



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO, CALIFORNIA 94103-1399

South Pacific Division

July 15, 2015

The Honorable Sloan Gibson  
Deputy Secretary of Veterans Affairs  
810 Vermont Avenue NW  
Washington, DC 20420

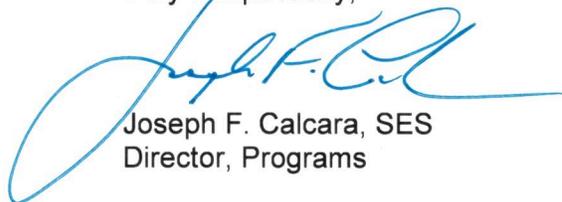
Deputy Secretary Gibson:

It is with distinct privilege that I submit the US Army Corps of Engineers (USACE) Diagnostic Assessment for the Department of Veterans Affairs (DVA) North Las Vegas Medical Center. The enclosed report provides detailed evaluations of more than thirty (30) tactics, techniques, and procedures across the three specific phases of project delivery, namely, Planning-Programming, Engineering-Acquisition, and Construction Management-Commissioning.

Through direct engagements with your staff, the contractor, the designer of record, and key stakeholders at the project site from the period April through May 2015, strengths and weaknesses were assessed against comparable standards that Department of Defense (DOD) and USACE use for major medical infrastructure. It should be noted that all observations, analytics, and recommendations offered are based on informed and reasonably defensible conclusions; however, due to the scale, scope, and term of the effort, this assessment should not be construed as conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS).

Our USACE Review Cadre found the spirit of collaboration, candor, and professionalism from every member of the DVA workforce we engaged as exceptional. We look forward to any future opportunity to assist and advise your efforts supporting our Nation's Veterans. As always, I may be reached on 415-503-6550 or at [joseph.f.calcara@usace.army.mil](mailto:joseph.f.calcara@usace.army.mil) if you require any further engagement regarding this effort.

Very Respectfully,

A handwritten signature in blue ink, reading "Joseph F. Calcara", is written over the typed name and title.

Joseph F. Calcara, SES  
Director, Programs

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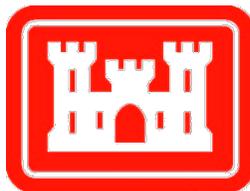
**MAJOR MEDICAL CONSTRUCTION  
UNITED STATES DEPARTMENT OF VETERANS AFFAIRS**

**A DIAGNOSTIC ASSESSMENT  
BY THE  
UNITED STATES ARMY CORPS OF ENGINEERS**

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**NORTH LAS VEGAS MEDICAL CENTER**

**15 JULY 2015**



**US Army Corps  
of Engineers®**

*Note: This USACE Report details in-depth observations, analytics, and diagnostics used to reach informed and reasonably defensible conclusions contained herein. It should be noted, however, that due to the scale, scope, and term of the effort, this assessment should not be construed as an audit conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS) and related Federal standards.*

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## ***EXECUTIVE SUMMARY***

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In April 2013, the Government Accountability Office (GAO) concluded that costs substantially increased and schedules were delayed for Department of Veterans Affairs' (DVA) largest medical-facilities construction projects located in Aurora, Colorado; Las Vegas, Nevada; New Orleans, Louisiana; and Orlando, Florida. In April 2014 Congressional testimony, GAO reported the cost increases for these projects were ranging from 66% to 427%, with schedule delays ranging from 14 to 86 months. In January 2015, DVA senior leadership approached the US Army Corps of Engineers (USACE) to evaluate the tactics, techniques, and procedures (TTPs) which had been used at these projects. USACE developed a detailed diagnostic screening tool to assess DVA strengths and weaknesses across the phases of a project life cycle against comparable standards that Department of Defense (DOD) and USACE use for major medical infrastructure construction program. This report addresses the North Las Vegas project.

Detailed diagnostic evaluations of more than thirty (30) line item inputs across the three specific phases of project delivery — Planning-Programming, Engineering-Acquisition, and Construction Management-Commissioning — were performed, and contractor, designer, and key stakeholder interviews were also conducted at the project site. Consensus observations and conclusions for the North Las Vegas VA Medical Center project are as follows:

Growing from an initial concept of outpatient clinic collocated with medical facilities at Nellis Air Force Base to a stand-alone full-scale hospital complex with a specialty care unit and inpatient rehabilitation, the USACE Review Cadre concluded that DVA has met or exceeded a majority of movements, measures and milestones used in typical DOD and USACE TTPs. The implementation of Design-Bid-Build acquisition methodology was a success, and benefited greatly from exceptional teaming between DVA and the contractor at the Resident Office. Of particular noteworthy mention, Facilities Criteria Requirements Validation, Adoption of Energy and Sustainability Goals, and Project Concept Development through 35% Design were all commendable and consistent with typical DOD and USACE TTPs. DVA was somewhat less than fully successful, however, in managing schedule and changes. Nonetheless, despite further planned changes to this medical center continuing, the completed areas provide quality, functional facilities that should be regarded as a premier model for future medical center construction.

Lastly, USACE was tasked with developing prescriptive recommendations on process, structures, and oversight controls to drive predictable cost and schedule performance. At North Las Vegas, typical root causes driven by mis-alignment of organizational priorities, expectations, and accountability across the various levels of DVA on other challenged projects were for the most part mitigated as best as possible by the extraordinarily collaborative efforts of the Senior Project Executive, the Medical Staff, the Architect-Engineer of Record, and the Contractor. Working through myriad challenges and changing requirements, the individuals involved successfully resolved conflicts to derive defensible facilities standards, effect prudent governance, and attain reasonable project outcomes especially given the dramatic changes to scale, scope, and nature of the final medical center requirements. At the time of this report, additional requirements for expanded emergency room capabilities remain in flux. Nevertheless, this was the most successful project observed of the four indentified in the April 2013 GAO study visited by the USACE Review Cadre, in particular given the weakness in DVA process to manage user-driven changes within approved budget controls.



## ***TASK & PURPOSE***

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In late January 2015, Department of Veterans Affairs (DVA) senior leadership approached the US Army Corps of Engineers (USACE) acting by and through their Senior Executive at South Pacific Division in San Francisco to:

- (1) Devise and perform a diagnostic evaluation to determine strengths and weaknesses in Tactics, Techniques, and Procedures (TTPs) used by DVA in delivery of their medical facility and infrastructure construction projects;
- (2) Conduct project executive, designer, construction contractor, facility manager, and other key stakeholder interviews to refine and/or validate conclusions; and
- (3) Provide prescriptive recommendations on process, structures, and oversight controls to drive predictable cost and schedule performance in DVA medical facility and infrastructure construction projects.

## ***PROJECT SCOPE***

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The VA Medical Center in North Las Vegas consists of approximately 1,050,000 BGSF new buildings. Key components of the project include:

- *Inpatient bed unit for approximately 90 beds*
- *120 - Bed Community Living Center*
- *Outpatient Clinics*
- *Ambulatory Care Center*
- *Mental Health Clinic*
- *Diagnostic and Treatment Center*
- *Geriatrics and Extended Care*
- *Veterans Benefits Administration Offices*
- *Surface parking for approximately 2000 cars (patient, visitors and staff)*
- *Central Energy/Utility Plant (Boilers, Chillers, Emergency Generators)*
- *Receiving Materials Facility*

## ***PROJECT BACKGROUND***

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The North Las Vegas Veterans Affairs Medical Center was the first major infrastructure project constructed by DVA in more than 15 years. In original 2001 concept the North Las Vegas facility was planned as a Department of Defense-Department of Veterans Affairs joint venture to provide a mega outpatient clinic on Nellis Air Force Base. In 2003, a determination was made by the DVA Capital Asset Board that a joint facility was not feasible due to heightened Department of Defense security requirements and their anticipated impacts on patient and staff access to the facility. Following the end of the joint venture, DVA undertook a significant re-scoping for the planned North Las Vegas facility, converting its concept to a full medical center with inpatient beds. The concept revision, however, did not account for square footage specificity. Furthermore, fluctuations in the booming Las Vegas construction market at that time drove uncertainty and brought on unknown cost risk to the North Las Vegas project, exacerbated by its Federal funding received in multiple, incremental phases that were mis-aligned with revised scope.



In 2005, DVA specified a cost at \$400,000,000. Construction Market rates at that time, however, resulted in a shortage of over 300,000 BGSF for the facility. Design shortages clearly existed, with space planning having been conducted prior to implementation of the more efficient Space and Equipment Planning System (SEPS). Furthermore, the DVA parking study conducted for the site differed significantly with Clark County Nevada code requirements, forcing DVA to increase parking by 25% at additional cost.

The North Las Vegas project has been executed in multiple phases:

- I. *Site Utilities and Energy Plant (Design-Bid-Build)*
- II. *Building Foundation (Design-Bid-Build)*
- III. *120 Bed Nursing Home Care Unit (NHCU)/Community Living Center (CLC) (Design-Build)*
- IV. *New Medical Center (Design-Bid-Build)*
- V. *Admin Building (Design-Bid-Build)*
- VI. *Emergency Dept Expansion (Design-Bid-Build)*  
*(There is also an ongoing Women's Clinic Upgrade, with no phase designation.)*

## **ASSESSMENT APPROACH & METHODOLOGY**

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Industry-authenticated TTPs have been adopted by DOD and utilized successfully by USACE in delivering medical facilities and infrastructure projects for the Defense Health Agency, and other military organizations. Based on DOD practices a diagnostic screening tool was devised to evaluate strengths and weaknesses across three key phases of project delivery: Planning-Programming (reference Tab 1), Engineering-Acquisition (Tab 2), and Construction Management-Commissioning (Tab 3). DVA Senior Leaders from the identified projects were briefed and concurred with the specifics and methodology of the diagnostics screening tool, which included more than thirty (30) movements, measures and milestones that are the key enablers to driving predictable cost and schedule results.

The USACE Review Cadre of highly qualified experts in engineering, construction, program management, and acquisition contracting conducted extensive on-board assessments through collaborative presentations and discussions that included documentation and other pertinent information from DVA, GAO, and other sources, including a site visit to interview contractors, facility managers, medical center directors, and other key stakeholders. The USACE Review Cadre asserts the enclosed information and observations contained herein has provided a reasonable basis for informed and defensible conclusions. Following are findings of the assessment arranged by three key phases of project delivery.



## ***SUMMARY of FINDINGS***

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### ***PLANNING-PROGRAMMING***

#### **STRENGTHS**

- ***Planning Guidance*** – *Minimal square footage specificity permitted flexibility.*
- ***Site Selection*** – *Facility site granted by BLM.*
- ***NEPA / LEED*** – *NEPA documentation requirements met.*

#### **WEAKNESSES**

- ***Planning Guidance*** – *Unclear project direction (clinic vs. medical center), followed by large-scale change to full-scale replacement; Lack of square footage specificity resulted in unclear command direction.*
- ***Prioritization / Programming / Authorizations & Appropriations*** – *Mis-aligned / ill-defined / incremental funding.*

With the North Las Vegas facility the first new major construction project undertaken by DVA in more than fifteen years, DVA planners were challenged by its growth in scale following the end of the joint venture with Nellis Air Force Base. While DVA was fortunate to acquire at no cost a nearby parcel in North Las Vegas from the Bureau of Land Management (BLM) to keep this project viable, the growth of the revised project scope and scale remained daunting. A lack of design specificity in square footage from clinic to hospital, while ideal for flexibility in fitting out the future facility to meet need, also brought forth unclear direction with respect to the desired end product. Vague design direction, along with space, equipment and parking planning, while mitigated to the extent possible by the collaborative strength of the team on the ground controlling Requests for Information (RFIs), nevertheless exacerbated schedule and cost growth. Further, as in the case of the Denver-Aurora and Orlando projects, Federal funding was provided incrementally and mis-aligned with construction phases, causing further construction delays and cost escalation at the highpoint of the Las Vegas construction market boom.

With cost-share arrangement dissolved, major change in concept design (clinic vs. hospital), unfocused guidance on design of function and space, and its incremental multi-phase funding stream, DVA struggled with maintaining a well-defined project. Accordingly, under these conditions, it was nearly certain the North Las Vegas project would experience cost and schedule growth from the originally reported baseline.

### ***ENGINEERING-ACQUISITION***

#### **STRENGTHS**

- ***Acquisition Strategy*** – *Design-Bid-Build and Design-Build.*
- ***Advertising & Award*** – *Timely.*

#### **WEAKNESSES**

- ***Develop Project Management Plan*** – *Project initially not fully staffed.*
- ***35% Design Approval*** – *Project expansion into multiple phases beyond original plan.*
- ***Schedule Discipline*** – *Significant pause between Phase 3 and Phase 4.*
- ***Change Management*** – *Recurring, repetitive changes throughout.*



Regarding acquisition strategy, requirements changed to meet the growing healthcare demand from the Las Vegas region's veterans population. With the North Las Vegas project growing from an initial expanded clinic co-located with Nellis Air Force Base to a much larger medical center to be designed and constructed in multiple phases, DVA adjusted the acquisition strategy, with Design-Bid-Build used as the principle delivery method (>90% of cost), with the exception of the Phase III NHCU/CLC facility, which successfully implemented and executed a Design-Build contract.

With respect to its advertising and award processes, DVA was observed as succeeding, with each phase of the facility generally advertised and awarded in a timely manner.

Although a formal Program Management Plan (PMP) should be standard for all projects of the size and complexity of the North Las Vegas facility, no formal PMP appears to have been in place. DVA assigned roles and responsibilities, and used an integrated schedule, but did not appear to have a staffing plan, which would also have been included in a formal PMP.

Schedule discipline was observed as lacking. While the overall schedule growth for each phase of the project was modest (with a few exceptions), the overall schedule grew resulting from additional phases amended to the medical center concept. Furthermore, a seven (7) month delay resulted between Phases III and IV due to multi-incremental Federal funding, as well as completion of the space plan. These combined factors yielded significant schedule growth, as measured from the initial estimated completion date (April 2009) to the current projected final completion date, September 2015.

As reported at the USACE Review Cadre site inspections at Denver, Orlando, and New Orleans, the Resident Engineer Staff reported as a challenge the amount of vertical coordination required through CFM regional offices to VA Central Office in Washington, including routine administrative issues and change orders. Responses were seldom received in a timely manner. Good teamwork and communication was demonstrated by the onsite DVA contracting and project management team, and the contractor. Recurring changes coupled with the long process time for change orders and modifications were seen as a significant source of delays, and disrupted performance. Greater empowerment at the Resident Engineer Office would certainly have increased the speed of negotiations and changes, and collectively, this would have greatly enhanced project success.

## ***CONSTRUCTION MANAGEMENT-COMMISSIONING***

### **STRENGTHS**

- ***Partnering Resolution*** – Frequent informal partnering, engagement.
- ***Contract Administration*** – Well-staffed onsite team, with expanded use of contract management well-received; onsite A/E.
- ***Quality Assurance*** – Requirements met.
- ***Safety Management*** – Contractor responsibility.
- ***Equipment Installation*** – Dedicated user involvement.
- ***Commissioning*** – Third-Party commissioning agent as part of team.

### **WEAKNESSES**

- ***Change Management*** – Vertical coordination (including routine matters) through regional CFM to VACO burdensome, impacted project schedule.



Constructability was not performed on the deliverable in this acquisition. Final Criteria Revisions were viewed as having met the overall mean for construction of a medical center; however, concern remains there will be late revision in criteria, standards and/or codes requiring additional time to complete and add costs. The USACE cadre was advised that additional Federal funds have been allocated to the North Las Vegas facility, and the desire appears to use those additional funds rather than return unused funds for other projects.

Stakeholder partnering was viewed as a success, exceeding expectations. Formal partnering was performed as construction commenced, but was later transitioned to an informal protocol where the onsite team met frequently to tackle pertinent issues in a timely manner. This frequent engagement is credited as a success and resolved issues between the contractor and stakeholders at the lowest level. The process established a tiered conflict resolution process, but could not be graded as a total success as it failed to be effective in maintaining communication toward the resolution of major issues.

Contract Administration performance was met, due in part to a well-staffed onsite team, that included the Architect/Engineer (A/E) of Record and the expanded use of Construction Management Contracted Services to address gaps in resources. Change Management was conducted through a tiered approval process, and was viewed as having met the needs of project delivery; however, the amount of vertical coordination required through regional offices to DVA Central Office, including routine administrative issues and change orders, was reported and viewed as a significant challenge, with responses seldom received in a timely manner. Greater empowerment at the Resident Engineer office level would likely have increased the speed of negotiations and turnaround time on changes, and collectively, this would have greatly enhanced project success. Timeliness of the process and review of change order approval practice in DVA is recommended.

Quality Assurance was performed, and quality of the constructed work has not been identified as a concern. However, it was observed that the implemented quality assurance process tends more toward what is viewed as Quality Control with. Safety Management is performed by the Contractor, with Government enforcement by OSHA inspections. The effectiveness of the onsite safety could not be evaluated against other safety programs, as a DVA construction safety program does not exist, therefore measurable data does not exist for comparison (an observation also made at the Denver-Aurora and New Orleans project sites).

Equipment Installations are judged to have met criteria, with dedicated involvement by DVA medical and administrative staff.

Project Commissioning meets expectations, with an independent third-party agent integrated into the project delivery team early in the process. Final Acceptance is proceeding in accordance with facility planning. As-built documentation, training, user participation, and other factors integral to project close-out remain on track.



## ***INFORMED CONCLUSIONS***

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Given the initial concept for this project dramatically evolved from an outpatient clinic at Nellis Air Force Base to a standalone hospital complex in North Las Vegas, the cost and schedule growth experienced should be expected. With that said, the key elements identified as having controllable impacts to cost and schedule on the completion of the medical center are as follows:

**Change Management** — The delegated authority to the onsite DVA Project Executive was viewed as strong, allowing for an authoritative management of inputs and execution by all onsite parties and their moving parts (hospital administration, A/E, contractors and subcontractors). Late changes due to vagueness in design and incremental funding had their expected adverse impacts to schedule and cost; however, the collaborative strength of the North Las Vegas team appeared to contain these challenges.

**Contracting Capacity & Resources** — The North Las Vegas project has benefit of a very knowledgeable lead Contract Officer. Greater empowerment is defensible and would have improved the processing efficiency of change orders. Moreover, the lack of well-defined, standard process to implement recurring headquarters policy changes would made contact administration more effective.



## ***EPILOGUE***

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GAO has recently reported in its April 2015 testimony before the Senate Committee on Veterans Affairs additional observations regarding DVA actions to address problems managing its major construction sites:

*“VA has taken actions to implement the recommendations in GAO’s April 2013 report. In that report, GAO identified systemic reasons that contributed to overall schedule delays and cost increases at one or more of four reviewed projects and recommended ways VA could improve its management of the construction of major medical facilities. In response, VA has*

- *issued guidance on assigning medical equipment planners to major medical facility projects who will be responsible for matching the equipment needed for the facility in order to avoid late design changes leading to cost increases and delays;*
- *developed and disseminated procedures for communicating to contractors clearly defined roles and responsibilities of the VA officials who manage major medical-facility projects to avoid confusion that can affect the relationship between VA and the contractor; and*
- *issued a handbook for construction contract modification (change-order) processing that includes milestones for completing processing of modifications based on their dollar value and took other actions to streamline the change order process to avoid project delays.*

*[...] VA had taken steps to improve its management of major medical-facility construction projects, including creating a construction-management review council. In April 2012, the Secretary of Veterans Affairs established the Construction Review Council to serve as the single point of oversight and performance accountability for the planning, budgeting, executing, and delivering of VA’s real property capital-asset program.*

*[...] In our April 2013 report we identified systemic reasons that contributed to overall schedule delays and cost increases, and recommended that VA take actions to improve its construction management of major medical facilities: including (1) developing guidance on the use of medical equipment planners; (2) sharing information on the roles and responsibilities of VA construction project management staff; and (3) streamlining the change order process. Our recommendations were aimed at addressing issues we identified at one or more of the four sites we visited during our review. VA has implemented our recommendations; however, the impact of these actions may take time to reflect improvements, especially for ongoing construction projects, depending on several issues, including the relationship between VA and the contractor. Since completing our April 2013 report, we have not reviewed the extent to which these actions have affected the four projects, or the extent to which these actions may have helped to avoid the cost overruns and delays that occurred on each specific project.”*

*[Source: “VA CONSTRUCTION: Actions to Address Cost Increases and Schedule Delays at Denver and Other VA Major Medical-Facility Projects,” GAO-15-564T, April 24, 2015]*

With respect to USACE tasking to develop prescriptive recommendations on process, structures, and oversight controls to drive predictable cost and schedule performance, at North Las Vegas typical root causes driven by mis-alignment of organizational priorities, expectations, and accountability across the various levels of DVA on other challenged projects were for the most part mitigated as best as possible by the extraordinarily collaborative efforts of the Senior Project Executive, the Medical Staff, the Architect-Engineer of Record, and the Contractor. Working through myriad challenges and changing requirements, the individuals involved successfully



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resolved conflicts to derive defensible facilities standards, effect prudent governance, and attain reasonable project outcomes. This was by far the most successful project of the four listed in the April 2013 GAO report visited by the USACE Review Cadre. That stated, DVA demonstrated weakness in process for managing user-driven changes within approved budget controls. Lastly, significant challenges in recruiting, training, and retention of quality professionals exists across Federal agencies whose core competencies are to deliver engineering and construction projects, not alone at DVA where the function operates in a smaller, adjunct specialty organization.

In light of these observations by the USACE Review Cadre, reasonably defensible recommendations to preserve cost and schedule control on medical construction projects, include the following:

- (1) Incorporate into A/E design the latest advances in medical technology until the 35% design milestone is attained, at which time further changes in medical equipment planning (unless determined as medically required) must cease;
- (2) Cost/benefit analysis must be performed targeting reasonable, cost-effective interpretation of Planetree® and other Evidence-Based Design standards – an expectation observed to have been carried out at the North Las Vegas facility despite lack of formalized independent peer review process;
- (3) Implementation of facilities features and amenities must be commensurate with reasonably defensible cost-effective standards for attracting/retaining medical professionals to DVA – again, an expectation observed to have been carried out at the North Las Vegas facility despite lack of formalized independent peer review process.

In conclusion, many DVA evolving changes, such as locking budgets at 35% design, incorporating medical equipment planners earlier, enhancing onsite contract authority, and driving accountability through a vested project executive as done at North Las Vegas will certainly help; but organizational process that enfranchises engineering/construction proponents to manage with disciplined rigor must be embraced at all levels of DVA to avoid major delays and cost overruns in future medical infrastructure delivery.



# APPENDIX

Tab 1.

PLANNING-PROGRAMMING					
<i>E</i> ≡ EXCEEDED <i>M</i> ≡ MET <i>F</i> ≡ FAILED <i>O</i> ≡ OMITTED					
PROCESS POINT	DESCRIPTION	E	M	F	O
FACILITIES CRITERIA	Form – Fit – Functionality (DD 1391) and Real Property Planning, Analysis				Undetermined
PLANNING GUIDANCE	Define & finalize medical clinical requirements. Walls, circulation, common area sitework / Amenities / Size / Room placement. Planning Charrette.			X	
REQUIREMENTS VALIDATION	Integration of scope & scale (Criteria Tracking System) and Value-Based Charrette, Project Definition				Undetermined
SITE SELECTION	Validates site approval (Real Estate issues, Environmental Considerations, SHPO/Cultural)				X
PROJECT PRICING	Parametric PLUS USI augments (Documentation). Determine impact, contingency funding requirements.				Undetermined
NEPA / LEED	HQVA (VACO) signatory		X		
MEDICAL EQUIPMENT PLAN	Scale, Scope & Timing				Undetermined
PRIORITIZATION / PROGRAMMING / AUTHORIZATIONS & APPROPRIATIONS	Traditional DVA PPBES		X		

Tab 2.

ENGINEERING-ACQUISITION					
<i>E</i> ≡ EXCEEDED <i>M</i> ≡ MET <i>F</i> ≡ FAILED <i>O</i> ≡ OMITTED					
PROCESS POINT	DESCRIPTION	E	M	F	O
ACQUISITION STRATEGY	DBB <\$300M; DB vs ECI vs CM/Risk >\$300M		X		
DEVELOP PROJECT MGT PLAN	Detailed R & R; Schedule Integration		X		
MEDICAL FUNCTIONAL CRITERIA	Med Standards & Functional Practices		X		
PRE-DESIGN CONFERENCE	Infrastructure & Medical				Undetermined
CONCEPT DESIGN	Single Line Form & Fit		X		
35% DESIGN APPROVAL	Trigger for Final CWE			X	
SOLICITATION DOCUMENTS	RFP Source Selection		X		
AUTHORITY TO ADVERTISE	HQVA (VACO) Authorization		X		
ADVERTISING & AWARD	Best Value Selection		X		
SCHEDULE DISCIPLINE	Timely Decision & Action			X	
CHANGE MANAGEMENT	Formal Process Followed			X	
GOVERNANCE	Senior Project Executive, authority		X		

Tab 3.

CONSTRUCTION MANAGEMENT-COMMISSIONING					
<i>E</i> ≡ EXCEEDED <i>M</i> ≡ MET <i>F</i> ≡ FAILED <i>O</i> ≡ OMITTED					
PROCESS POINT	DESCRIPTION	E	M	F	O
CONSTRUCTABILITY REVIEW	Design-Build Deliverables				X
FINAL CRITERIA REVISIONS	Formal process and adherence		X		
PARTNERING RESOLUTION	Facilitated Formal Construction Partnering	X			
CONTRACT ADMINISTRATION	Onsite Professional Engineer / Administrative Contracting Officer		X		
CHANGE MANAGEMENT	Timely/effective process		X		
QUALITY ASSURANCE	Document Process with Independent Checks & Internal Verification		X		
SAFETY MANAGEMENT	Construction Safety Manual (EM 385-1-1, or similar OSHA)		X		
EQUIPMENT INSTALLATION	Integrated Master Schedule & Building Integration Model (BIM) to avoid conflict		X		
COMMISSIONING	Medical Center of Expertise and Bench of Internal and A/E Support Contracts		X		
FINAL ACCEPTANCE	Red-Zone Protocol		X		



## **USACE REVIEW CADRE BIOGRAPHICAL INFORMATION**

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Possessing more than 200 years of cumulative experience in engineering, construction, acquisition contracting, program management, and legislative expertise, the following individuals participated in the development of this report:

### **JOSEPH F. CALCARA, SES, USACE South Pacific Division**

Selected to Senior Executive Service in 2005, Mr. Calcara currently serves as the Programs Director for the U.S. Army Corps of Engineers (USACE) South Pacific Division (SPD). He is responsible for regional direction and management of a \$1.5 billion annual military, civil works, real estate, and environmental program. SPD is one of eight USACE regional commands. SPD oversees four operating districts, which are headquartered in Albuquerque, Los Angeles, Sacramento, and San Francisco, to provide Federal and military engineering support in California, Arizona, Nevada, Utah, New Mexico, and in parts of Colorado, Oregon, Idaho, Wyoming, and Texas.

From February 2008 through January 2012, Mr. Calcara served as the Deputy Assistant Secretary of the Army (Installations, Housing, & Partnerships) at the Pentagon in Washington DC. In this capacity, Mr. Calcara was the senior career executive responsible for worldwide policy, programming, and oversight of Army real estate, engineering and construction, housing privatization, base realignments and closures, energy conservation, and military infrastructure and facilities. During his tenure, Mr. Calcara enabled the largest transformation in Army history to proceed with successful stewardship over more than \$72 billion in capital investments driven by Global Defense Posture Realignments, Base Realignments and Closures, Army Modular Force, Grow the Force, Army Force Generation, Korea Transformation, Joint Basing, Army Soldier-Family Action Plan, and Army Medical Programs.

Additionally, Mr. Calcara steered the unprecedented transfer of over 22,000 acres of excess real property to further the goal of \$1.4 billion annual recurring savings to the Army. He also served as the Senior Executive for the Army Residential Communities Initiative, managing more than \$12 billion in capital construction and renovation for 84,000 housing units at more than 40 locations in the public/private portfolio.

Mr. Calcara served previously in Headquarters, U.S. Army Corps of Engineers from 2006 to 2008 as Director of Army Real Estate. He was accountable for worldwide program execution, policy, and technical expertise in realty acquisition, asset management, and property disposal for 24 million acres of Army-controlled land and improvements valued in excess of \$600 billion. He also served concurrently as the Chief of the South Pacific Division Regional Integration Team, a multi-disciplined vertical cadre charged with integrating regional infrastructure and facilities, products and services valued at more than \$1.5 billion in annual civil works, military, and environmental projects across ten western states.

From 1983 to 2006, Mr. Calcara served in various capacities with the Naval Facilities Engineering Command at its Headquarters in Washington, D.C., and their component commands at Pearl Harbor, San Diego, and Philadelphia, and in the Office of the Assistant Secretary of the Navy. For 23 years, Mr. Calcara supported delivery of global shore installation management products and services for real estate, mechanical engineering and design, housing, asset privatization, base closure and realignment, military construction, energy conservation, and facilities sustainment, restoration and modernization programs.



**JAMES PATRICK MOORE, P.E., CCM, *Lead and Senior Civil Engineer for Construction Management, HQ USACE***

Jim is the Lead and Senior Civil Engineer for Construction Management, developing and implementing policy for USACE Mega Project Management, Design-Construction Evaluations (DCE) for civil works and military construction programs and projects throughout the Corps. Jim is also the USACE Subject Matter Expert (SME) for earth and rockfill embankments; complex mechanical and HVAC systems, concrete; and standard, modular and panelized building systems. A voting member of the USACE Dam Safety Senior Oversight Group, Jim also performs evaluations of risk-based and risk-informed models, guidance, and applications, developing and analyzing causal factor analysis tools for cost and time growth of civil works projects.

Jim earlier served as Director of Public Works, Tobyhanna Army Depot (2002-2003); at USACE Baltimore District (1978-2002); and Lane Construction Corporation, Binghamton NY/Princeton WV (1976-78).

Jim holds a Master of Science, Management of Technology, Lehigh University (1999) and Bachelor of Science, Civil Engineering, The Pennsylvania State University (1976).

**JOHN A. KEEVER, P.E., *Chief, Construction Division, USACE Los Angeles District***

John A. Keever joined the staff at the U.S. Army Corps of Engineers, Los Angeles District in June 1980 as an engineering intern and was selected for Chief of Construction Division in April 2007. As Chief of the Construction Division, John is responsible to the District Engineer for managing a large, complex and diverse construction program. The mission assigned to the Construction Division includes planning, coordinating and directing a construction program in support of civil works, military and environmental remediation, and Interagency support. Construction division Budget is approximately \$600,000,000 with over 210 employees in Southern California, Arizona, the southwestern tip of Utah and southern Nevada.

In 1980 John began as an Engineer Intern for the Los Angeles District. Once he had completed the intern program he elected to go into Construction Operations Division where he has held positions of increasing responsibility (Quality Assurance, Office Engineer, Project Engineer, Area Engineer and now Chief of Construction Division). John has worked on all programs assigned to SPL (Civil Works, Military, Environmental, and IIS) and has been at a number of Field Offices in California, Arizona, and Nevada. John has also served on details as the Chief of Construction Branch (120 days), Chief of Military & Environmental Programs Branch in PPMD (1 year), E-Rate Program Manager for LAUSD (90 days), and 1st Calvary Division Area Engineer for GRC in Baghdad (120 days).

John was selected to attend USACE Sponsored Long Term Training and attended Washington University in St. Louis and obtained a Master's Degree in Construction Management. He is a registered civil engineer in California. John was selected for the SPD Construction Management Excellence Award in 1993.



**ROD MARKUTEN, P.E., *Regional Civil Engineer for Construction, USACE South Pacific Division***

Rod Markuten is the Regional Civil Engineer for Construction and the Dam and Levee Safety Officer for the South Pacific Division. He's held this position since 2009 when he transferred from the Chief, Engineering and Construction for the Pacific Ocean Division position where he was responsible to provide technical leadership and support to the region for high quality cost-effective design and construction services throughout the Pacific-rim. Rod will be become the Chief of Construction for the Japan Engineer District in May.

Rod has 40 years of service with the Army Corps of Engineers. His first assignment was with the New Orleans District as a Hydraulic Engineer. In 1978 he transferred to the Europe Division where he served for 13 years in various positions in Germany and Italy. First, as Project Manager for NATO projects throughout Europe, then as Senior Program Manager for the Air Force design program, and finally as Resident Engineer for the Ground Launched Cruise Missile (GLCM) bed-down in Germany and construction at the Hahn, Bitburg and Spangdahlem Air Force Bases.

He was assigned to the South Atlantic Division in 1991 as the construction technical lead for the Military and Civil Works Programs. In 1996, he became the first Corps' Resident Engineer in Russia for construction of the Fissile Material Storage Facility. After two years in Russia, he returned to the Atlanta, and then transferred to the Pacific Ocean Division, Honolulu Hawaii as the construction lead. April 2007 he was promoted to Chief of Engineering and Construction for the Division.

Awards include; DeFlurey Medal (Bronze), Society of Military Engineers' Ralph A. Tudor Medal for Construction Achievements, Superior Civilian Service Award (Iraq), Joint Civilian Service Medal, Commander's Awards.

Native of Pennsylvania and a graduate in Civil Engineering from the University of Miami with a Masters' in Civil Engineering from Tulane University. Rod is a registered professional engineer in the state of Florida and member of the Army Acquisition Corps.

**JAMES D. BARTHA, *Regional Chief of Contracts, USACE South Pacific Division***

James D. Bartha is the Region Chief of Contracts for the South Pacific Division of the Army Corps of Engineers. He is responsible for the management of four District contracting offices, and the award and administration of all contracts issued by the South Pacific Division

Before joining the Army Corps, he was the Western Region Chief of Contracts for the United States Department of Transportation, Maritime Administration. In this capacity, he was responsible for the Region's acquisition program, including the administration of ship management contracts for the operation and maintenance of 22 ships in the Ready Reserve Force program for military sealift. Mr. Bartha was selected for the inaugural Maritime Administration Transportation Senior Leadership Program.

Prior to joining the Maritime Administration, he was a Contracting Officer with the Naval Sea Systems Command. His career at NAVSEA began in 1988, and included assignments at the Naval Surface Weapons Center, White Oak, Maryland (research and development) NAVSEA headquarters, Ship Construction, Coastal Mine Hunter Program) , and the Naval Surface Warfare Center, Port Hueneme, California (Head, Combat and Weapons Systems Contracts).



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He started his career in Washington D.C. as a congressional intern for Representatives Clarence Long (D-MD) and Don Ritter (R-PA). He joined the Federal Government in 1985, as an analyst for the General Accounting Office, where he studied the Navy's Strategic Homeport Plan and other Government programs. His career in acquisition and contracting began at the Federal Aviation Administration, where he negotiated a wide variety of contracts in the areas of aviation security and air traffic control systems. In 1988, he was detailed to the Executive Office of the President, Office of Management and Budget, where he helped prepare the President's FY90.

He received a Bachelor of Sciences degree from the American University in December 1983, majoring in Economics and Political Science, and in 1985 a Master of Public Administration degree from American University, concentrating in Procurement and Grants Management. He graduated in June 1991 from the Naval War College, Newport Rhode Island, College of Command and Staff, where he graduated with a Diploma in National Security and Strategic Studies. He is a 2011 graduate of the Federal Executive Institute Leadership for a Democratic Society Executive Leadership Program.

Professional certifications include Certified Professional Contracts Manager, Certified Professional Supply Manager, and certification in the career fields of Contracting and Program Management by the Defense Acquisition University. He is member of the Army Acquisition Corps, and a lifetime member of the Navy League, Naval Order, Naval War College Foundation, the National Contact Management Association, and the National Defense Transportation Association. Publications include Army Acquisition, Logistics and Technology Journal, September 2010, "U.S. Army Corps of Engineers (USACE) Recovery Project Presented at International Workshop"

### ***CESAR YABOR, Chief, Interagency & International Services, USACE South Pacific Division***

Mr. Yabor is the Chief and Program Manager for the Army Corps of Engineers' South Pacific Division (SPD) Interagency and International Services (IIS) programs, serving as regional team leader for execution of intergovernmental relationship building and strategic communications (STRATCOM) planning. As IIS chief, Mr. Yabor promotes Federal partner outreach, development of Interagency Agreements, and provides guidance to Corps of Engineers districts for local/regional 'One Door To The Corps' support for the Division's portfolio of Federal and State partners, managing a broad portfolio USACE partnerships which includes DVA, EPA, DOE, DHS, NASA, the United States Coast Guard, the National Park Service, NASA, and the Native American Tribal Nations of the Southwest.

Prior to joining USACE, Mr. Yabor served as a Legislative Affairs and Regional Public Affairs Officer for the United States Department of Veterans Affairs in Washington, DC and Atlanta, Georgia (2002-2009), and served as Senior Professional Staff on the Senate Committee on the Judiciary (1995-2002) under former Chairman Orrin Hatch (R-UT) as well as on the personal staffs of former Senate Armed Services Committee Chairman Sam Nunn (D-GA) and Rep. Ileana Ros-Lehtinen (R-FL) during his 15 years of service on Capitol Hill.



**ROBERT KLEIN, DVA Program Manager, USACE Los Angeles District**

Bob Klein is the Program Manager for the Veterans Affairs program at the Los Angeles District and has worked for the Corps of Engineers for over six years. Current responsibilities include managing over a hundred projects at five VA Medical Centers in two states and overseeing the budget for the entire DVA program. He manages five Project Managers who have over the last six years executed over 250 projects worth more than \$ 500 million.

He joined the Corps after retiring as a Colonel from the Army with over 44 years of service. He was branched qualified and commanded in three different branches (Infantry, Engineer and Signal), serving in combat as an Infantry officer in three wars (Afghanistan, Iraq and Panama). He also commanded a Counter-drug task force. He is a graduate of the Army War College, the Command General Staff College, the Engineer Advance Course and the Engineer Basic Course (Honor Graduate) as well as being a DEA Fellow. He is also a graduate of the FEMA Institute and the United Nations Institute for Training and Research. He holds a Bachelor's in Business and a Master's in Religion. He has his PMP certification.

He was an engineer company commander and an engineer brigade commander as well as a commander for a battalion-size engineer task force on active duty. His awards include: USACE Program Manager of the year (2013), Bronze Star, Defense Meritorious Service Medal, Meritorious Service Medal (6 OLC) 7th Award, Army Commendation Medal (5 OLC) 6th Award, Army Achievement Medal (1 OLC) 2nd Award, German Armed Forces Badge (Bronze), and the Army Corps of Engineer's Order of the de Fleury medal (Bronze).

**TASHA L. PARGALI, Deputy Regional Chief of Contracts, USACE South Pacific Division**

Tasha L. Pargali is the Deputy Regional Chief of Contracts for the South Pacific Division of the Army Corps of Engineers, serving as the regional team leader and technical authority for assuring acquisition compliance of contracts issued and administered by the South Pacific Division.

Before joining USACE, Ms. Pargali was the Management Support and Administration Division Chief for Defense Logistics Agency Aviation (DLA) at Oklahoma City. In this capacity, she was responsible for Policy, Pricing, Post Award Administration and served as the Ombudsman, Competition Advocate, and Small Business Program Manager. Ms. Pargali also served as the DLA Aviation Best Practices Team Lead identifying and standardizing contracting best practices across DLA, Air Force, Army and Navy detachments that were realigned to DLA Aviation as a result of the 2005 Base Realignment and Closure.

Ms. Pargali began her career as a Defense Career Intern at Tinker Air Force Base in 2005 where she negotiated a wide variety of aviation service and supply contracts. She has also worked as a Contract Negotiator and Procurement Contracting Officer with an unlimited warrant.

She has a BBA in Finance and a M.Ed. with an emphasis in Workforce Learning & Development from the University of Oklahoma. Ms. Pargali is a member of the Army Acquisition Corps and is Level III Certified in Contracting by the Defense Acquisition University. She is also a Certified Federal Contracts Manager (CFCM).

