

Federal Projects

HHOP Family Housing, USAG Camp Humphreys, Korea (Heerim)

As Vice President/Technical Director of Heerim, a South Korean Architectural firm, Mr. Woods provided oversight on this Army Corps of Engineers project. This project was to facilitate the relocation of the US Army Garrison Yongsan from Seoul to Camp Humphreys, about 40 miles south.

This was Phase One of a 2-phase, \$1.3B housing element that will provide 3, 4, 5 bedroom apartments for 2,400 military families. Phase One of this Design/Build Project included 1,400 units in 27 buildings ((15) included 1,400 units in 27 buildings ((15) 6-story and (12) 14-story buildings plus a Community Center and Welcome Center).

The concept is UP, not out, so the design called for; underground parking and high-rises, and provided open space and recreational areas for the families. Camp Humphreys is growing from about 10,000 people to 44,000.



\$34.5M Osan Hospital Addition & Renovation, Osan Air Base, Korea (+LEED Documentation) (SDK & TJD)

Mr. Woods was the Project Architect during the Design Charrette at Osan Air Base and provided architectural LEED documentation during the course of the project. The purpose of this project is to construct a new 2-story medical addition adjacent to the existing hospital facility, a second floor addition (Upper Level) to be located over the existing single story portion of the existing hospital facility, and areas of Alteration work within both, the Upper and Lower Levels, of the existing Hospital Building 777 for the 51st Medical Group (51 MG) at Osan Air Base.

The total area for the additions was hospital renovation was 24,542 square feet. for a total of 50,742 square feet.



\$15M Aircraft Corrosion Control Facility, Osan Air Base, Korea (+LEED Documentation) (SDK & TJD)

Mr. Woods was GM and supervisor of office production on this project and personally developed LEED Documentation for the LEED Silver compliance.

This project is a two-bay Aircraft Corrosion Control Facility at Osan Air Base, Korea with an area of 31,872 square feet and a programmed amount of \$15,000,000. This facility provides services for F16 and A10 aircraft and consists of a two-bay structure for aircraft restoration and washing. It has storage rooms for tools, consumable items and flammable lockers/ storage cabinets to store paints, solvents, thinner, alcohol, paint strippers, adhesives and soap. It also has staging area/rooms for



Section 4 ~ Federal Projects

aircraft parts, curing, repair and dust collection point and rooms for prefabricated/ pre-manufactured paint booth and bead blaster equipment.

Administrative and office space for maintenance staff with break room/technical library and support facilities like communication, electrical, mechanical room including space for compressors, boilers, low-level high-expansion foam system, break room, restrooms, locker rooms and shower facilities is also provided.

The facility follows the Osan AB Facilities Excellence Design Guide and is a utilitarian in appearance. The design of the facility conveys the functional purpose of the building as an administrative and aircraft maintenance type of facility.



Dormitory 777, Nellis AFB, Nevada. US Army Corps of Engineers – Los Angeles District,

Design / Build, Spirit Bronze Design

Earth Tech's Project Architect for design-build services for a 144-room dormitory and its site surroundings for enlisted personnel.

Design services included all disciplines for the three-story, 51,110-square-foot building. The project contained 36 four-unit modules, believed to be the first time in Air Force housing, that each share a kitchen and a laundry closet. Each four-unit module has four bedrooms with their private bathrooms and clothes closets. The building design also included associated support areas containing office, supply storage, TV/game rooms, vending area, bulk storage rooms with wire cage storage lockers (stacked 2 high), 2 handicap, toilet rooms, janitor closet, mechanical-electrical-communications rooms.

Earth Tech used military design codes and criteria. Force protection design, using the Department of Interior anti-terrorism guidelines, was used to protect the structure against progressive collapse from terrorist action. Construction materials include concrete block masonry walls, pre-cast and pre-stressed hollow core concrete planks, and a structural steel gable roof. The facility was fully automatic fire sprinklered. The building received a "Bronze" rating in the Spirit rating system based on LEED. Universal accessibility (ADA) requirements were met using the Uniform Federal Accessibility Standards (UFAS).



Dormitory 777, Nellis AFB, Nevada



Dynamic Battle Control Center Design-Build, Nellis AFB, Nevada. US Army Corps of Engineers - Los Angeles District,

Design / Build, Spirit Bronze Design

Earth Tech's Design Manager and architect of record for \$11M design-build of an Air and Space Combat Operations Center.



Dynamic Battle Control Center
Nellis AFB, Nevada

Section 4 ~ Federal Projects

Design manager for all aspects of the projects design components, technical support, design document control, and design oversight activities during construction of the two-story, 42,550-square-foot (3,953 square meter) building. Universal accessibility features were provided in conformance with the ADA and UFAS.

Managed design of offices, auditorium, high-bay operations bay, computer/data rooms, support areas and a number of Sensitive Compartmentalized Information Facility (SCIF) areas. Interior construction is dry wall, insulation, CMU and acoustical ceiling. An accessible floor over a depressed foundation is installed in functionally related areas to facilitate voice and data cable distribution and easy reconfiguration of equipment for varying exercises. The facility has load bearing CMU walls and pilasters with concrete masonry exterior to match the surrounding buildings.

The facility is sited near the existing operations compound and Building 201 (Red Flag) because of ongoing and future operational requirements. Sustainable design features included water efficient landscaping; light pollution reducing site lighting; optimized energy performance; reduced water consuming fixtures; high-performance envelope; noise control; indoor air quality management; an Environmental Management System (EMS); use of local and regional materials; and low-VOC emitting finish materials. Credits were sufficient for a Spirit "Bronze" level design. High levels of acoustical design were employed to maintain appropriate indoor noise levels.

Antiterrorism/Force Protection (ATFP) design, using the Department of Interior anti-terrorism guidelines, was used to protect the structure. ATFP was an integral part of siting and landscape considerations, closed-circuit TV (CCTV) electronic surveillance and access control, and structural resistance against progressive collapse from terrorist action.



Dynamic Battle Control Center
Nellis AFB, Nevada



Navy Consolidated Brig At Marine Corps Air Station (MCAS) Miramar, San Diego, California

HDR prepared the Request For Proposal for this project, utilizing teams in our San Diego, Chicago, and Cincinnati offices. As the San Diego manager, coordinated client meetings, site visits, and consultants who performed Civil Engineering, Geotechnical and Hazardous Material investigations.

This is a Design-Build project of a new confinement facility, including support space, which will be sized to hold 120 additional male and 80 additional female prisoners from all military services awaiting trial, serving short-term and longer-term sentences up to five to ten years. New prisoner industries/maintenance facilities are required to provide work and training support spaces to the increased population. A new parking lot, utilities, an emergency generator, security fencing, security control systems, lighting, and landscaping will be required. New facility technology systems will be integrated with existing systems. Approximate size of the new facilities is 95,000



Section 4 ~ Federal Projects

square feet. Renovation will be required to enclose an outdoor visitation area and convert it into administrative support and meeting space. Additional renovation is required for medical support, galley operations, and records storage expansion needs. Approximate size of renovated space is 4,600 square feet. Construction will conform to Department of Defense, Department of Navy, and American Correctional Association (ACA) Standards.

Benfield Anechoic Facility, Edwards Air Force Base, CA. Manager of AECOM On-Call A&E services. This is the world's largest testing facility for aircraft radar imaging and is a high security Air Force Facility. Enclosing 4.6 million square feet of space, the Benfield chamber is spacious enough to hold virtually any U. S. military airplane, including the B-1 bomber. Planes are rolled in through one of the world's biggest doors, a 250-ton steel device that is so bulky it takes 40 minutes to close. Projects included adaptation and improvements to the existing facility to meet Air Force needs, specifically, planning additional new construction of offices and storage in adjacent building, analysis and repair of aging equipment, modification of existing buildings including MEP and Structural and other services. Fee for services were in excess of \$500K annually.



Benfield Anechoic Facility -
Edwards AFB AECOM

F-22 Radar Cross Section Testing Facility, Hill Air Force Base, Utah, AECOM, \$23M, Design-Build, Okland Construction, Army Corps of Engineers, Sacramento, LEED Silver AECOM.

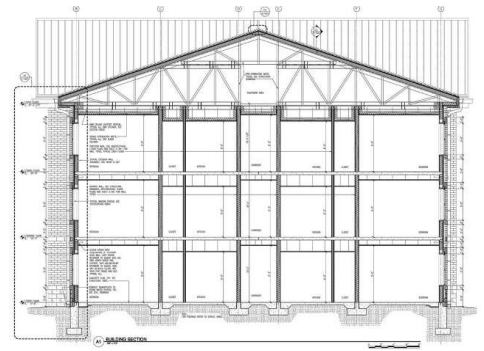
Mr. Woods was involved as Project Manager during the bid phase and through the Kickoff of this project. The project was then turned over to a PM living in the Salt Lake City area due to a work slow-down in 2010.

This project is a 61,584 gross square foot, partial two-story, high-bay, secured Electromagnetic Vulnerability Assessment Facility (EMVAF) providing vestibule space, radar control room, restrooms, lightning protection, fire detection/prevention, intrusion detection, scientific workstation space, personnel offices, visitor processing area, conference room, maintenance and spare parts storage areas, and a mechanical laboratory. This facility includes a 3,978 square foot basement, a **6,720** square foot anechoic chamber. The large double-shielded anechoic chamber with large access doors and legacy force platforms features a 100-ton capacity synchronous turntable with a 10-foot, 70-ton hydraulic lift and a 5-ton hoist with rail (above a false ceiling) running from the high-bay area to the middle of the shielded doors. Turntable access is through the basement.



Section 4 ~ Federal Projects

US Army Corps of Engineers– **Military Police Bachelor Enlisted Quarters, Design-Build, Ft. Leavenworth, KS**
Performed QA/QC review of 3-story, CMU and Steel Frame BEQ for HDR. Construction was Type II B, Non-combustible, Fully Sprinklered. The building had 56 – 2 Bedroom living units for 112 personnel. Each floor contained 14,705 square feet for a total of 44,115 square feet. Construction drawings were prepared by the HDR Chicago office. QA/QC included ATEP, ADA, and building code reviews.



Department of Veterans Affairs, Greater Los Angeles Healthcare System, California.

Earth Tech Project Manager for two boundary surveys of the VA West Los Angeles Medical Center. Surveys were to determine and record the boundary of the approximately 382 acre medical complex in the highly urbanized area of Wilshire Blvd. and the 405 Freeway as well as leased property to the US Post Office and Brentwood School.



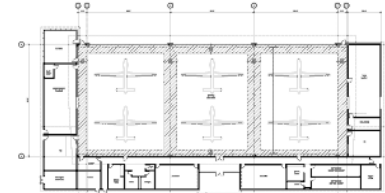
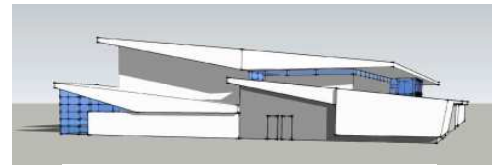
Many Farms High School. Bureau of Indian Affairs

Stichler Design Group Project Architect for construction of new classrooms and an activity center for this high school. Many Farms High School is located in the heart of the Navajo reservation in Many Farms, Arizona. It has 400 students and 35 faculty members along with a large support staff. It is a boarding school sponsored by the U.S. Bureau of Indian Affairs Office of Education Programs, with separate dorms for male and female students. Also included was the partial demolition and renovation of student dormitories. Mr. Woods coordinated consultants and modifications to construction documents reflecting ADA, structural, and Bureau of Indian Affairs modifications.



The Following Military Projects were through Schematic Design for bidding as Phase 2 Design-Build Proposals

UAV (Predator) Hangar, \$9.5M, Design-Build, Straub Construction, *LEED Silver*, Ft. Huachuca, AZ (AECOM)



Predator Hangar, Ft. Huachuca
USACE, AECOM

Recruit Marksmanship Training Facility, \$11.2M, Design-Build, KOO Construction, *LEED Silver*, Camp Pendleton, CA, AECOM.



Recruit Marksmanship Training Facility, Camp Pendleton, AECOM

BEQ Package #1, \$124M, Design-Build, Clark/Sundt JV, for 1200 Marine bachelor enlisted personnel in 2-person rooms located on three sites, complete with laundry facilities, recreation areas, and multi-purpose facilities, *LEED Silver*, Camp Pendleton, CA (NAVFAC-SW) (HDR)



Headquarters Site, BEQ Camp Pendleton Pkg #1
Design Build Proposal, HDR

Dormitories, Davis-Monthan AFB, Tucson, AZ, \$9M (est.), Design-Build, *Earth Tech DB, Spirit Bronze, Earth Tech*. This proposal earned Earth Tech a contract under an Army Corps of Engineers MATOC



Davis-Monthan AFB, Dormitories
Earth Tech

BEQ, Portsmouth Naval Shipyard, \$10M (est), Design-Build, *Earth Tech DB, LEED Bronze, Kittery, MN, Earth Tech*.

Family Housing, \$9.3M, Design-Build, *Earth Tech DB, Spirit Bronze*, Mountain Home AFB, Idaho (56 Single Family Dwellings), USACE, *Earth Tech*.



Portsmouth Naval Shipyard BEQ,
NAVFAC-Baltimore, Earth Tech

Section 4 ~ Federal Projects