delivery	Authorization
Fort Belvoir, VA	New Hospital completed	2011	\$1.03 billion
Fort Sam Houston, TX	Hospital Addition completed	2011	\$802 million
Fort Riley, KS	New Hospital under construction	2014*	\$404 million*
Fort Benning, GA	New Hospital under construction	2014*	\$350 million*
Fort Bliss, TX	New Hospital under construction	2016*	\$966 million*
Rhine Ordnance Barracks, Germany	New Hospital under construction	2021*	\$990 million*

* Planned or scheduled as of November 1, 2013

The Corps has long sought to lead, adapt, and apply important lessons of design and construction in conjunction with our industry partners to obtain economical and quality facilities meeting the requirements of DOD in a disciplined manner. For example, we applied concepts of Evidence Based Design with the DOD Office of Health Affairs to guide development of world-class medical facilities, and with the DOD Education Activity (DODEA) we developed design concepts for 21st Century school facilities.

Regardless of the nature of the facility, the Corps has developed and implemented processes and capabilities for design and construction, which have been refined over

many years. Our project management business process brings together the range of diverse professionals and activities required of a successful project, which includes our design, construction, acquisition, and project management professionals. Success depends upon early involvement to understand the overall project objectives and to plan the approach to execute the project from design through construction. We think of four fundamental elements to deliver successful projects:

1. Learning what is needed;
2. Planning the work;
3. Executing the procurement; and
4. Managing the execution.

Each of these elements represents unique skills, involving multi-disciplined teams who account for project scope, delivery schedule, and ultimate cost as team members work collaboratively with one another. These basics must be managed concurrently, in a continuous cycle that occurs throughout the life of a project.

The responsibility for programming and budgeting for construction projects rests with the service or agency requiring the facility. However, the ultimate success of a project depends upon early development of the scope and acquisition plans of action, including validation of the scope and cost estimates. Learning about a project requires early involvement by the Corps with the project—"Using Agency" to understand and assist with development of their requirements. We have found the sooner our professionals are involved, the greater our ability to deliver a successful project and minimize cost or time growth.

Planning work begins as requirements are being developed. It engages all stakeholders and involves more than facility design. We also define and align requirements that may compete for cost, scope, or schedule objectives. Plans for acquisition, work phasing, and project delivery are agreed upon early, and before construction. We will determine the project acquisition processes, which will influence the design process and development of the solicitation. For medical facilities, the

medical equipment requirements may be extensive, so decisions are made among the team for the manner of acquisition of medical equipment.

Execution is a team effort from design through construction to include clinicians and medical service personnel of the Using Agency for medical facilities. During construction, we partner with the prime contractor and the government management team. Frequent, periodic meetings ensure open lines of communication to enable clear understanding of what all parties need throughout the project's life.

A governance approach that involves oversight from the job site to Corps leadership ensures early recognition, leadership awareness, and decision-maker involvement in resolving problems. A series of structured control processes, implemented throughout the organization, are designed to identify and evaluate issues with our partners as they arise and minimize the time it takes to address and resolve them.

Training is also a vital component in maintaining professional standards and keeping up to date on current practices. We maintain educational courses and require or encourage professional credentialing in the processes and disciplines required for our mission. We provide specialized technical training across a broad range of subjects, providing continuous learning, essential to maintain the highest levels of expertise in engineering and construction throughout the Corps. We also draw heavily from the Defense Acquisition University, its certification and continuing education programs to maintain contracting competencies.

Budget and schedule risk is inherent in executing any construction projects, and medical facilities are among the most complex facilities we construct and deliver on behalf of DOD. They require close, frequent coordination with a large number of stakeholders, often with divergent interests and requirements. They require exacting technical design and construction standards, both of which must be carefully managed. Moreover, they are subject to changing requirements due to evolving medical technology – even during construction. We manage the challenges posed by those risks, and we seek to minimize the cost and time growth risk which complex medical facility construction may face.

To assure the standards and criteria of the Defense Health Agency, and to assist in their planning, we established specialized medical infrastructure capabilities and employ them across the enterprise to assist us in delivering medical projects. Our Medical Center of Expertise at Fort Belvoir, Virginia, applies current specialized knowledge to address demanding health care facility requirements. It provides a full range of medical facility design, construction, outfitting, commissioning, and medical maintenance capabilities that support the Defense Health Agency. The Center's staff includes subject matter experts in medical facility design and construction, serve as technical consultants, and draw on architect-engineer firms experienced in medical facility design. They participate in every phase of project delivery, from requirements development to project close out, and ensure we meet the full range of health care facility standards.

The Corps has broad experience across its enterprise in construction and delivery of medical facilities. Of our forty-three local district offices, seventeen of them (40 percent) have significant experience in medical facility design, construction, outfitting, repair, and maintenance. They have demonstrated the ability to deliver this demanding work on time and on budget.

THE CORPS' RELATIONSHIP WITH THE DEPARTMENT OF VETERANS AFFAIRS

The Corps, as part of its interagency capabilities, has an established relationship with the Department of Veterans Affairs (VA), providing support for a broad range of facility construction and maintenance requirements. Authority for the Corps' work with VA is based on the Economy Act, which, coupled with an interagency agreement, provides us with sufficient authorities to work collaboratively. During 2007, the Corps of Engineers and the VA formalized its relationship through a Memorandum of Agreement (MOA) for the Corps to provide the VA support in the execution of their minor construction and non-recurring maintenance needs.

As veterans started returning home from service in recent conflicts, and increased funds to support facilities became available, VA leadership drew on this MOA, increasingly asking the Corps to assist with its construction needs. Prior to fiscal year 2007, Corps execution support to VA was at or below \$2 million annually for work for the Veterans

National Cemetery Administration. In 2007, the workload grew to \$7 million and quickly began to rise as follows:

Fiscal Year	Execution Amount (\$ millions)
2008	14
2009	108
2010	348
2011	377
2012	340
2013	239

As execution funds have grown over the years so has the collaborative relationship between the Corps and VA. Corps Headquarters has a good and stable relationship with the VA's Office of Construction and Facility Maintenance. Our regional and local offices have also developed relationships with each of the 23 Veterans Integrated Service Network (VISN) offices around the country; in the most recent two years, the Corps managed work at 74 different VA facilities nationwide. Whether and how a VISN incorporates the Corps services into its projects is at the discretion of each VISN.

One example of our efforts is the recently completed 30,000 square foot expansion of the Grand Junction, Colorado VA Medical Clinic. We added a third floor surgery facility to an active facility, including operating rooms, intensive care units, and sterile processing areas. The project demonstrated our ability to work closely and collaboratively. Much of the work was accomplished at night, to minimize impacts to the operations. The local VA public affairs office provided project related information to the staff – establishing expectations and minimizing impacts. When issues arose, VA and Corps leaders worked through them, never allowing an impasse to divert from their collective goal – completing a vital facility to serve our veterans.

Our relationship is growing; we are currently working together to assist VA develop and implement an enterprise construction governance capability; we expect to begin this

effort within two months. We've also collaborated with the VA to provide training opportunities using a variety of instructional modes. We expect to assist with construction project quality management, schedule analysis and management, and project management automated information systems familiarization – all within the next four months.

The Corps plays a unique role in service to the nation as a subordinate command of the Army with expertise in both civil works and military infrastructure; we possess unique capabilities and have a long history of successfully solving demanding engineering challenges. We also acknowledge the solemn duty to care for our veterans and will continue to support those efforts with our most capable teams as we continue to develop our support and assistance relationships with the VA.

Mr. Chairman, this concludes my statement. Thank you for allowing me to be here today to discuss the Corps' construction capabilities. I would be happy to answer any questions you or other Members may have.