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Construction
AREA/RESIDENT ENGINEER MANAGEMENT GUIDE

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CHAPTER 1

INTRODUCTION

1-1. Purpose. This manual presents and prescribes, in one publication, the basic duties, responsibilities, policies, procedures, and essential information for Area/Resident Engineers and their staffs. The manual provides guidance in construction management and contract administration of design-bid-build and design-build construction, Hazardous, Toxic and Radioactive Waste (HTRW) remediation, and relocation contracts under the Area/Resident Offices' jurisdiction. This manual is limited to the construction management and contract administration of construction contracts, including construction related service contracts such as contracts for surveys and laboratory tests applicable to construction and HTRW remediation. The text does not present, in detail, all of the procedures involved in the construction management and contract administration of construction contracts, but rather guides the user to the various manuals, Engineering Regulations (ERs), Engineering Pamphlets (EPs), Engineering and Construction Bulletins (ECBs), Procurement Instruction Letters (PILs), Quality Management System (QMS) Processes, District Regulations, and other directives which contain the necessary instructions for the proper functioning of a field office. The general guidance provided in this manual needs to be adjusted for some other contract types such as Task Order Contracts, and the many variations of Cost Reimbursable Contracts. Each Area/Resident Engineer should have access to pertinent regulations and guidance documents relating to field office procedures, contract administration, and construction management processes.

1-2. Applicability Statement. This manual shall be used by all USACE personnel responsible for construction where USACE holds Contracting Officer authority. Where instructions contained herein conflict with contract provisions, the contract shall govern. When in doubt as to proper procedure, appropriate elements of the District Office should be contacted. This manual does not supersede the Federal Acquisition Regulation (FAR), Defense FAR Supplement (DFARS), Army FAR Supplement (AFARS), or USACE Acquisition Instruction (UAI), formerly known as EFARS.

1-3. Distribution Statement. Distribution is unlimited.

1-4. References. See Appendix A, References/Links.

1-5. Reviews. This document will be revised periodically as appropriate. Revisions will be incorporated into the electronic document which will be made available in its entirety.

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CHAPTER 2

ORGANIZATION, DUTIES, AND RESPONSIBILITIES

2-1. General Organization. The established command channel in USACE is from the Chief of Engineers (HQUSACE), to the Division Commander, to the District Commander, the Deputy District Engineer for Program and Project Management (DPM), to the Chief of Engineering and Construction (if applicable), to the Chief of Construction, to the Area/Resident Engineer. The Area/Resident Engineer is responsible for the construction management and contract administration of all construction contracts assigned to their office and all activities of their office. The Chief of Construction shall direct and supervise the Area/Resident Engineer. However, the Area/Resident Engineer as Administrative Contracting Officer (ACO) or as the Contracting Officers Representative (COR) is also accountable to the Contracting Officer (KO). The Area/Resident Engineer and members of their staff also serve as important member(s) of various Project Delivery Teams (PDTs), working closely with project managers (PM) and other PDT members.

2-2. Terminology.

a. Area/Resident Engineer, as referred to in this manual, will have the same significance and meaning as Engineer-in-Charge, having direct job site surveillance, construction management and contract administration responsibilities. The Area/Resident Engineer, if qualified and issued a warrant, is typically appointed as the ACO on a contract-by-contract basis. The Area/Resident Engineer or other responsible individuals in the Area/Resident Office may also be delegated as the Contracting Officer's Representative (COR) for specific contracts.

b. Area/Resident Office is used to indicate individually or collectively the personnel of the surveillance force, contract administration and other office personnel, and the Area/Resident Engineer:

(1) Area Offices normally will be established, centrally, in the vicinity of project construction operations. The Area Engineer may be appointed to administer the construction work for multiple Resident/Project Offices.

(2) Resident Offices will be established to administer projects at a specific location. The Resident Engineer may be appointed to administer the construction work for multiple Project Offices.

(3) Project Offices, headed by a Project Engineer or a senior Construction Representative, will be established to handle limited or specialized functions where lesser scope, responsibility, and authority than assigned to the Area/Resident Office are needed. Project Offices normally report to an Area or Resident Engineer.

(4) Office Engineering/Contract Admin Section will be responsible for the review and processing of contractual actions such as modification, pay estimates, schedule analysis, contract closeout documents, etc.

(5) Technical Support Section will include engineering / technical specialists who provide assistance to all contracts assigned to the Area Office

c. "Contractor" is used to indicate the prime contractor for a given contract.

d. The Contracting Officer (KO) is the USACE representative, usually within the District or Center Contracting Office, designated by the Principal Assistant Responsible for Contracting (PARC) to enter into and administer contracts for the Government and make determinations and findings thereon. This duty is typically termed the Procuring Contracting Officer (PCO) and Terminating Contracting Officer (TCO), both of which are not normally associated with ACO delegation. Contracting Officer also means the ACO, when the referenced action is within the ACO's authority.

e. Contracting Officer's Representative (COR) will be the Area/Resident Engineer or a member of the Area/Resident Office staff who is delegated specific contract administration authority by the KO. ACO authority includes all authority granted to a COR. However, there are contracts, normally service contracts, for which the Area/Resident Engineer will only be granted COR authority. Therefore, each Area/Resident Engineer shall maintain a current list of authorities for each contract administered by their office. Qualification, nomination and training requirements are established by the HQUSACE Directorate of Contracting (DoC), and are identified via Procurement Instruction Letter (PIL) 2012-06-R1 dated 25 Jul 2012. Refer to https://cops.usace.army.mil/sites/CT/P/Procurement%20Instruction%20Letters%20PILs/PIL%202012-06-R1.pdf.

f. The Director/Chief, District Contracting Office, may request the PARC provide a warrant to a qualified individual to act as ACO, subject to specified conditions and restrictions. The individual appointed will function on specified contracts when authorized by the KO in the ACO letter. The appointee may not delegate this authority to another person. Qualification, nomination and training requirements are established by the HQUSACE Directorate of Contracting, and are identified via Procurement Instruction Letter (PIL) 2012-09 dated 23 May 2012. A copy of the procurement instruction letter can be located at the following website: https://cops.usace.army.mil/sites/CT/P/Procurement%20Instruction%20Letters%20PILs/Forms/AllItems.aspx.

g. The Chief of Construction refers to the head of the technical division/branch performing the construction management and construction contract administration function at the District office. This may be a Division Chief position or it may be a Branch Chief in cases where the District has an Engineering and Construction organization, Technical Services organization, or a

Construction – Operations organization. The organization which they direct is referred to as District Construction.

h. The Chief of Engineering refers to the head of the technical division/branch performing the design or the design management/engineering function at the District office. This may be a Division Chief position or it may be a Branch Chief in cases where the District has an Engineering and Construction organization or a Technical Services organization. The organization which they direct is referred to as District Engineering.

i. The Deputy for Programs and Project Management (DPM) refers to the head of the programming and project management division/branch performing the overall program and/or project management function at the District office. This includes management of project budgets and schedules, the development of individual Project Management Plans (PMP), and providing leadership to Project Delivery Teams (PDT), in accordance with the USACE Project Management Business Process (PMBP). The USACE Business Process is identified in ER 5-1-11, http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_5-1-11.pdf. The organization they direct is referred to as PPMD. The USACE ER publications are located at: http://www.publications.usace.army.mil/usacePublications/EngineerRegulations.aspx.

2-3. Duties. The general duties of the Area/Resident Engineer include:

a. Lead the construction contract execution mission within their assigned area of responsibility.

b. Accomplishing all construction/service contracts under their supervision in accordance with governing contract documents (Request for Proposals (RFPs)/Betterments/Proposals for Design-Build or Plans and Specifications for Design-Bid-Build).

c. Supervising and managing the Area/Resident Office and its personnel.

d. Handling all administrative functions included in this manual.

e. Maintaining proper relations and communications with authorities, guests, customers, using agencies and contractor personnel.

f. Maintaining proper coordination and communications with the project management chain of command.

2-4. Responsibilities.

a. The Area/Resident Engineer is responsible for the satisfactory performance of all activities within the scope of the authority assigned to him/her, which include, but are not restricted to the following:

(1) Enforcing strict compliance with all clauses of all contracts under their supervision.

(2) Correctly interpreting plans and specifications.

(3) Assuring project progress and timely completion.

(4) Assuring that all materials and equipment installed in the construction comply with contract requirements, and assuring that materials and equipment designated for Government approval have been approved.

(5) Safeguarding the interests of the Government at all times.

(6) Managing an economical and efficient Area/Resident Office, always striving for improvement.

(7) Recommending improvements in work which are not within the scope of the Area/Resident Engineer's authority to correct but which will result in a better job or savings to the Government.

(8) Timely anticipation of personnel needs for contract administration and quality assurance.

(9) Prompt handling of all correspondence.

(10) Obtaining and maintaining a thorough knowledge of pertinent FAR, Army, HQ USACE, Division and local District regulations, directives, and other administrative publications.

(11) Keeping accurate records and reports as required.

(12) Maintaining the appropriate contract information in the various USACE Information Management systems such as the Resident Management System (RMS), Paperless Contracting System (PCF), Corps of Engineers Financial Management System (CEFMS), and Standard Procurement System (SPS) as required.

(13) Complying with security requirements.

(14) Ensuring that acceptable safety standards are maintained on all work under their supervision.

(15) Maintaining good public relations.

(16) Training of Area/Resident Office personnel.

(17) Preparation of Government Estimates for modifications, conducting modification negotiations, verifying availability of funds for modifications, preparing and executing modification documents, and communicating current modification status to the District.

(18) Maintaining property accountability.

(19) Supervising Area/Resident Office personnel.

(20) Maintaining/ensuring membership on various Project Delivery Teams (PDTs), both pre-award and post-award, per Project Management Business Practice (PMBP). Individual Project Management Plans (PMPs) should spell out inclusion of Area/Resident Engineer or staff in PDT meetings and participation in reviews, etc.

(21) Ensuring labor charges for Area/Resident Office personnel are charged appropriately (e.g. MILCON, O&M, Civil Works, etc.).

(22) If issued an ACO warrant, the framed warrant shall be displayed in the Area/Resident Office. It is also important to develop and maintain a good working relationship with the KO(s) on the contract they are working on together, as well as other PDT members.

b. The above are important responsibilities. Greater detail of these and others are included in this manual.

2-5. Authorities.

a. The Area/Resident Engineer is informed, in writing, by the KO of their appointed authority. The Area/Resident Engineer is responsible for interpreting and exercising authority within the designated limits.

b. The Area/Resident Engineer has no authority to:

(1) Waive contract requirements.

(2) Make changes to contracts which are not within the scope of the contract.

(3) Dictate the contractor's operations, except in the case where the KO has directed acceleration efforts under FAR Clause 52-236-15, SCHEDULES FOR CONSTRUCTION CONTRACTS.

(4) Allow the contractor to perform work in an unsafe manner.

(5) Accept work not conforming to contract requirements, except in the case that the KO deems it in the public interest as provided by FAR Clause 52-246-12, INSPECTION OF CONSTRUCTION.

(6) Obligate funds without proper authority.

(7) Act outside authorities granted by the ACO warrant, or ACO or COR appointment letters.

CHAPTER 3

GENERAL OFFICE ADMINISTRATION

3-1. Mail Management. The Area/Resident Engineer is responsible for proper handling of all incoming and outgoing mail at a field activity. Mail typically falls into correspondence related to specific contracts, intra-office correspondence, as well as correspondence with other outside agencies. The processes for handling these various types of mail varies as noted below. Correspondence containing Personally Identifiable Information (PII), classified information or other sensitive information will be handled appropriately. DODI 4525.08, DoD Official Mail Management, provides additional information and requirements.

3-2. Correspondence.

a. Preparation of correspondence will be in accordance with current Army Regulation (AR) 25-50 and local District policy. Care should be taken to ensure that it is accurate, neat, and grammatically correct, punctuated properly, has no misspelled words, and is as brief as possible without sacrificing clarity.

b. In order to avoid delays where timely studying, investigating, etc., is required, the Area/Resident Engineer should establish a suspense system and assure it is maintained.

c. It is the Area/Resident Engineer's responsibility to determine which letters require their reply or the reply of higher authority. Letters requiring a reply by higher authority shall be acknowledged and immediately forwarded to the District Office accompanied by appropriate comments and recommendations. Generally, matters requiring action by the District Office will be letters requesting or requiring Contracting Officer's final decision, requesting changes in design, priorities, etc., concerning matters of policy and procedures, and from Congressional authorities, public officials or other dignitaries, such as governors, mayors, etc.

d. Adequate copies will be made of all correspondence and all interested parties sent a copy, including contract correspondence. Contract correspondence should use a serial number system to provide control and accurate tracking. The Resident Management System (RMS) (http://rms.usace.army.mil/) should be used for preparation and tracking of contract correspondence. The policy requiring RMS is currently set forth in paragraph 7-5 of ER 1110-1-12, Engineering and Design Quality Management. See the following link for ER 1110-1-12: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-1-12.pdf.

3-3. Filing and Records.

a. All correspondence, records, reports, drawings, and other data accumulated in the Area/Resident Office shall be filed as prescribed by AR 25-400-2, The Army Records

Information Management System (ARIMS) (http://www.apd.army.mil/pdffiles/r25_400_2.pdf). The Area/Resident Engineer is responsible for establishing a file system with the assistance of the Records Management Officer of the District Office. The Area/Resident Engineer should appoint a Records Coordinator to promote the records management. Complete files shall be maintained separately for each contract and shall be identified by the contract number.

b. Contract Filing and Records.

(1) The Army has directed implementation of the web-based Paperless Contract File (PCF) application as its official contract file management tool for all contracts and all contract file documentation issued by USACE and its contractors. The PCF will be used to establish, view, manage, review, and archive all official contract files.

(2) All pre-award official contract file documents are filed in the applicable PCF cabinet by Contracting Office staff. All construction contracts and construction related service contracts are entered into RMS and all USACE organizations managing same (including dredging contracts) are to use RMS. Note that in addition to signing and routing RMS generated SF30s, ACOs also sign modifications in the USACE Standard Procurement System (SPS)/Procurement Desktop Defense (PD2). For bilateral modifications, the bilaterally-signed documents represent the official contract documents. Upload a copy of all signed documents into RMS for filing in PCF.

(3) Most post-award official contract file documents will be filed in the applicable PCF cabinet through use of RMS. RMS will capture and upload post-award construction (including dredging) contract documentation into PCF. Use of RMS for construction contract management was mandated initially by HQUSACE in 1998, and more recently reiterated in ER 1110-1-12, Engineering and Design Quality Management. ACOs will use RMS for management of all post-award construction contract administrative actions.

(4) The RMS Monthly Status Report is automatically sent to PCF. The COR must upload a copy into the DoD Contracting Officer Representative Tracking (CORT) tool. Also, CORT is used to nominate, track and manage COR appointments for all contracts, including construction contracts.

(5) Contract files and records are subject to retention instructions as per FAR 4.805, STORAGE, HANDLING, AND DISPOSITION OF CONTRACT FILES.

c. Non-contract Filing and Records.

(1) Operation Order (OPORD) 2012-73 Deployment of USACE Electronic Document and Records Management System (EDRMS), 5 Oct 2012. The EDRMS can be found at the following link: https://aceit.usace.army.mil/support/RecordsMgmt/Pages/EDRMS.aspx. USACE leadership has directed implementation of the web-based Electronic Document and Records Management System (EDRMS). The USACE EDRMS initiative is to provide the

policy, procedures, and tools that will enable the USACE user community to effectively identify, classify, archive, preserve, and destroy documents and records systematically in accordance with Army Record Information Management System (ARIMS).

(2) The Area/Resident Engineer shall maintain information on personnel administration, such as position descriptions, employee record information (appointments, training, etc.), employee performance information (TAPES), position hazard analysis (PHAs) and other files pertinent to personnel management.

3-4. Forms. Indexes of commonly used forms, as well as a supply of the forms should be maintained in each Area/Resident Office. The Area/Resident Engineer should be kept current with the latest forms from the District Office and should notify the District of any forms which are outdated or no longer useful so they can be considered for cancellation. (The most current version of forms may be obtained online through Army Electronic Publications located at http://armypubs.army.mil/index.html.) Proposed forms should be forwarded to the District Office with DA Form 1167, Request for Approval of Form.

3-5. Personnel.

a. The Area/Resident Engineer has the responsibility to work with the Civilian Personal Advisory Center (CPAC) to perform the management of the personnel assigned to their office. It is the Area/Resident Engineer's responsibility to select or recommend for selection new employees. The ability to review qualifications and recognize the merits of a potential employee is vital to maintaining a good organization structure.

b. The Area/Resident Engineer shall insure that each employee is thoroughly familiar with the provisions of DoD Regulation 5500.7R Joint Ethics Regulation. This ensures compliance with DoD and Army requirements, maintenance of public trust and remaining above reproach for employees directly interfacing with contractors.

c. Job Elements and Performance Standards:

(1) Performance Standards are a vital part of performance management. USACE's performance appraisal system depends on valid standards that are fully understood by both employees and supervisors. An employee may be appraised only on the standards to which they are assigned and must be on standards for one hundred twenty (120) days for appraisal purposes. A midyear review of each employee's performance shall be made and discussed with the employee. Failure of a supervisor to ensure that valid standards are in place will result in the supervisor being unable to appraise the employee's performance. An appraisal is necessary to reward an outstanding performer or to take action against a poor performer.

(2) Each Area/Resident Engineer is required to ensure that all employees are properly assigned and have accurate performance standards in place. All supervisors must periodically

review their files to assure all employees have accurate job descriptions and performance standards. In general, employees' performance standards should be reviewed and updated (if appropriate/necessary):

(a) When they report for duty.

(b) When they change positions, including a change in position description.

(c) When their responsible supervisor changes.

(d) When they complete their annual rating period.

(3) New supervisors shall review, discuss, and if necessary, revise performance standard for all employees under their supervision, within 30 days of the supervisor coming on board. Note that there are performance bullets required for all employees with ACO and/or COR responsibilities.

d. The local District Office publishes policies and procedures and furnishes regulations to Area/Resident Engineers covering a wide spectrum of personnel matters. These regulations are normally published under code 690 and provide guidelines on Organization, Equal Opportunity, Career Management, Leave, Sexual Harassment / Assault Response & Prevention (SHARP), etc. It is the responsibility of the Area/Resident Engineer to become familiar with these regulations and strictly adhere to the provisions contained therein. The following is a general outline of these regulations:

(1) The personnel assigned to the Area/Resident Office shall be given duties as outlined in their job descriptions. The Area/Resident Engineer shall take necessary action to revise the job descriptions when significant changes are made in duty assignments. However, each job description contains a statement, "Performs other duties as assigned." If the necessity arises, employees may be temporarily assigned to other duties within their capabilities. If the assignment covers a period of time in excess of thirty (30) days, documentation shall be furnished to the District Office. The Area/Resident Engineer shall have knowledge of classification complaints and appeal.

(2) The Area/Resident Engineer shall assure that the job positions under their jurisdiction are of the soundest and most economical structure for accomplishing the mission and are so organized that maximum utilization is made of the highest skills each employee possesses.

(3) It is the Area/Resident Engineer's responsibility to assist, train, and develop personnel to effectively meet the needs of the District and to develop the potential of assigned personnel. Mandatory training for all Army civilians is identified in AR 350-1 Army Training and Leader Development (http://armypubs.army.mil/epubs/pdf/r350_1.pdf).

(4) The Area/Resident Engineer shall have a knowledge and understanding of the purpose of performance appraisals as provided in AR 690-400, Total Army Performance Evaluation System (http://www.apd.army.mil/pdffiles/r690_400.pdf). All employees shall be made aware of and understand the performance requirements which they are expected to meet. Realistic measurements shall be made of both quality and quantity of work. A planned discussion with personnel strengthens employee-employer relations and improves performance. Personnel should be tactfully informed of their strong points as well as their weak points, always giving them encouragement to improve. As a result of the evaluation of personnel, the Area/Resident Engineer shall provide for necessary training and recommend promotions, reassignments, or separations. Further guidance is provided in AR 690-950, Career Management, located at: http://armypubs.army.mil/epubs/pdf/R690_950.pdf; and ER 350-1-420, Five Year Individual Development Plan (IDP) and Development Assignment. A copy of ER 350-1-420 is located at: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_350-1-420.pdf.

(5) The Area/Resident Engineer shall be aware of short and long-range goals of assigned personnel and should provide them with appropriate assistance in attaining these goals. It is important to keep a thorough and accurate record of all employees' evaluations and of important discussions. Employees are required to maintain their Individual Development Plan (IDP). It is also necessary for the Area/Resident Engineer to include training and developmental assignment forecasts in the annual budget. PROSPECT training survey is typically requested in June of each year. The following are recommended USACE PROSPECT courses for consideration for Resident Engineers, Project Engineers, Office Engineers, technical specialist, and Quality Assurance Representatives:

	Resident Engi-neer	Project Engineer	Con Rep	Mech Engineer	Elec Engineer	ACO/ COR	Office Engineer	OE Tech
Core	**Construction Quality Management (29)**							
	General Construction QV (54)							
	OSHA-10Hour		OSHA-30hr	OSHA-10Hour				
	Construction Contract Admin (366)							
	Mechanical QV (72)					Mech QV (72)		
	Electrical QV (42)				Electrical QV (42)			
	Constr Sched Perf Mgmt (80)							
Level 1 (required)	Est Mods (180)		Concrete QV(731)	Est Mods (180)				
	Neg Mods (368)		Crane Safety(32)	Neg Mods (368)				
	Design Build (425)		Masonry QV (752)					
	National Elec Code (78)				National Elec Code (78)			
Level 2 (recom-mended)	Fire Protect (6)		HVAC TAB (68)			Design Build(425)		
	HVAC Commissioning (327)					Cost Reimb Contracts (1)		
	AE Contracts (4)		HVAC Ctrls (340)			AE Contracts (4)		
			Welding QV (116)					
			Roof Tech (tbd)					
			Steel Fasten (747)					
Level 3 (job/person specific)		Arch QV (3)					Elec QV (42)	Est Mods (180)
	Cost Reimb Contracts (1)		Design Build (425)				Mech QV (72)	Neg Mods (368)
			Earthwork QV(40)				Concrete QV(731)	Sched Bas (143)
			Flex Pave (50)					
			Rigid Pave (85)					
			Paint QA (84)					
			Elevator Saf (748)					
			Sched Mgmt (80)					
			HTRW Insp (141)					
			HW Manifest (223)					
			HWRefresh (429)					

(6) Certain positions may be Defense Acquisition Workforce Improvement Act (DAWIA) positions. Incumbents in these positions are required to comply with DAWIA certification requirements, shall maintain continuous learning points, and shall update their IDP at intervals not to exceed 6 months, to include updating Career Acquisition Management Portal (CAMP)/ Career Acquisition Personnel and Position Management Information System (CAPPMIS). Area/Resident Engineers should counsel these employees of these requirements. Costs for this training should also be included in the preparation of the annual budget, along with projected DAWIA training for individuals who aspire to be an Area/Resident Engineer and hold an ACO warrant, or who may be in a Contracting Acquisition position. Additional information on DAWIA certification and training requirements can be found at the Defense Acquisition University (DAU) website at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

(7) The Area/Resident Engineer shall have a working knowledge of the various incentives available (i.e., Outstanding Performance Awards, Quality Step Increases, Commander's Awards, Special Act Awards, Hardhat of the Year Award, Construction Management Excellence Award, Length of Service Awards, letters of appreciation, commendations and promotions). Action should be initiated to obtain awards for deserving persons and for outstanding accomplishments. The Area/Resident Engineer should recognize the value of recommending awards as a personnel-motivating factor. AR 672-20, Incentive Awards, provides guidance on incentive awards. See the following hyperlink for AR 672-20: http://armypubs.army.mil/epubs/pdf/R672_20.pdf.

(8) The Area/Resident Engineer should create an atmosphere in which behavior problems are not likely to occur, such as keeping employees informed, recognizing merits, explaining the "why" as well as the "what" of changes and problem areas, delegating authority, permitting personnel to act, and having frequent informal discussion with personnel.

(9) Should issues arise regarding employee performance and/or conduct, the Area/Resident engineer will aggressively work corrective actions. The Area/Resident Engineer can obtain information regarding standard penalties and employee's rights from the Human Resource Office. Often, employee conduct issues are confused with performance issues and attempts made to deal with conduct problems through the appraisal system. The Human Resource Office can assist in sorting out the proper regulations to use in specific cases. The Area/Resident Engineer shall discuss the person's misbehavior, make a positive effort to improve or resolve the conditions causing the person's actions at Area/Resident Office level, and forward recommendations for necessary action to the District Office. The Area/Resident Engineer should focus on improvement of the employee rather than on disciplinary action. The person to be disciplined shall have an opportunity to reply to all charges and the explanation shall be given full consideration before deciding appropriate action. Where feasible, the Area/Resident Engineer shall plan and take appropriate action to avoid recurrence of similar incident. The Area/Resident engineering must be cognizant of new employees within their probationary period and make sound decisions about retaining personnel based upon their performance. Probationary period reviews should be executed approximately 8 months after the employee starts work to ensure adequate time to release unsuccessful employees. The Area/Resident engineer must also

be proficient in application of Performance Improvement Plans, withholding of within-grade step increases and other sanctioned methods of motivating improved performance of problematic employees.

(10) It is the Area/Resident Engineer's responsibility to anticipate personnel needs and to request adequate staffing in advance. Timely identification of surplus personnel is equally critical. The Area/Resident Engineer should advise the District Office at least sixty (60) days prior to the need for additional personnel or when it is anticipated any personnel are surplus to needs. This length of time is the minimum necessary for the personnel actions required. Area/Resident Engineers should initiate action as soon as he/she is reasonably sure the change is necessary.

(11) Information furnished to the District on needed personnel action(s) should clearly include the following:

(a) Brief narrative description of duties or job number and any special qualification requirements.

(b) Suggested designation and grade of new employees.

(c) Construction project on which a new employee will be utilized and project location.

(d) Estimated length of time the employee is needed.

(12) It is in the interest of the Area/Resident Engineer to have a staff of versatile personnel. The Area/Resident Engineer should conduct systematic courses of instruction for personnel, train personnel in accordance with their needs and abilities, and encourage them to utilize the many sources for self-training.

(13) Shifts for employees should be scheduled to be compatible with the contractor's work schedule, but staggered to keep overtime to a minimum. Approval for overtime, holiday work, credit hours, variable work schedule, travel compensatory and regular compensatory time is required in accordance with Army Regulation and local District policy.

(14) The Area/Resident Engineer shall become familiar with District policy on Equal Employment Opportunity and ensure that employment practices are within the purview of the policy.

(15) Local District policy should provide information and guidance to Labor-Management Regulations with exclusively recognized labor organizations in the local District. The Area/Resident Engineer should become familiar with these regulations and ensure that all supervisors under their supervision are aware of procedures to be followed should the occasion arise involving a member of the local bargaining unit.

(16) Local guidance on pay administration for Area/Resident Office employees is provided by Army Regulation and local Districts covering guidance on holiday pay, night differential rates, severance pay, and pertinent matters related to administration of pay. The Area/Resident Engineer should assure that the administrative staff is familiar with the contents of these requirements.

(17) The Area/Resident Engineer is furnished a Standard Form (SF) 50, Notice of Personnel Action, on all personnel assigned to the Area/Resident Office. The Area/Resident Engineer shall assure that the administration staff maintains these forms in a current status. Access to their employees' personnel data, including SF 50s, is available online through the Defense Civilian Personnel Data System (DCPDS).

(18) The Area/Resident Engineer shall assure that the Area/Resident Office employees are apprised of the Privacy Act and receive protection afforded by the Act. This includes proper handling of materials containing Personally Identifiable Information (PII).

(19) Employees shall record their time and attendance daily. They shall maintain and submit employee timesheets with appropriate labor code information and signed/approved OPM Form 71, Application for Leave, to their respective timekeepers for sick and/or annual leave and credit hours taken during the pay period, in accordance with established recurring due dates. Overtime or compensatory time should be approved in advance. Area/Resident Engineer will establish methods of forecasting, requesting, approving and posting leave.

(20) The Area/Resident Engineer designates a timekeeper, an alternate timekeeper and an alternate time approval official from the staff. The Area/Resident Engineer shall initiate and maintain procedures for individual timesheets to assure time is charged to the proper account, each employee signs their timesheet, and that timesheets files are retained for the specified period. Area/Resident Office timekeeping shall be entered into CEFMS and approved by the timekeeper, the employee, and the employee's supervisor by the deadline each pay period.

e. The Area/Resident Engineer will encourage all professional CP-18 personnel under their supervision to obtain a Professional Engineer/Registered Architect Licenses, or other forms of professional registration. License costs can be reimbursed. The USACE goal is that every engineer be registered. Registered engineers usually fill supervisory positions of an engineering capacity. Area and Resident Engineers must be registered to qualify for their positions. Engineers should be made to understand that a non-registered applicant may be at a disadvantage when competing for positions of higher responsibility in the USACE.

3-6. Travel.

a. The basic instructions relating to civilian employee travel are contained in Joint Travel Regulations, Volume 2 (http://www.defensetravel.dod.mil/site/travelreg.cfm). Temporary Duty (TDY) Travel Orders will be entered, requested, approved, and certified in CEFMS at the

Area/Resident Office, as shown in the CEFMS Standard Operating Procedures guide. Area/Resident Engineer's TDY orders must be approved and certified in District Construction.

b. The local District Civilian Personnel Advisory Center (CPAC) will typically prepare Permanent Change of Station (PCS) travel orders. The departing employee will be contacted to provide information regarding their requirements for the move.

(1) PCS travel orders shall always be written, dated, and approved prior to commencement of travel. Employees should be cautioned against signing real estate sales contracts, etc. without PCS orders in hand. Further guidance can be obtained from the District CPAC.

(2) In case of PCS where the traveler and/or dependents have temporary quarters-subsistence, the daily expenses incurred will be documented on ENG Form 4743R, Claims For Temporary Quarters Subsistence Expenses/Foreign Transfer Allowance, and furnished for CEFMS entry. Employees leaving the District shall be furnished one copy of the ENG Form 4743R and a copy should be retained for CEFMS backup.

(3) TDY travel orders normally will be requested and issued prior to commencement of travel when the traveler is required to perform temporary duty away from the official duty station. In exceptional circumstances, confirmatory orders may be issued after the performance of travel. In addition, a TDY assignment at one location may not exceed 180 consecutive days, except when authorized under paragraph C2230-C of the Joint Travel Regulation, Volume 2.

(4) Travelers will typically be issued a Government travel credit card (GTCC), which allows cash withdrawal as a cash advance. However, if one travels less than twice a year, a Government travel card is not required. In that case one may obtain a travel advance. The Area/Resident Engineer will insure proper use of GTCC by those employees who hold GTCC. Delinquent payments must be dealt with promptly and misuse will be grounds for disciplinary action.

(5) Within five days of completion of each authorized trip, the traveler will enter or provide information to be entered as a TDY or local travel voucher in CEFMS. The Area/Resident Engineer or designated alternate shall review and approve the vouchers for payment. All information required for a CEFMS voucher shall be furnished and care exercised that proper notation regarding leave taken, either sick or annual, during the period of travel is provided.

(6) Travelers with CEFMS signature capability may electronically sign travel vouchers. Others must sign hard copy vouchers. The Area/Resident Engineers shall establish a procedure to maintain files of signed vouchers and records of all required travel receipts, whether the voucher was signed electronically or on hard copy.

(7) Where local travel reimbursement is authorized on a mileage basis for travel, odometer readings should be indicated and the necessity and reasonableness of the mileage should be shown thereon.

c. All employees driving Government owned, leased, or rental vehicles, or using privately owned vehicles for Government business, are required to complete the Defensive Driving Course every four years.

3-7. Government Vehicles.

a. The use of Government-owned or contract supplied motor vehicles will be in the performance of official duties only.

b. The proper maintenance of Government or contract supplied vehicles is very important. The Area/Resident Engineer has the responsibility to care for the vehicles assigned, determine vehicle requirements, and to ascertain that the vehicles are not being abused. Accidents shall be documented and reported to the District Office.

c. Trip tickets or records shall be kept on each vehicle for all mileage driven. The Area/Resident Engineer shall be familiar with regulations covering Government vehicles and insure that mileage, gas costs and vehicle service costs are documented in accordance with district timelines.

d. Government vehicles are typically provided through an agreement at the local district level with GSA. The Area/Resident Engineer needs to coordinate budgeting and costing vehicles with their local District Logistics Office.

3-8. Procurement.

a. The regulations governing the procurement procedures are the Federal Acquisition Regulation (FAR), Department of Defense FAR Supplement (DFARS), Army FAR Supplement (AFARS), and USACE Acquisition Instruction (UAI).

b. A Purchase Request and Commitment (PR&C) shall be prepared for supplies, equipment, and services to be obtained through the District/Center Contracting Office.

c. Properly designated ordering officials, acting within the limitation of their appointment may make field procurements, utilizing credit card payment procedures. A credit card does not substitute for a contract and for compliance with acquisition regulations. The District/Center Contracting Office should be contacted if doubt exists regarding authority for purchase of any item.

d. Administrative staff assigned to Area/Resident Offices may be responsible for procuring office supplies for Area/Resident Office use. Rules for these purchases via credit card or via GSA Supply Center are established by the local District/Center Contracting Office.

e. The Area/Resident Engineer shall insure proper use of any Government Purchase cards (GPC) administered by their staff. This includes insuring GPC training for all cardholders, proper documentation of requests/purchases, and empowerment of GPC holders to deny purchases they determine to be improper. Area/Resident Engineers must be cognizant of GPC purchases and avoid the appearance of splitting or incrementing requirements in lieu of using non-GPC procurement methods. All GPC purchases should be made on a fixed price basis to avoid possibility of revised or updated billing exceeding the GPC card limits.

f. The Area/Resident Engineer, in consult with the District/Center Contracting Office, should develop procedures to procuring QA testing services or other post award construction management related services.

3-9. Property Accountability – General.

a. The District Accountable Property Officer appoints the Area/Resident Engineer as Responsible Employee. The appointment will be in writing and outlines the responsibility for control and management of property. In addition, the appointment is the Area/Resident Engineer's authority to sign property documents and to appoint alternates.

b. The Responsible Employee may designate an alternate to act for and in their name. The alternate may be authorized to perform specific duties. The alternate designation must be in writing and a copy shall be furnished to the Accountable Property Officer.

c. A memorandum record of nonexpendable property will consist of the latest inventory list with a Statement of Agreement, a copy of each property voucher, and current loan receipts.

d. Receiving reports shall be promptly prepared in accordance with ER 700-1-1; Logistics – USACE Supply Policies and Procedures, which can be located via the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_700-1-1.pdf. Each item shall be classified according to the definitions in ER 700-1-1.

e. Property shall be transferred between Responsible Employees using ENG Form 4900, Property Control Receipt. A copy of ENG Form 4900 can be found at the following link: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerForms/ENG%20FORM%204900-R%20-%20Sep%202012.pdf

f. Excess property shall be promptly reported to the Property Disposal Officer.

g. Government property will be loaned for official use only. Government property will not be loaned for the convenience or advantage of any person or entity. Pilferable items are considered to be loaned even though the individual in possession of the items is under the supervision of the Responsible Employee. The Area/Resident Engineer will insure that loans outside the District have been reviewed for proper authorization and approved by the Accountable Property Officer.

h. Incidents of loss, theft, damage, or destruction shall be reported in writing within 10 days of the incident. Depending on the circumstances the following may be used to report the incident.

(1) DD Form 1131, Cash Collection Voucher, may be used provided cash payment is offered, and the depreciated value does not exceed the individual's monthly basic pay. Refer to http://www.dtic.mil/whs/directives/forms/eforms/dd1131.pdfhttp://www.dtic.mil/whs/directives/forms/eforms/dd1131.pdf.

(2) DD Form 362, Statement of Charges/Cash Collection Voucher, may be used provided payroll deduction is offered and the depreciated value does not exceed the individual's monthly basic pay. Refer to http://www.dtic.mil/whs/directives/forms/eforms/dd0362.pdf.

(3) A "Statement of Damage" may be prepared on a Memorandum for File when property is damaged and negligence or misconduct by Government employees is not involved. THIS METHOD WILL NOT REPORT LOSS OR DESTRUCTION OF PROPERTY.

(4) DA Form 4697 (Department of Army Report of Survey) is mandatory under circumstances other than paragraphs (1), (2), or (3) above. DA Form 4697 can be found at http://www.armyproperty.com/Resources/Forms/MS%20Word/MS-Word-DA-4697.doc.

(5) Contact the Accountable Property Officer for specific instructions concerning preparation or which form to prepare.

i. Pilferable (sensitive) and nonexpendable property shall be physically inventoried at least annually. The Accountable Property Officer will furnish an inventory list for noting locations. Subsequent to the inventory, the Responsible Employee will initiate documents for adjustment of the account. The inventory list with all quantities, overages, shortages, and adjustments noted will be returned to the Accountable Property Officer. After all adjustments, overages, and shortages are reconciled, the Accountable Property Officer will furnish a listing of property charged to the Area/Resident Office.

(1) Verify serial numbers.

(2) Review usage of each item to determine if retention is justified.

(3) Update loan receipts by having the individual date and sign on the back of the original. As necessary, prepare new loan receipts.

(4) Verify bar codes. Replace worn or deteriorated bar codes.

j. The Area/Resident Engineer must remain cognizant of evolutionary changes in Property Accounting. For example, IT equipment may evolve from being centrally managed to being locally accountable. Similarly, vehicle fleet management may vary from District to District.

3-10. Property Accountability – Contracts.

a. The local District Accountable Property Officer is typically appointed as Property Administrator on Contracts. The Property Administrator's function is to insure compliance with the contract requirements relative to Government property or salvage.

b. Government property provided to a contractor should be identified by name and quantity in the special clauses of the contract. In addition, the contract should identify items for Government salvage by name and approximate quantity. If this information is not provided in the contract, notify the Property Administrator.

c. As required by FAR Clause 52.245-3, IDENTIFICATION OF GOVERNMENT FURNISHED PROPERTY, the contractor is required to verify the quantity and condition, and acknowledge receipt of Government property in writing. This may be done on shipping documents or DD Form 250, Material Inspection and Receiving Report, if desired. Refer to http://www.dtic.mil/whs/directives/forms/eforms/dd0250.pdf. Discrepancies, damages, etc. shall be annotated on the receiving document. A copy of the receiving document, signed by the contractors' authorized representative, shall be furnished to the Property Administrator as soon as practical. DD Form 250 is located at:

d. Normally, the Property Administrator will authorize the Area/Resident Engineer, in writing, to perform the Usage Check for Government property furnished under contract. The usage check is the physical verification that Government property provided was used reasonably and for the proper purpose required under the terms of the contract. This documentation shall be furnished to the Property Administrator.

e. Turn-in documents for items to be salvaged shall be sent to the Property Administrator. This also includes property that becomes excess or surplus as a result of changes in plans and specifications, procurement or requisition beyond contract requirements, or termination prior to completion.

f. Subsequent to receipt of receiving documents, usage checks, and turn-in documents for salvage, the Property Administrator will reconcile the contract property account and initiate DD Form 1593 (Contract Administration and Completion Record), which is located at the following hyperlink: http://www.dtic.mil/whs/directives/forms/eforms/dd1593.pdf.

g. When the contractor maintains the official records of Government furnished property, the Property Administrator will review the contractor's property control system to insure compliance with the contract requirements, the FAR and the DFARS.

3-11. Information Technology. The Area/Resident Engineer is responsible for forecasting/budgeting/coordinating and requesting (through ACE-IT) information technology needs, such as connectivity needs, computers, blackberry/cell phones/support, print/plot/copy functions, etc. Special attention should be paid to the establishment and connectivity of construction field trailers.

3-12. Tenant Commander Responsibilities. Should the Area/Resident Office be located on a military installation as a tenant organization, the Area/Resident Engineer fills the role of tenant commander. In that role, they may be required to participate in installation working groups (force protection, emergency management, etc.).

3-13. Emergency Management/Response. Area/Resident Engineers may be called upon to work with District Emergency Management to fill key Emergency Management roles, such as Emergency Area Coordinators, or Liaison Officers with State and Local Emergency Management Agencies/Officials.

3-14. Government Field Trailer. There are many items to consider when setting up a new government construction office. If the office is to be there for several years, recommend that a printer with ACE-IT network capability be installed for scanning etc. and government phones be provided. Need to be hard wired, as ACE-IT will not allow wireless printing to the network. Note this needs to be planned very early in the process, as this can take up to 6 months, as ACE-IT must coordinate with the local telephone/cable provider. For short term projects, the use of lap tops with a VPN connection, and the use of cell phones for verbal communication may be adequate. Recommend for short term projects including a contract requirement for the contractor to provide adequate internet capability via cable, telephone or satellite.

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CHAPTER 4

FISCAL ADMINISTRATION

4-1. General. The Area/Resident Engineer should become familiar with the regulations listed below, as well as other pertinent regulations, and insure that the office staff fully understands them. This will provide a more efficient control in budgeting and accounting, and for obligating Government funds at the Area/Resident Office.

a. Defense Finance and Accounting (DFAS) 37-1, Finance & Accounting. Refer to the following hyperlink: http://asafm.army.mil/offices/BU/Dfas371.aspx?OfficeCode=1200.

b. ER 37-1-30, Financial Administration Accounting and Reporting. Refer to http://www.publications.usace.army.mil/usacePublications/EngineerRegulations.aspx.

c. ER 37-3-22, Carryover Supervision and Administration. Refer to the following website: http://www.publications.usace.army.mil/usacePublications/EngineerRegulations.aspx.

d. ER 415-1-16, Fiscal Management. This document can be found at the following link: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-1-16.pdf.

e. DOD Financial Management Regulation (DoDFMR) 7000.14R. Refer to the following hyperlink: http://comptroller.defense.gov/FMR.aspx.

4-2. Budgeting. Prior to beginning of the fiscal year, the District Construction will accumulate data to be incorporated in a Construction budget encompassing estimated work placement projections for the upcoming fiscal year, projected costs at all Area/Resident Offices and the construction effort in the District Office. Area/Resident Engineers shall prepare a budget for their offices, which will be included in the Construction budget, which is acted upon/approved prior to the beginning of the new fiscal year. Included are labor, plant, rent, miscellaneous supplies and materials, telephone, information technology (IT) needs, utilities, vehicles, travel, training, awards, reproduction expenses and District and Area/Resident Office overheads. When it has been determined that accurate and representative figures are adopted for each category of cost, the budget will be furnished to Resource Management, Budget Branch for approval. Reports available in CEFMS will provide the Area/Resident Engineer monthly cost to date of organization Supervision & Administration (S&A) activities. The budget may be updated periodically during the fiscal year. Typical updates occur at the beginning of the new fiscal year (October), and again at mid-year (April/May) to reconcile the budget to any projected versus actual changes (project getting deferred, new contract award information, etc.). Any Area/Resident Office budget change during the year must be coordinated with and approved by the Chief of Construction. Chapter 22 of ER 37-1-30 deals specifically with S&A.

4-3. Cost Accounting. CEFMS is a detailed cost accounting system, which is completely automated with input at the grass roots level of the organization. The operation of CEFMS is complex and places additional responsibility on technical elements of the District and especially the Area/Resident Office. Detailed CEFMS procedures are beyond the scope of this manual; however, a "Quick Process Sheet" for typical Area/Resident Engineer operations is provided at the end of this chapter. The Area/Resident Engineer and their staff must be trained in their CEFMS responsibilities and should maintain a copy of all pertinent CEFMS regulations. A variety of monthly reports are available to aid in managing financial resources. The Area/Resident Engineer and pertinent staff must become familiar with CEFMS in order to track, coordinate and manage the following:

a. Civil.

(1) Actual project cost by month, fiscal year, and cumulative (total-to-date). Feature and sub-feature further break down this data.

(2) Status of Appropriations and Work Allowances.

(a) Current year expenditures.

(b) Current and total obligations.

(c) Unobligated balance.

b. Revolving Fund. Status of S&A Cost and Operating Accounts. Reports are available to track each S&A account by current month and year-to-date cost. Area/Resident Engineers should have a Standard Operating Procedure (SOP) for establishing responsibility and procedures for insuring that labor and expenses are charged to the correct accounts. The Area/Resident Engineer should take personal interest in tracking actual S&A costs compared to the operating budget, as well as monitoring those costs against actual placement to assure the Area/Resident Office is staying within the assigned S&A target.

c. Military.

(1) Project funds control records are maintained in Programs and Project Management Division (PPMD). The Area/Resident Engineer must be aware of both the project Programmed Amount (PA) for their assigned projects and the Current Working Estimate (CWE) to assure no Anti-Deficiency Act violations occur, and should assure that the Project Manager (PM) has the latest estimates for unresolved modifications to provide the most accurate Current Working Estimate possible.

(2) Contract financial records are maintained in CEFMS. The Area/Resident Engineer is responsible to assure that monthly contractor payments are input against the proper appropriation/s. CEFMS maintains "on-time" status of:

(a) Funds authorized.

(b) Funds expended.

(c) Funds reserved.

(d) Funds available.

4-4. Cost Reporting. The monthly accounting is recorded in CEFMS by the end of the month or periodically in accordance with direction issued by the District Office. In general, costs will be reported as follows:

a. Labor. Each employee is required to record time on ENG Form 4704, Work Schedule Time Record, http://www.publications.usace.army.mil/USACEPublications/EngineerForms.aspx or an approved alternate work schedule time record. Accurate and labor distribution, to include appropriate labor codes, must be provided on each employee. Time and labor is entered into CEFMS for each pay period. Input into CEFMS is normally required by noon on the first workday after the pay period. Other deadlines will be required occasionally to meet unusual circumstances. The Area/Resident Engineer should assure that deadlines are met for timely input and approval of labor.

b. Revolving Fund Plant. Costs for travel, vehicles, equipment, telephones, etc. are recorded in CEFMS. The Area/Resident Engineer or authorized alternate shall make funds available in CEFMS to cover such items so costing will be accomplished in a timely manner.

c. Purchase Orders. Orders for Supplies or Services, DD Form 1155, prepared by Directorate of Contracting at the request of the Area/Resident Office will be forwarded to the Area/Resident Engineer. Upon receipt of the articles or services involved, the DD Form 1155 will be completed to indicate the individual receiving them; the Area/Resident Engineer or the individual designated to sign, and authorization of payment entered in CEFMS. DD Form 1155 can be found at http://www.dtic.mil/whs/directives/forms/eforms/dd1155.pdf.

d. Partial Shipment. Payment for partial shipments, when provided in the purchase order shall be received and entered in CEFMS as described above.

e. Credit Card Purchases. Small items may be procured as a credit card purchase, as authorized in writing by District/Center Contracting Office. Credit card payments shall be made through CEFMS. The Area/Resident Engineer shall assure that funds are made available in CEFMS for credit card payments.

4-5. Obligation of Government Funds. The Area/Resident Engineer is responsible to assure that no commitment is made involving funds in excess of the amount authorized, for an improper purpose, or when there is not a bona fide need. This includes a wide variety of financial responsibilities, two of which are of primary importance as addressed elsewhere in this guide. In an ACO or COR capacity, Area/Resident Engineers must insure that contract actions do not lead to unauthorized commitments. These could include constructive changes or exceeding scope or dollar allowances related to Unpriced Change Orders (UCOs). In a supervisory responsibility, Area/Resident Engineers must ensure that commitments, such as those made through the Government Purchase Card (GPC), are fixed price and do not provide the opportunity for the service provider to exceed the obligated amount.

4-6. Audits.

a. Members of the District Internal Audit staff will occasionally visit the project site to perform internal review of the policies and procedures related to any aspect of Area/Resident Office operations. The auditor will discuss the findings with the Area/Resident Engineer prior to departure and a copy of the final report will be furnished to the Area/Resident Engineer.

b. Review will be made relative to the adequacy of procedures and reports maintained by the Area/Resident Engineer in connection with field checks of cost reimbursable work.

c. Auditors from the Army Audit Agency (AAA), General Accounting Office (GAO) and others may also make visits to the project site. Normal procedures require that these reviews are coordinated through the District and Division Offices prior to arrival at the project site.

CHAPTER 5

CONSTRUCTION MANAGEMENT

5-1. General. The Area/Resident Engineer is considered the USACE expert in construction management, and post-award construction contract administration. The Area/Resident Engineer and their staff should be thoroughly familiar with all the provisions of the contracts which they are administering, as well as with the plans and specifications, including all amendments and modifications. They should be thoroughly familiar with the pertinent USACE, Division, District and Area/Resident Office administration policies. It is USACE policy that RMS be utilized on all construction contracts. RMS can be found at http://rms.usace.army.mil/. The policy requiring RMS is currently spelled out in paragraph 7-5 of ER 1110-1-12, Engineering and Design Quality Management. ER 1110-1-12 can be found via the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-1-12.pdf. The Area/Resident Engineer should insure their staff is aware of the proper usage of RMS, that an Area Office Quality Management Plan is prepared annually and supplemented/ tailored as needed for individual projects, that contractors have adequate access to the associated contractor Quality Control System (QCS) counterpart to RMS, and that accurate data is inputted in a timely fashion. QCS will be replaced by the Contractor's mode of RMS in FY16. The Area/Resident Engineer must also be aware of the various Quality Management Systems (QMS) in place and available to assist in construction management efforts. There are reference materials available to the Area/Resident Engineer from HQUSACE, Divisions and District Offices as follows:

a. The Technical Excellence Network (TEN), E&C Community of Practice. See the following website: https://ten.usace.army.mil/TechExNet.aspx?p=s&a=CoPs;18.

b. Official Publications of the USACE. See the following website for publications: http://www.publications.usace.army.mil/Home.aspx.

c. Construction Contract Administration (CCA) Guide. See the following hyperlink: https://cops.usace.army.mil/sites/CT/OCD/51C/Shared%20Documents/REFERENCE%20MATERIAL/Chapter%202%20Tasks/305%20Construction%20Contract%20Administration/FY11%20366%20Const%20Contract%20Admin%20Student%20Manual.pdf.

d. Whole Building Design Guide. See the following website: http://www.wbdg.org/.

5-2. Plans and Specifications, and Design/Build Request for Proposals (RFPs).

a. During the design development phase, prior to award, a series of reviews should be performed on the design documents. These reviews will be in accordance with procedures set forth in ER 415-1-11, Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) Review. ER 415-1-11 can be found via the following hyperlink:

http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-1-11.pdf. Guidance for electronically entering comments into DrChecks can be found at the local District Intranet Web Site under District Engineering. The Area/Resident Engineer and staff members who will be performing quality assurance of the work should study the plans and specifications immediately.

b. Personnel studying the pre-award solicitation documents should be especially watchful for site condition issues, local permit issues and the status of same, errors, LEED issues, and designs with which they have had difficulty in the past. The errors and discrepancies found should be entered into DrChecks. The Area/Resident Engineer's comments should be entered in DrChecks in a timely to allow adequate time for review and consideration prior to advertisement, but in no instance later than a time necessary for inclusion in an amendment. District Construction will need to certify that all BCOES comments have been addressed by the design team prior to advertisement, but in no instance later than receipt of proposals/bids. The thorough review of the plans and specifications prior to contract award serves a two-fold purpose; it reduces the number of costly and time-consuming modifications, and provides the Area/Resident Engineer and quality assurance personnel with a thorough knowledge of the plans and specifications at the very beginning of the contract.

c. An effective tool to performing BCOES reviews is to approach the design as a construction contractor would. In first reviewing the specifications, determine reasonableness and effectiveness of General Conditions Provisions. Review the bid schedule with the measurement and payment section and with the plans and specifications, to determine whether the format of the bid schedule is appropriate (lump sum or unit priced items), whether adequate incentive is provided for performance of closeout documentation and whether the overall pricing schedule is consistent. Review of the technical specifications with spot check of the submittal schedule identifies conflicts or omissions. Review of the specifications table of contents alongside the project plans can identify omitted or extraneous specifications. Review of the designer prepared submittal register, to include Government Approved (GA) and For Information Only (FIO) designations to determine if accurate and appropriate, as well as clearly coordinating with the project manager and design technical manager to ensure post award AE services are funded/coordinated. Reviewers can also formulate a basic approach as to how the work would be scheduled as well as any unusual means or methods that might be required to execute the work, but not explicitly directed. Any specific phasing requirements should be thought through to identify potential conflicts and the contract should be reviewed to ensure that any necessary interim milestones are effectively conveyed. Contract fronts should include necessary items such as special clauses, schedule, CQC, warranty, safety and closeout document provisions. These provide only a few key items to capture during BCOES reviews, but offer a reasonable starting point. A review of the QMS process/checklists for BCOES is also required.

5-3. Review of Proposed Construction with Using Service Authorities, Operations Managers, and Local Sponsors.

a. The Area/Resident Engineer, in concert with the PM and design manager, should coordinate with the Using Service authority for determining:

(1) If they have any comment on the plans and specifications.

(2) The extent of their comments, if any.

(3) If their comments have been submitted to their higher echelons through channels.

b. The Area/Resident Engineer should review the project construction site, existing utilities available, project construction lay down/staging needs, and any conditions that may affect ingress or egress to the site during project construction with the Using Service authorities, Operations manager or Local Sponsor.

5-4. Period of Performance and Liquidated Damages. Area/Resident Office personnel should have knowledge of the projects for which they will have construction oversight through their representation on the project delivery team. The designer of record will typically prepare an estimate of contract duration, and the District will establish the proposed liquidated damage cost. A sample liquidated damage calculation spreadsheet is included below. As the District expert in construction management, the Area/Resident Engineer has the responsibility for review and final acceptance of the construction duration and liquidated damages associated with extended oversight of contracts beyond the contract completion date due to contractor delays for projects on which the Area/Resident Office will perform construction oversight. The Area/Resident engineer should also encourage project managers and customers to include anticipated actual damages (including customer's estimated damages), when appropriate, as part of the liquidated damages calculation. Liquidated damages are our best and reasonable estimate of the harm if performance period is not met.

5-5. Prospective Bidders.

a. The Area/Resident Engineer, typically in coordination with other PDT members and the Using Agency, should coordinate details for site visits by prospective bidders, either formally or informally as the situation dictates, in order that they may familiarize themselves with job conditions affecting the work. Particular attention should be given to any conditions that may affect ready ingress and egress, existing site conditions, existing utilities, potential security issues, and construction staging limitations. Prospective bidders should be treated impartially. A record shall be kept of all prospective bidders visiting the site, including name, organization, and date of visit.

b. The Area/Resident Engineer, in coordination with the assigned contract specialist, should direct the attention of each prospective bidder to FAR Clause 52.236-3, SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK. This paragraph should be emphasized when supplying information to prospective bidders.

c. With respect to questions of fact only, all bidders shall be given the same answer, in its entirety. For questions of interpretation of drawings and specifications, the attention of bidders shall be directed to the Solicitation Provisions, wherein it is required that such questions be made in writing with sufficient time for a reply to reach all prospective bidders before the submission of their bids.

d. Base/Post rules and regulations should be thoroughly explained, particularly those having a direct effect on prosecution of the work.

5-6. Award of Contract. As a general rule, contract awards will be made in the local District Office. The contract documents will be prepared in the District Office and mailed or delivered directly to the contractor, or furnished in electronic format. Copies of the contract shall be furnished to the Area/Resident Engineer. If the procurement is completed by a negotiated procurement method, a copy of the successful contractor's proposal shall also be provided, along with any record of negotiations. In some cases, other geographic districts will award contracts within the boundaries of the local geographic district. In those instances the district awarding the contract will either issue successor Contracting Officer (KO) authority to the local geographic district and the contract will be managed as if it were awarded by the local district, or the awarding district may request assistance from the local Area/Resident Office. In either case, the Area/Resident Engineer needs to insure that copies of the contract are provided by the Contracting Office responsible for managing the contract. Additionally, the Area/Resident Engineer needs to ensure that information from awarded contracts is used to establish necessary contract files and databases, and access to automated systems is granted. For example, recently awarded contracts must be registered within the Contractor Performance Assessment Reporting System (CPARS) within thirty (30) days of award. Electronic or paper copy files should be established using standardized file structures. Project information management programs such as RMS must also have necessary project data loaded upon contract award. District policies may include initial milestone dates to be populated in RMS.

5-7. Notice to Proceed (NTP).

a. A Notice to Proceed (NTP), a copy of which is furnished the Area/Resident Engineer, is issued by the appropriate District Office upon receipt of the properly executed documents from the successful bidder. FAR Clause 52.211-10, COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK, establishes the period of performance beginning on the date the contractor receives the notice to proceed. The contractor will acknowledge receipt of the NTP by signing and dating it with the actual receipt date. This date will establish the start of the period of performance. The contractor should have no cause for undue delay in acknowledging

receipt of the NTP. If the NTP is transmitted via Certified Mail, the date the contractor signs the Certified Mail Card establishes the start of the performance period. If the NTP is sent electronically, it is prudent to request a return email from the contractor confirming receipt.

b. In some cases, a firm completion date is established in the bidding documents with a provision that if NTP is received after a certain date, the completion date will be adjusted. In these cases, the adjustment of the completion date shall be documented in an administrative modification that reestablishes the award completion date. The modification is only issued to correct the award document and does not carry any additional days on the modification itself.

5-8. Commencement of Work.

a. After acknowledgment of the NTP, the contract normally requires the contractor to commence work within a minimum number of days. The Area/Resident Engineer should record the date in RMS on which the contractor begins work at the job site. Refer to paragraph 7-3 (c), 7-3. Progress and Progress Reporting of this manual for guidance as to what actions by the contractor constitute the start of work.

b. Should the contractor fail to commence the work as provided for in the contract, the Area/Resident Engineer should make an immediate report, giving all essential facts, to the Chief of Construction, the PM and the KO. A notice of concern should also be sent to the contractor.

5-9. Post Award/Preconstruction Conference.

a. After award of contract, a conference shall be arranged by the Area/Resident Engineer between responsible personnel of the contractor, Area/Resident Office, District Office, and, if applicable, the Using Service. Reference the RMS library templates for agenda/minutes. For D-B projects, this is referred to as the post-award conference. Refer to Chapter 14. Design-Build Method of Delivery of this manual. For D-B-B projects this is referred to as the preconstruction conference. At this conference, the contractor should be oriented with respect to Government procedures and line of authority for contractual, administrative, and construction matters. For projects which occur out in the public sector (i.e. HTRW, civil works, etc.), it may be appropriate to invite local authorities to the conference if an evaluation plan or other coordination with the public is required. When possible, the NTP date should be aligned to occur on the date of the conference so as to clearly denote start of the contract's period of performance.

b. Forms, methods and procedures should be explained to the contractor. Topics should include:

(1) General contract information to include a description of the work involved.

(2) Name, address, telephone number, and extension of the designated Area/Resident Engineer, as well as any ACO/COR delegations, and the identification of any staff that may be involved in the management of the project.

(3) The contractor should be advised that there should be no official contact with members of the District staff, but that all contact must be through the Area/Resident Engineer (ACO/COR). The contractor shall be advised of rules and regulations pertinent to operations and the conduct of employees.

(4) The contractor should be advised that there should be no official contact with the Using Service, but that all contact must be through the Area/Resident Engineer. The contractor will be advised of Base/Post rules and regulations pertinent to operations and the conduct of employees. Representatives of the Using Service will be invited to participate in this portion of the conference.

(5) Discuss the USACE Partnering policy and encourage the Partnering process for the contract. All parties should strive to meet the following goals:

(a) Develop an atmosphere of trust among all parties.

(b) Strive for a quality product.

(c) Strive for completion in a timely manner.

(d) Strive for an accident free job.

(e) Develop open lines of communication.

(f) Work as a team toward completion of the project.

(g) Provide responses to all issues in a timely manner.

(h) Develop a positive attitude and avoid adversarial relationships.

(6) The required certificates of insurance for the prime contractor should typically be submitted to the KO prior to NTP, and should be reviewed at the Preconstruction Conference. Any subcontractors' certificates of insurance requested by the Area/Resident Engineer for review should also be sent to the Area/Resident Engineer. The insurance inspection dates should be entered into RMS and tracked by the Area/Resident Engineer.

(7) The contractor's responsibility for inspection of work and proposed methods for performance of work should be discussed. Discuss subcontracting and amount of work to be

performed by the prime contractor. The requirement for the contractor's efforts and submittal of reports on subcontracting to minority business enterprises should be emphasized.

(8) Stress the importance of Contractor Quality Control (CQC) on USACE contracts. Refer to paragraph 5-15. Contractor Quality Control of this manual.

(9) Stress the section on Environmental Protection in the contract specifications. Review the preventive measures required for control of environmental issues. Refer to Chapter 13. Environment of this manual.

(10) Emphasize the importance of safety on construction projects, with particular attention to the USACE Safety Manual (EM 385-1-1), which can be found via the following hyperlink: (http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1_2008Sep_Consolidated_2011Aug.pdf). The District Safety Officer may be invited to participate in this portion of the conference.

(11) Method of submitting correspondence, shop drawings, and samples. Refer to paragraph 5-18. Shop Drawings, Samples, and Certificates of this manual.

(12) Changes and Claims. The contractor shall be advised that the contract clauses limit changes in the work to those authorized in writing by the KO or designated ACO. Refer to paragraph 7-12. Modifications, General of this manual.

(13) Emphasis should be placed on the requirement for timely submittal of the Project Schedule, and the importance of the contractor staying on schedule. Schedule requirements of the contract should be discussed, to include preliminary and initial schedules as well as cost loaded schedules. Frequency and method of periodic schedule reviews should also be covered. Refer to paragraph 7-3. Progress and Progress Reporting of this manual.

(14) Review FAR Clause 52.248-3, VALUE ENGINEERING-CONSTRUCTION, and set up the mechanics for the submittal of cost reduction proposals in compliance with prescribed details so as to permit expeditious processing of acceptable proposals. Emphasize that any change would be handled by formal contract modification and must result in savings to the Government without impairing essential functions of the project or extending the contract performance period. Inform the contractor that Value Engineering serves to emphasize the management principal of periodically reviewing methods and materials used economically accomplish quality construction. Emphasize that the program has active support throughout USACE, and that any reasonable proposal consistent with the job requirements for performance and maintainability will be considered. Refer to Chapter 8. Value Engineering of this manual.

(15) Discuss the following Labor Standards Requirements:

(a) The prime contractor is responsible for all subcontractor violations, and for ensuring the flow down of contract clauses and wage rates to subcontractors.

(b) The prime contractor must ensure weekly payment of all laborers and mechanics, and weekly submission of certified payrolls.

(c) The prime contractor must ensure bona fide use of apprentices and trainees.

(d) The prime contractor must ensure that a bona fide list of its and its subcontractor employees is maintained, to include names, addresses, and social security numbers, and these are available upon request by the agency.

(e) The prime contractor must post wage rates, WH Poster 1321, Employee Rights Under the Davis-Bacon Act at the worksite.

(f) The prime contractor is responsible for payment certification, and any failure (or the failure of any of subcontractors) to comply may result in penalties and debarment from future bidding on Government contracts for a period of three years.

(g) The prime contractor should be supplied with the necessary forms, including DD Form 879, Statement of Compliance (Contractor's Weekly Payroll Statement) and SF 1444, Request for Authorization of Additional Classification. DD Form 879 can be found at the following website: http://www.dtic.mil/whs/directives/infomgt/forms/index.htm. SF 1444 can be downloaded from http://www.gsa.gov/portal/forms/download/115906.

(h) The District Labor Relations Officer should be invited to participate in this portion of the conference, where feasible. Refer to Chapter 10. Labor Relations and Labor Standards Enforcement Responsibility of this manual.

(16) Discuss Prompt Payment Act requirements, progress payments, final payment, USACE policy on payment for stored materials and USACE policy on retained percentage. Refer to paragraph 7-2. Contractor's Payment Estimates of this manual.

(17) Discuss Contractor's Performance Appraisal. Refer to paragraph 7-7. Evaluation of Contractor Performance of this manual.

(18) Construction procedures and special problems, to include critical materials or specialized inspections.

(19) Other pertinent items of the contract and Special Clauses, and the Technical Provisions of the contract should be reviewed.

c. After this meeting, a record shall be prepared by the Area/Resident Engineer and the contractor shall be requested to reply, in writing, of concurrence with the record or identify areas of disagreement. The meeting record will then be distributed to the contractor, contract file, and the Government quality assurance representative.

5-10. Location of Material Storage Area and Project Signs.

a. In many instances, an area for contractor operations is identified in the contract documents, and if additional space is required, it should be clearly understood within the contract that the contractor is responsible to obtain additional space at no additional cost to the Government. However, in some cases (i.e. civil works construction) the Government has chosen to identify specific borrow and/or waste areas. In either case, the Area/Resident Engineer should be aware of the contractor's operational plans and space needs. The provisions of the contract regarding waste areas and borrow areas for construction excavation should be discussed with the contractor to insure complete understanding.

b. Most contracts will require the installation of a sign or signs describing the construction project, and a project safety sign. The Area/Resident Engineer has the responsibility of strategically placing the signs to convey the desired information to the public. Hazardous and toxic waste projects include exclusion zones. These zones shall be clearly marked with appropriate signage.

5-11. Federal, State, Base, and Local Regulations.

a. It is the Area/Resident Engineer's responsibility to know applicable Federal, State, Base, and local regulations. The Area/Resident Engineer should keep the contractor informed of these regulations as well as where the regulations may be obtained.

b. Observance of the State laws and local and Federal regulations is required under the terms of the contract. Handling and storage of explosives, operation of steam boilers, operation of cranes in the vicinity of power lines, operation of mines and quarries, and some other activities may require additional permitting and periodic inspection by state or other agencies. The Area/Resident Engineer shall cooperate with these agencies in requiring observance of the State laws and regulations. On hazardous and toxic waste projects it should be kept in mind that state regulations may be more stringent than those of the Environmental Protection Agency (EPA). In these situations, the state regulations may take precedence.

c. The contractor should be informed of the roadway which may be used, and the weight limit, if not posted. Temporary roadways may be authorized, if warranted. Such roadways will be the complete responsibility of the contractor. It is the contractor's responsibility to preserve and protect all roadways, structures, utilities, vegetation, and the like (see FAR Clause 52.236-9, PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES AND IMPROVEMENTS). All damages to Government or other property by the contractor shall

be repaired by or at the expense of the contractor. The Area/Resident Engineer shall keep accurate records of all damages. The contractor shall also keep roadways that he uses on military installations and public roads clean during use.

5-12. Relationships with the Using Service, USACE Operations Managers and Local Sponsors. The Area/Resident Engineer must establish and maintain good working relationship with the Using Service, USACE Operations Managers and local sponsor customers. Every effort must be made to keep the local customer informed of current and future construction projects and their impact on the customer's local operations. The following is basic policy for Area/Resident Engineers and the local customer should be advised accordingly:

a. The District Office, USACE, is a service organization acting by direction of higher headquarters to properly construct or install certain previously agreed upon facilities.

b. The Area/Resident Engineer is the representative of the District Commander (as distinguished from the KO) and exercises such authority within the limitations prescribed by the District Commander.

c. The Area/Resident Engineer and/or PM will advise the authorized representative of the local customer of the scope of the directive under which the project is to be performed.

d. The local customer will be advised that the District Commander, through the KO and/or their authorized representative, is in fact the contracting medium by which construction services are carried to completion.

e. Where the local customer desires to affect changes in plans and/or specifications, the local customer representative will be requested to initiate prompt confirming action through proper channels. In the case of O&M work, and a few other instances, the local customer typically has full financial authority to request that USACE make changes. The Area/Resident Engineer and staff should understand the customer's chain of command and who has the authority for the User requested changes.

f. The local customer will be advised that the District Commander has no local jurisdiction over rights-of-way, real estate, or the right of entry and exit into or over Base or Post properties. Cooperation is essential in the closing of streets, roads, and area ways, in the erection of barricades, and in similar matters affecting the construction.

g. Interim inspection will be made jointly by the Area/Resident Engineer and an authorized representative of the local customer whenever requested. Inspection for Beneficial Occupancy, Pre-Final and Final Inspections must be made jointly with authorized representatives of the local customer, who should be given sufficient notice to avoid delay.

h. The Area/Resident Engineer and staff will comply with all local, Post or Base regulations.

i. The Area/Resident Engineer will promptly transmit to the District Office adequate information and comments relative to command matters as outlined above.

j. The Area/Resident Engineer will coordinate technical liaison matters with the local customer, as applicable.

5-13. Dealing with the Contractor.

a. The Area/Resident Engineer and staff must maintain firm, fair, professional and friendly, but impersonal, relations with the contractor and subcontractor representatives. The Area/Resident Engineer and staff needs to be honest, honorable, and above reproach, and they shall not grant or accept any favor, gratuity, etc. from the contractor. The Area/Resident Engineer need to insure all actions are in accordance with the Joint Ethics Regulations.

b. Every effort shall be made to establish and maintain businesslike and cooperative relations with the contractor and its representatives. It is only through firm, intelligent quality assurance, based on a thorough knowledge of construction principles and an appreciative understanding of the contractor's challenges that good working relations will result.

(1) The Area/Resident Engineer needs to give full hearing and consideration to all requests and proposals of the contractor. Even though the request or proposal may seem without merit, the contractor needs to be furnished a decision from the Area/Resident Engineer or be informed that the matter is being forwarded to the KO for determination.

(2) All decisions and instructions given the contractor should afford the greatest latitude in choice of equipment, materials, and methods that are possible without prejudice and without waiving the contract requirements.

(3) The Area/Resident Engineer should encourage partnering with the contractor, subcontractors, and the local Using Service. The Area/Resident Engineer staff, local customer and contractor personnel must understand the principles of partnering. Partnering requires that each partner accomplish their tasks correctly and in a manner timely to the completion of the project. This requires that all parties be professional and open in their actions. Partnering does not allow the contractor to cut corners and not comply with contract requirements. Likewise partnering does not provide that the Government can make changes affecting the contractor's cost without equitable adjustment. Informal horse-trading is not within the scope of partnering even if all parties would be satisfied with the trade.

c. The Area/Resident Engineer should not make decisions on matters strictly of design nature. The District Office should review interpretations or changes in design. The justification

of a change will require a definite benefit being derived by the Government as a result of the change.

d. The Area/Resident Engineer will exercise caution in dictating methods of construction to the contractor unless the specifications clearly indicate the methods of construction. The management of the work, "means and methods", is the responsibility of the contractor. If any method is employed which the Area/Resident Engineer believes will impair the quality of the work or is a safety hazard, the contractor should be informed at once. The Area/Resident Engineer should, in addition, watch to see that the operation is stopped, and, if not, make the unsatisfactory practice of the contractor a matter of written record to the contractor and KO. If the situation warrants, the Area/Resident Engineer should contact the KO and suggest a joint call to the head of the contractor's company.

e. The Area/Resident Engineer should be very cautious in requesting the contractor to accelerate work to regain schedule. The contract should be current as far as any time extensions are concerned and scheduled critical activities must be behind schedule before the Area/Resident Engineer takes action to accelerate work. It is always best to inform the contractor of the need for acceleration and to ask for a plan of improving progress on the contract or phases of the contract. If the contractor's answer and/or later actions to such a request are not satisfactory, the matter should be referred to the KO for further necessary action.

f. The Area/Resident Engineer will insure that each member of the staff thoroughly understands the scope of their authority in dealing with the contractor's representatives. Care shall be exercised to assure discussions of a controversial nature are with the prime contractor. There is no intent in the contract for creation of contractual relations between subcontractors and the Government. The prime contractor is responsible for the accomplishment of all phases of the contract. To fulfill this responsibility, the contractor must coordinate with subcontractors and be responsible for all of their operations. The contractor is required by FAR Clause 52.236-6, SUPERINTENDENCE BY THE CONTRACTOR, to place a satisfactory construction superintendent on the work who is fully qualified to coordinate and supervise all subcontractors and handle all necessary details with the Area/Resident Engineer. The Area/Resident Engineer shall inform the contractor when the contractor superintendent or subcontractor is considered unsatisfactory. Additionally, FAR Clause 52.236-5, MATERIALS AND WORKMANSHIP, provides that the KO may require removal of any contractor employee deemed incompetent, careless or otherwise objectionable. Personnel of the Area/Resident Engineer's office should particularly note that their dealings are with the prime contractor. They are not to enter into detailed discussions concerning the extent or quality of the work required or the materials to be used with subcontractors unless specifically requested to do so by the prime contractor. All communications, correspondence, shop drawings, samples, descriptive data, reports, and cost proposals are to be submitted by the prime contractor. Field instructions shall be given to the prime contractor's supervisor or contractor quality control personnel; never directly to subcontractors or workmen unless a safety hazard exists that presents an immediate threat to personnel or property.

g. Special care shall be taken that differences of opinion between Government personnel are not discussed in the presence of the contractor or the contractor's representatives. In like manner, all Government records and interdepartmental and intradepartmental correspondence, which are considered administratively confidential, shall be maintained in such a manner as to be accessible only to Government officials and employees.

h. Any pertinent contract document wherein the contractor is required to negotiate with any governmental agency shall be made through the Area/Resident Engineer or with their full knowledge.

i. All matters of a controversial nature should be settled by a mutual agreement on the job whenever possible. Every reasonable effort should be made to avoid disputes. The Area/Resident Engineer shall keep the KO informed of all unsettled controversies, furnishing all facts, which will include both his and the contractor's approach and arguments. Detailed manpower and equipment records on the QA report regarding disputed work can be very helpful when defending against a claim.

5-14. Quality Assurance (QA).

a. The Area/Resident Engineer should bear in mind at all times the importance of their responsibility to provide the best quality assurance (QA) of the contractor's quality control (CQC), which is the keynote of quality construction. It calls for technical knowledge, tact, and good judgment. Lax CQC leads to poor results; careless QA brings about unsettled conditions and disputes; and arbitrary and dictatorial quality assurance brings on friction and hard feelings. The Area/Resident Engineer and staff should establish an attitude of cooperation and mutual interest in accomplishing QA in accordance with the contract requirements. The Area/Resident Engineer will prepare a QA Plan which not only considers day-to-day QA issues, but also considers a plan for QA testing, and identifies which features of work will require specialized QA inspection and/or testing, and participation from subject matter experts (SME) outside the Area/Resident Office staff, such as fire protection engineers, geotechnical engineers, or USACE MCX or CX personnel. The Area/Resident Engineer should continually test themselves and members of the staff to assure the existence of a thorough knowledge of the plan and its effectiveness in fulfilling the contract requirements. QA efforts at the inception of each phase of work should be particularly effective since minor deficiencies at that stage have a tendency to become more serious later. CQC and Government QA representatives must fully understand the three-phase control system and should appreciate the value of the opportunity for understanding provided at the preparatory phase meeting.

b. Guidelines for Area/Resident Engineers.

(1) ER 1180-1-6, Construction-Quality Management, prescribes procedures for administration of this part of the contract specifications. Refer to the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1180-

1-6.pdf. Every member of the Area/Resident Engineer's staff should study and be familiar with this ER. Additional information is provided in EP 715-1-2, A Guide to Effective Contractor Quality Control. A copy of EP 715-1-2 can be located using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_715-1-2.pdf.

(2) It is realized that each project has a different set of circumstances and circumstances change from time to time. Because of this wide range in construction variables, each project will have to be studied carefully by the Area/Resident Engineer and the available quality assurance force must be tailored to best suit the varying conditions and construction requirements. The Area/Resident Engineer should stagger the work force or make judicial use of overtime to best solve a particular problem.

(3) General Comments:

(a) Area/Resident Engineers and District Construction personnel will review the CQC Program requirements included in new solicitation specifications during the BCOES process, and furnish changes that should be made prior to bid opening. It is anticipated that these suggestions will improve the CQC Program.

(b) The Area/Resident Engineer must take positive action to see that the contractor provides good quality CQC and, consequently, acceptable quality work. If the contractor is not doing all that is required, the Area/Resident Engineer will take steps to insure that the necessary changes are made.

(c) Any defective work or materials which the CQC personnel do not take action to correct, should, without exception, be ordered corrected or replaced by the Area/Resident Engineer.

(d) The Government must provide enough QA personnel to ensure that the CQC system is providing acceptable quality work, and that the CQC system is corrected to prevent a recurrence of unsatisfactory work. If the contractor is not providing satisfactory work, the Area/Resident Engineer will take the necessary action to insure that the contractor's work does meet the specifications. There is no doubt that the Government has the ultimate responsibility for the finished work.

(e) The Area/Resident Engineer will make arrangements for laboratory service from commercial sources or USACE labs to accomplish the QA testing required. The Area/Resident Engineer will be responsible to take enough tests to be assured that the contractor's test results are reliable and representative of materials incorporated into the work.

c. The CQC manager's primary duty is to see that the proper quality of work is being performed in accordance with the plans and specifications. The Government QA force is

charged with evaluating this effort and providing input to the COR/ACO of deficiencies in the CQC program. QA representatives shall be advised that they only have authority to assure strict compliance with the contract and no authority to change or waive contract requirements. To accomplish this, the plans and specifications should be studied in advance; problems and requirements should be anticipated; necessary tests or investigations of work should be made well in advance of the time of its execution. Approval of shop drawings should be obtained before items of materials are brought on the job; and QA personnel should monitor and ascertain that the contractor's plans and management are such that no construction or manufacturing operations will be unnecessarily delayed.

d. The Area/Resident Engineer shall be furnished a copy of the analysis of design for work being constructed under their supervision, as well as any Engineering Considerations and Instructions for Field Personnel (ECIFP) Report. The analysis should include sustainability checklists and energy calculations. The Area/Resident Engineer and appropriate members of the staff shall review the designs and be alert to detect conditions not anticipated by the designers. The Area/Resident Engineer and staff should continually monitor the quality of foundations, embankments, materials, and other appropriate items to insure that they are equal to those required by the design.

e. The Area/Resident Engineer shall ensure that construction quality management efforts (i.e., the CQC testing and inspections and the Government QA testing and inspections) are thorough and are performed at appropriate times. The following CQC phases should be performed:

(1) Preparatory Phase. The preparatory phase meeting is performed prior to initiating construction on any definable feature of work. The preparatory phase is a joint meeting (Government and contractor personnel). Both parties should ascertain that there is a firm understanding of contract requirements; that materials and equipment have been tested, submitted, and approved; that provisions have been made for control testing; that preliminary work has been satisfactorily completed; that materials and equipment on hand conform to approved shop drawings; and that sufficient quantities of necessary materials are at the work site.

(2) Initial Phase. The initial phase is performed when construction is initiated on a work feature. The initial phase is a joint inspection (Government and contractor personnel). Both parties should establish standards of workmanship and review the requirements for control testing.

(3) Follow-up Phase. Follow-up inspections are performed daily to insure continuing compliance with contract requirements. The knowledge and understandings provided by the preparatory meeting and initial inspection serve as a guide for follow-up inspections. Follow-up inspections include the required control testing. These inspections need not always be joint inspections, but occasionally quality assurance personnel should accompany the CQC personnel during the performance of follow-up inspections.

f. The Area/Resident Engineer is responsible for having and maintaining an adequate force of qualified QA personnel for proper QA of all construction work being performed under their supervision. The Area/Resident Engineer should go on written record with the District Office any time it is their opinion that unqualified or insufficient numbers of QA personnel have been provided.

g. QA Personnel must always be well equipped to perform their duties. Immediately available to them should be:

(1) Hard copy of the plans and specifications with all amendments, revisions, and modifications;

(2) Approved shop drawings for all equipment and material,

(3) Applicable volumes of EP 415-1-261, Quality Assurance Representative's Guide (See http://www.publications.usace.army.mil/USACEPublications/EngineerPamphlets.aspx),

(4) Copy of the Safety Manual, EM 385-1-1 (Refer to the following hyperlink: http:/www.publications.usace.army.mil/USACEPublications/EngineerManuals.aspx),

(5) Contractor's Accident Prevention Plan,

(6) Contractor's Quality Control (CQC) Plan,

(7) Government Quality Assurance (QA) Plan,

(8) Daily Log Reports,

(9) Rules, tapes, and other measuring devices or testing equipment, as required, to check the various items of work for which they are responsible.

h. Any incident in the field that impacts on construction can result in a claim by the contractor. It is imperative that these incidents be identified and documented even if it is deemed doubtful at the time that a claim may result. Office of Counsel attorneys are available to discuss immediate legal problems. These discussions can often assist in avoiding and/or better documenting claims. Field office personnel must document these events as they happen by written memoranda, photographs, video tape, entries on daily QA logs, and collection and preservation of physical evidence, etc., as appropriate.

i. The QA representative should be kept aware that assistance and advice will be provided them any time they need it.

j. Visits to Project and Inspection by Higher Authority:

(1) The Area/Resident Engineer, as the representative of the District Commander, will extend every courtesy and cooperation to all official visitors and, whenever possible, will personally escort them throughout the project. Where this is not possible, another qualified and responsible person should perform this task. Visitors by definition include anyone not associated directly with the Area/Resident Office or the contractor. This includes other members of the USACE PDT, the DOR, customer representatives, other Government agencies, and/or private sector individuals. Visitors should not be left on their own. The Area/Resident Engineer will remind official visitors that comments or instructions must be directed to the Area/Resident Engineer and not to the contractor or its representatives.

(2) All visitors will be given a safety briefing, and must be outfitted with appropriate personal protective equipment, prior to being allowed on any construction site. These briefings should be specific to each site to be visited and should cover any safety hazard which may exist. The briefer must keep in mind that visitors may not be accustomed to dangers inherent on construction sites so hazard identification must be complete.

(3) Most inspections by higher authority are made on an accelerated basis and it is mandatory that records, charts, and reports are maintained current and available for ready review.

(4) The requirement for visitors to sign a Visitor's Register is not mandatory. An informal type of book may be made available for signature at the visitor's option.

(5) Upon completion of inspection by higher authority, the Area/Resident Engineer will meet with the inspection party in an "exit interview" to discuss their findings. If deficiencies found are such that corrections can be taken without approval of the District Office, the inspection party will be advised of the corrective action to be taken and the Area/Resident Engineer will then take necessary action to correct the deficiencies.

(6) The policies regarding the handling of foreign and other casual visitors to activities under the direct supervision of USACE are discussed in Chapter 11. Physical Security.

5-15. Contractor Quality Control (CQC).

a. General Requirements.

(1) All fixed-priced construction contracts in excess of the simplified acquisition threshold ($150,000, FAR 2.101) include contract clause FAR Clause 52.246-12, INSPECTION OF CONSTRUCTION, requiring a CQC system. This clause requires the contractor to maintain an adequate CQC system and perform such quality control as is needed to assure that all items of work, including that of subcontractors, conform to contract requirements. This clause also requires the contractor to maintain and make available to the Government complete records of such CQC results (test results, inspection results, etc.). The primary purpose of this contract clause is to emphasize the contractor's full responsibility for complying with all contract

provisions. The contractor must provide inspection and testing necessary for adequate quality control of its own and its subcontractors operations, and for materials and supplies to be placed, except where the contract specifications provide for Government control or testing of the products.

(2) In addition to the standard quality control specification section, all hazardous toxic or radiological waste projects will also have a chemical quality management specification section. This section describes internal quality control procedures, which the contractor must adhere to with regards to chemical testing by their chemical laboratory. In addition, this section should include locations and types of chemical tests required by the contract, and describe sampling techniques that must be followed in field sampling. These sampling location and techniques are examples of the types of items the Area/Resident Engineer and Area/Resident Office personnel must check on as part of the Government's QA program.

(3) The CQC system, however, does not relieve the Area/Resident Engineer of the responsibility to see that all work under the contract is accomplished in accordance with plans and specifications. It provides the Area/Resident Engineer with another management tool to assist in providing quality-constructed facilities to the various using services.

(4) Area/Resident Office personnel will "spot check" work in progress to verify that the contractor is performing effective quality control. The CQC system should not be accepted without question. The right to inspect or verify at any time is reserved by the Government, (FAR Clause 52.246-12, INSPECTION OF CONSTRUCTION). The burden of proof of contract compliance rests with the contractor and is not assumed by the Area/Resident Engineer or the KO.

b. Administration.

(1) The contractor will furnish the Area/Resident Engineer with a Quality Control Plan that complies with the contract specifications within approximately twenty (20) days after receipt of the NTP. This plan should include the procedures, instructions, and reports to be used. It must specifically include the surveillance and tests required in the technical provisions of the contract specifications. An interim plan for the first thirty (30) days of operation will be considered. A CQC coordination meeting, also referred to as a mutual understanding meeting, is required by the contract. At the CQC coordination meeting the CQC Plan will be discussed in detail. The meeting should develop mutual understandings as to the details of the system, including the forms to be used for recording the inspections, administering the system, and the interrelationship of CQC and Government QA. Any additions, corrections, or omissions from the plan must be corrected in writing before the plan will be conditionally accepted. Unless specifically authorized by the Government no construction activity will be started until the CQC Plan is accepted.

(2) Immediately prior to starting various phases and types of work or several related phases or types of work that will progress simultaneously, surveillance personnel will meet with the CQC personnel and review the applicable plans and specifications. Other Government personnel will participate in the meetings when deemed necessary by the Area/Resident Engineer. Pertinent plans and specification requirements will be discussed and an understanding reached that the contract requirements are clearly understood by CQC personnel. Special emphasis will be placed on the plans and specification requirements which have, on prior projects, resulted in deficiencies or which are not normally required or performed on commercial work. Questions that arise during the meeting, which the surveillance personnel are unable or are without authority to answer, should be referred to the Area/Resident Engineer. A list of personnel attending each meeting, their employer, their respective positions or titles, and the subjects discussed will be noted on the ENG Form 2538 (Daily Log of Construction). These meetings are to discuss appropriate plans and specification requirements, not proposed deviations from the requirements or to discuss so-called better materials and/or work methods expected to accomplish the same purpose or intent of the governing plans and specifications. Each section of the Technical Provisions of the contract will normally be included in one or more of these meetings. Refer to paragraph 5-14. Quality Assurance of this manual for detailed information relative to preparatory, initial and follow-up phases.

(3) The contractor's quality control reports (QCRs) should be provided within 24 hours after the date covered by the report to the Government surveillance personnel who will review and verify these reports for completeness and accuracy. If not factual, or should the reports contain errors, the reports should be rejected and returned to the contractor. Government surveillance personnel should not alter, delete, approve, or sign the contractor's QCRs. Government QA reports (QARs) should document any comments to contractor's QCRs.

(4) The Government surveillance personnel will prepare daily QARs according to governing requirements, independent of and in addition to the contractor's QCRs.

(5) The Area/Resident Engineer will review the contractor's QCRs and the corresponding Government QARs. If, in the opinion of the Area/Resident Engineer, the reports, or actual quality results, indicate that the CQC system is not adequate for quality control of the contract work, the Area/Resident Engineer will direct the contractor, in writing, to take the corrective actions necessary to insure compliance with the contract requirements.

(6) The USACE preferred information management system for post award construction contract administration is RMS (http://rms.usace.army.mil/). The QA module of RMS is specifically designed to include all aspects of QA documentation. Additional, RMS includes a contractor Quality Control System (QCS) feature that allows, among other things, the opportunity to document all daily CQC reports, and allows these to be viewed by the Area/Resident Office staff. As mentioned earlier, QCS will be replaced by the Contractor's mode of RMS in FY16. Use of RMS is mandatory on all construction contracts over $150,000.

5-16. Shop Inspection.

a. The Area/Resident Engineer is responsible for the determination of the necessity for shop inspection and for initiating a request for shop inspection of equipment and materials being furnished and installed by the contractor. The determination should be made during the early stages of the contract and preferably before advertisement of the solicitation. This should be high-lighted in the Quality Assurance Plan for the project.

b. Good judgment should be exercised in determining the necessity for shop inspection. The following items should be considered: type of materials or equipment involved; cost of inspection; importance of checking the materials; specific requirements in the specifications, etc. Items to generally appraise for shop inspection requirements are structural steel and mechanical and electrical equipment.

c. The actual shop inspection can be accomplished with Area/Resident Office staff, local District Construction staff, independent third party QA inspectors, or other personnel from other USACE Districts. Before making a request for a shop inspection, the Area/Resident Engineer shall determine the date the material or equipment is to be manufactured, date it is needed on the job, manufacturer's address, and supplier's address. A copy of the contractor's purchase order should be forwarded to the appropriate element performing the inspection.

d. The fact that other Districts may be inspecting the work does not relieve the Area/Resident Engineer of the duty of assuring that the material being manufactured or fabricated at another location fully complies with the contract requirements. It is the Area/Resident Engineer's responsibility to make sure that the material is being properly inspected, tested, etc., and that, when delivered on the job, it will meet the contract requirements and will be delivered in sufficient time so as not to delay the construction.

e. Copies of inspector's Acceptance Reports and shipping lists will be furnished to the Area/Resident Office. Mill test reports and Certificates of Compliance received by the Area/Resident Engineer from the contractor should be checked against the applicable contract specification requirements to ascertain that the reports or certificates indicate the materials meet the requirements of the specifications.

5-17. Removal of Work for Examination. FAR Clause 52.246-12, INSPECTION OF CONSTRUCTION, gives the KO the right to require the contractor to remove or tear out any completed construction for the purpose of examining it for compliance with contract requirements. The paragraph further provides that the contractor pay all cost for the removal and replacement if the work is found to be defective or nonconforming with contract requirements. If, however, the work is found to conform to contract requirements, the Government shall bear the expense of removal and replacing, payment being covered by a modification to the contract. The Area/Resident Engineer shall determine that adequate funds are available, should the

Government have to pay the expense, and include this information when recommending to the KO that the clause be invoked.

5-18. Shop Drawings, Samples, and Certificates.

a. Contractors submittals will be processed in accordance with ER 415-1-10, Contractor Submittal Procedures. Contract documents and contractor submittal procedures can be found at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-1-10.pdf. Shop drawings referred to will mean all submittals which are made for the purpose of securing approval for material or equipment to be used in or on the construction job. It may mean samples, catalog data, certificates, drawings, calculations, etc.

b. Shop drawings required to be furnished by the contractor are usually enumerated in the Technical Provisions of the specifications. The Area/Resident Engineer may require shop drawings for any materials or articles which will be incorporated in the work under FAR Clause 52.236-5, MATERIAL AND WORKMANSHIP.

c. The Area/Resident Engineer is responsible for ensuring timely review of all the necessary shop drawings.

d. The contractor is required to furnish a list of all submittals to be submitted for approval with the estimated date of submittal, including the date approval is needed. A draft of this submittal register ENG Form 4288 may be provided with the contract specifications. It is very important that the submittal register is completed and that shop drawings be submitted and reviewed promptly. The Area/Resident Engineer should assure the submittal register is carefully monitored in RMS/QCS or Contractor's mode of RMS. Timely and complete submittal of shop drawings will contribute materially to the successful completion of the job by the contract completion date. The shop drawing submittal register is a record indicating the status of shop drawings and should be checked at frequent intervals to insure that all needed shop drawings are submitted reviewed and approved sufficiently in advance of need to avoid delays. ENG Form 4025 – Transmittal of Shop Drawings shall be used for the transmittal of shop drawings. This is available in RMS/QCS or Contractor's mode of RMS. In the event the Area/Resident Engineer determines that the contractor is dilatory or negligent in furnishing shop drawings, the contractor should be advised immediately and requested to take prompt action to avoid delays.

e. It is essential that shop drawings not only be timely submitted but also be expeditiously handled by persons reviewing the shop drawings. In order to maintain adequate control of submittals, the Area/Resident Engineer should institute a systematic suspense and follow-up procedure for handling shop drawings. Many times construction phase support services are requested from the original designer of record. It is the Area/Resident Engineer's responsibility to make sure the appropriate contract is in place with the A-E through the District design manager and PM, and that the submittal register and the individual submittals to be reviewed are provided to the A-E in a timely manner to allow for adequate review time. Refer to published

ECBs and EP 715-1-7, Architect Engineer Contracting in USACE for more information on the procurement of construction phase support services.

f. If shop drawing reviews are accomplished by the contract through the design A-E, the payment process for this review effort must be coordinated with the PM and the District design manager. The Area/Resident Engineer should be provided a copy of the A-E contract and should be included in the process to review invoices the A-E submits for payment to ensure proper payment for its efforts for not only shop drawing reviews, but site visits and any other technical assistance the A-E is providing, or expected to provide. If there is a discrepancy on the A-E invoice, timely communication processes should be established between Area/Resident Office, the District design manager, the COR for the A-E contract, and the A-E to reconcile any payment questions/concerns. It should be noted that the A-E payment process is subject to the same Prompt Payment Act requirements as the construction contracts.

g. Funding for submittal reviews (and other post-award services) is also something that needs to be thoughtfully planned out. While S&A funds are used extensively for submittal reviews, the Area/Resident Engineer also should make sure other design during construction (DDC) funds are provided as necessary for those items where the use S&A is specifically precluded, including such items as the review of extensions of design submittals, D-B design development issues, etc.

h. The contractor shall be specifically advised that the approval of the drawings should not be construed as a complete check, but will indicate only that the general methods of construction and detailing are satisfactory. Approval of such drawings will not relieve the contractor of the responsibility for furnishing material and equipment complying with the requirements of the contract plans and specifications, or for any error which may exist on the shop drawings or layout drawings.

i. When reviewing requests for approval of methods and procedures for accomplishing work such as blasting, control of ground water, compaction of earthwork, grouting, pile driving, and similar types of work utilizing certain equipment and materials, care should be given not only to requested methods and procedures, but also to the flexibility of varying these to meet all possible conditions. Approvals of this type should generally be made contingent upon proposed methods and procedures obtaining satisfactory results.

5-19. Expediting Materials and Equipment. Construction contracts provide that the contractor is responsible for procuring the materials and equipment as specified in the contract specifications to complete a project. The Area/Resident Engineer is charged with the responsibility of taking the action to require completion of the project on schedule. Past experience has shown that one principal cause of construction progress falling behind schedule is due to delays in the delivery of materials and equipment. A best practice is for the Area/Resident Engineer to maintain a "follow-up" system to insure that materials are ordered and delivered in sufficient time to avoid delay to the work. The Area/Resident Engineer should assure that the contractor:

a. Places orders for all materials and equipment promptly, specifying delivery dates that will meet the construction schedules.

b. Expedites submission of required shop drawings, where required.

c. Maintains a vigorous follow-up of all orders.

d. Keeps the Area/Resident Engineer informed as to the progress of procurement.

e. Complies with the requirements of the Defense Priorities and Allocation System. See Chapter 6. Defense Priorities and Allocation System of this manual.

5-20. Technical Library. The facilities of the District Office Technical Library are typically available to Area/Resident Engineers at the local geographic District Office. However, each Area/Resident Office should maintain sufficient publications, or internet access to same, such as:

a. American Society for Testing and Materials (ASTM).

b. AASTHO (American Association of State Highway and Transportation Officials) specifications.

c. Unified Facilities Criteria to include adopted codes, references and standards.

d. Manufacturers descriptive information and installation instructions.

e. Other publications as required to answer questions raised regarding materials and methods. These publications may also be used to ensure that materials and workmanship comply with the contract. A good reference is the Whole Building Design Guide website (http://www.wbdg.org/).

5-21. Area/Resident Office Documentation.

a. The Area/Resident Engineer is responsible to assure that all formal and informal contract interpretations, actions and directives are fully documented. Documentation is necessary in order to investigate disputes, contract actions, and the like; and for record of techniques or procedures employed. Techniques which produced unusually good or poor results should be recorded as lessons learned for future projects at this and other Area/Resident Offices. Particular care should be taken to record and preserve pertinent data, photographs, and evidences with respect to any matter, which may become the basis for a claim. Hard copy and electronic methods of documentation are feasible. Refer to paragraph 3-3 b, 3-3. Filing and Records of this manual to review PCF requirements.

b. Written monthly reports to the KO are required for the COR on all contracts. Summary RMS reports, uploaded to PCF, meet this requirement.

5-22. Inspector's Quality Assurance Reports (QAR) – Daily Log of Construction.

a. A daily quality assurance report of construction shall be prepared for each day a quality assurance representative visits the contract work site. QARs will be prepared on ENG Forms 2538-1 (MILITARY) or 2538-2 (CIVIL), Quality Assurance Report (QAR), Daily Log of Construction, as appropriate. The QAR should be made in RMS. Electronic versions are available in RMS. ENG Form 2538-1 can be completed and downloaded via the hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerForms/ENG_FORM_2538-1_May_1994.pdf. The author's name, the report number, and the contract number will identify it. The QARs should be filled out completely and contain accurate information. Data in the contractor's QCR will not be repeated on the QAR unless it is necessary to augment or correct erroneous entries on the QCR. Repetitious, standardized language should be avoided in favor of meaningful QA information about the specific work covered by the QCR. Information included should be similar to the following:

(1) Date.

(2) Type of weather.

(3) Types of equipment (idle and employed).

(4) Type and amount of work performed that day.

(5) Pertinent information on progress of work, delays, causes of delays, and extent of delays.

(6) Instructions given to the contractor, including name of contractor's representative instructed.

(7) Controversial matters, including complete details of any matter, which may possibly, result in a claim.

(8) Visitors to the project.

(9) Safety violations observed and corrective measures taken.

(10) CQC phases attended and instructions given.

(11) Miscellaneous remarks pertinent to the job.

(12) Comments on entries in the contractor's Daily Construction Quality Control Reports (QCRs).

b. The person(s) designated to be responsible for preparation of the QAR shall review the contractor's Daily QCR. The QAR should include any pertinent information, instructions, or actions taken which have not been incorporated into the QCR and should clarify all questionable statements included in the QCR. If the QCR is deficient, it should be returned to the contractor for correction.

c. The Area/Resident Engineer may designate key personnel to be responsible for preparing the QARs on specific contracts, but the Area/Resident Engineer should add pertinent information of which they have knowledge. The QARs and QCRs will be spot checked and initialed off on by the Area/Resident Engineer or a designated senior staff member. The log will be filed in RMS along with the contractor's CQC report, and a hard copy filed in the Area/Resident Office with the corresponding contractor's Daily Construction QCR attached. Upon completion of the contract, the original copies of the Daily CQC/QA reports will be retired as a record file.

d. The Area/Resident Engineer is reminded of the importance of all reports prepared by either the contractor or the Government, as these are official records and may be used as evidence in court or in other legal action. They are not to be considered an individual's personal records.

5-23. Laboratories.

a. Generally, a Government laboratory facility will not be provided. In such cases, for CQC laboratory work, the contract will require the contractor to provide testing services from a certified laboratory facility or employ certified commercial testing facilities, as needed, for quality control. For QA testing the Area/Resident Engineer will perform or employ certified commercial testing facilities, as needed, for QA via separate contract. The Area/Resident Engineer will assure that the laboratory facility has the proper calibrated equipment, trained personnel and employs correct procedures for the testing, as required in ER 1110-1-8100, Laboratory Investigations and Testing, and ER 1110-1-261, Quality Assurance of Laboratory Testing Procedures. Refer to the following hyperlink for a copy of ER 1110-1-8100: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-1-8100.pdf. A copy of ER 1110-1-261 can be located using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-1-261.pdf. The Area/Resident Engineer should periodically verify the laboratory facility is on the USACE approved list of laboratories. These can be found at the USACE Materials and Testing Center website at its Validated Laboratories web-page. Refer to the following link: http://gsl.erdc.usace.army.mil/SL/MTC/ValidatedLabsList.htm.

b. The Area/Resident Engineer should, within the required QA Plan, assure that adequate laboratory facilities are readily available to provide QA testing and any investigative tests required that require a certified laboratory to perform. The Area/Resident Engineer should see that sufficient QA tests are accomplished to assure that the contractor's testing facility is accurately performing. The QA tests that require certified laboratory involvement must be performed by an entity independent of the contractor's testing facility. Note that some QA testing does not require a certified laboratory (e.g. structural steel bolt tightness, or calibrated air flow hood to validate contractor's TAB reports) if qualified Area/Resident Office staff are available to perform these QA tests.

c. The contractor's proposed laboratory on hazardous, toxic, and radiological waste projects shall be reviewed by the appropriate District with HTRW capabilities, and will be approved as part of the contractor's Chemical Data Acquisition plan.

5-24. Testing and Test Reports.

a. The Area/Resident Engineer will monitor the contractor's testing program to the extent necessary to assure tests that are accurate, sufficient in number and representative of the various materials incorporated into the work.

b. The Area/Resident Engineer is responsible for performing sufficient check tests to assure that the contractor's testing complies with the contract requirements and the CQC Program. The number of check tests required will, of course, vary with the feature of work involved and the adequacy of the contractor's testing program. In general, a greater number of check tests will be required in initial and critical phases of construction but, in all cases, will be sufficient in number to assure that the contractor's tests are factual and representative of materials in place. Normally quality assurance tests should be 5% to 10% of the CQC tests. On hazardous, toxic, and radiological waste projects numerous chemical tests are required. The Area/Resident Engineer and their personnel must assure that the samples are being taken properly and in the proper location. They must also assure that the samples are properly packaged to maintain the required temperature and that the chain of custody paperwork is properly filled out.

c. The Area/Resident Engineer should ensure that all material requiring a test be tested. The contractor's Quality Control Plan should identify the materials requiring tests, the type of tests, and, where practical, the date testing will be required. Entries shall be made on the Daily Construction QCR when the tests are accomplished. For every test failure, there shall be a satisfactory retest. All original tests and retests should be cross-referenced in strict a manner such that the final results are clearly indicated.

d. Where materials are specified to meet certain requirements and tests are not indicated the CQC representative should make a visual inspection to assure that contract specifications have been met. The findings will be noted on the Daily QCR.

e. Contracts require that an approved laboratory test some materials. The Area/Resident Engineer is typically responsible for checking and approving the laboratory and the contractor's sampling and testing procedures, although this responsibility may vary between Districts. The Area/Resident Engineer can obtain assistance from a commercial laboratory in this endeavor. EM 1110-2-1906, Laboratory Soils Testing. See the following hyperlink for EM 1110-2-1906: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-1906.pdf and EM 1110-2-2000, Standard Practice for Concrete for Civil Works Structures are some of the available guidance. Refer to the following hyperlink for EM 1110-2-2000: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-2000.pdf.

f. Prior to the installation of each item of critical material, a check should be made to assure that the CQC representative tested or checked the material for compliance with contract requirements.

g. In the rare case it is the responsibility of the Government to test certain materials, the Area/Resident Engineer shall determine the proper laboratory to be used; make sure funds are available for testing; execute the delivery order with the Area/Resident Office's commercial testing laboratory; or requisition the tests. The requisition should specify the tests required, the contract number, and the charge number (PR&C number). All test data should be made available to the contractor.

h. QA testing is typically required, and should be spelled out in the project specific QA Plan. As an additional means to help the field team better manage QA testing requirements, it is suggested that additional information be added to the list of Definable Features of Work (DFW). Where QA testing has been deemed necessary, the DFW can be annotated, this list can then be used as a desk reference by the QA representative to coordinate same upon notification by the contractor of a preparatory phase meeting. Additionally, the Area/Resident Engineer will maintain a file of all Government test results at the Area/Resident Office, and the results should be entered on the QAR. Further, field control data on all water-retaining structures, including levees and dams, must be completed. This data will include all the CQC tests in addition to Government tests. See EM 1110-2-2300, General Design and Construction Considerations for Earth and Rockfill Dams. EM 1110-2-2300 can be found using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-2300.pdf for further information. The information will be submitted in accordance with ER 1110-2-1925, Field Control Data for Earth and Rockfill Dams available at the following website, http://www.publications.usace.army.mil/USACEPublications/EngineerForms.aspx.

5-25. Photographs.

a. Each Area/Resident Office should have a camera and necessary supplies for taking photographs of construction. Digital images from cameras can be shared and transmitted. How

these can be downloaded, stored and shared should be coordinated with ACE-IT, as security protocols for sharing and transmitting the media must be followed.

b. The following types of photographs should be taken:

(1) Views of major construction projects before any work has commenced at the site, during various stages of construction, and when completed.

(2) Scenes of value in connection with changed conditions, claims, or potential claims.

(3) Detailed views of work in place for which removal has been ordered because of noncompliance with plans and specifications.

(4) Construction in which unusual difficulties has been overcome or where the subject is of technical interest, etc.

(5) New methods of construction.

(6) Property or material damages.

(7) Photos related to safety.

(8) Photos that could be utilized for training programs and special presentations.

(9) Photos that document LEED construction credit validation.

(10) Photos that document sample work deemed acceptable as agreed upon by the QA and CQC personnel during initial phase meetings. These photos should be uploaded to the RMS QAR.

c. A complete description and identification information should be prepared for each picture. This should be done for all photographs regardless of the reason for taking the photograph. It could be that the photograph may be needed years later to show conditions for reasons that no one may be aware of when the photograph was taken. For a picture to be admissible it should have a sponsoring witness (not necessarily the photographer) who has personal knowledge of the scene depicted and the witness should be able to testify that the photograph fairly and accurately portrays the scene depicted. Therefore there should be a contemporaneous record of what the photograph is showing, where it was taken, when it was taken and why it was taken, such as:

Contract Number:

Photographer:

Witness:

Date:

Time:

Location: (Station; Room number; Etc.)

Directions: (Looking North, Southwest, Etc.)

Narrative: (What is the picture of, what are we trying to document, Etc.)

d. Some installations require camera badges IAW installation policies. Care should be taken to insure compliance with installation policies, if working on a military installation.

e. Many contracts require the contractor to provide photographs. The Area/Resident Engineer needs to insure the contractor is aware of any installation requirements related to photographs.

5-26. Work Stoppages and Delays, General. Construction contract completion dates are established by the contract documents. The Area/Resident Engineer is responsible to assure completion of the contract on time. There are some time delays and work stoppages which are beyond the control of the Area/Resident Engineer or the contractor, such as fires, floods, strikes, adverse weather, changes in design, etc. Whenever it becomes known that there will be a delay, the Area/Resident Engineer shall document all facts concerning the delay and supplement the information later as facts develop. The Area/Resident Engineer should also notify the Chief of Construction, the KO and the PM. Refer to paragraph 10-2 of this manual concerning delays due to labor disputes.

5-27. Delays Within the Control of the Contractor. The Area/Resident Engineer must be alert to any contractor's refusal/inability to prosecute the work, or other delaying factor. The Area/Resident Engineer should go on written record with the contractor when a delay becomes apparent. The Area/Resident Engineer should request the contractor to take necessary action to improve progress and respond by return mail of the action, which will be taken. The Area/Resident Engineer should then carefully monitor the job to see that proposed actions are being taken and the progress is improving. Any time there is a failure on the contractor's part to improve or when the urgency of the job warrants, the Chief of Construction, the KO and the PM should be notified. The KO can direct action in accordance with the Contract Clause, FAR Clause 52.236-15, SCHEDULE FOR CONSTRUCTION CONTRACTS, or consider action under FAR Clause 52.249-10, DEFAULT (Fixed-Price Construction).

5-28. Suspension of Work.

a. Orders to suspend work under FAR Clause 52.242-14, SUSPENSION OF WORK, shall not be issued unless absolutely necessary, and only for elements of work necessary to suspend, as the Government may be liable for damages caused by the issuance of such orders. The KO or ACO shall issue suspension orders. The Area/Resident Engineer shall notify the Chief of Construction, the KO and the PM when a suspension order is deemed necessary. Suspension orders are necessary to prevent the contractor from proceeding with work that will have to be removed or changed, has been deemed unsafe until corrections are made or at risk of violating anti-deficiency provisions.

b. The contract clauses allow the Government a reasonable time to make decisions, revise designs, etc. It is only after it is determined that a modification cannot be issued in a reasonable time to prevent stopping all or part of the contractor's work that a suspension order will be issued.

c. When the contractor is placed on a suspension order, it is essential that accurate records be maintained. All personnel, material, and equipment, which the contractor has on the job before and during the suspension, must be accounted for, as well as time, worked. The records shall specifically and accurately reflect the cost and/or time effect the suspension order has on the contract as a whole or any part thereof. Careful and accurate records shall be kept on all items, which might be used as a basis for extra compensation.

d. The Area/Resident Engineer should not manage the contractor's work during a suspension; however, he/she will request that the contractor shift their operation to best utilize personnel, material, and equipment as necessary on those phases of work that are not affected by the suspension order.

5-29. Work Stoppage.

a. There are times when it may become necessary for the Area/Resident Engineer to stop the contractor from proceeding with the work. This work stoppage is different from the suspension order in that it is not a stoppage for the convenience of the Government but a stoppage necessitated by acts of the contractor, such as:

(1) Where hazards stemming from contractor's safety violations are involved.

(2) Where the contractor proposes to incorporate into the work defective or nonconforming materials or to employ techniques/processes contrary to the plans or specifications.

(3) Where defective workmanship or materials have been incorporated into the work and have to be removed or replaced.

b. It is important that the Area/Resident Engineer stops only that portion of the work that is affected by the actions or lack of actions by the contractor and that all of the facts of the proceeding are documented in writing.

c. The contractor shall be informed, in writing by the KO or the ACO, the extent of the stoppage of the work; the date and hour work was stopped; the reason for the action; and the conditions by which work may proceed again. The contractor shall also be informed, in writing, when the stoppage is lifted.

d. Caution must be used in stopping the contractor from installing equipment and material simply because it has not been submitted. FAR Clause 52.236-5, MATERIALS AND WORKMANSHIP, provides that machinery, equipment, and articles that do not have the required approval may be installed or used at the risk of subsequent rejection. Such items would not be eligible for payment until the items are approved.

5-30. Deficiencies in Contractor Performance. No deficiencies in contractor performance should be tolerated, whether it is administrative, safety, or construction. The Area/Resident Engineer should be continually on the alert for deficiencies. It is recommended all deficiencies be entered in RMS and tracked using the deficiency tracking log. This way QA reports will document and verify correction. All deficiencies should be promptly corrected when noted. To expedite correction, the contractor may first be informed verbally and, where necessary, it should be immediately confirmed in writing. The Chief of Construction, the KO and the PM should be promptly informed of any refusals by the contractor to correct a deficiency. A complete record of facts and circumstances should be made. Deficiency tracking should be executed through appropriate means. For construction deficiencies, RMS includes a tracking module. For contract compliance deficiencies, keeping a log of specific issues provide basis for interim and final contractor evaluation ratings.

5-31. Differing Site Conditions. The Area/Resident Engineer shall promptly and thoroughly investigate changed conditions which are thought to exist or alleged by the contractor under FAR Clause 52.236-2, DIFFERING SITE CONDITIONS. The Area/Resident Engineer should notify the PDT of contractor's allegation, their findings and request assistance of District specialists, if appropriate. When considered necessary by the Area/Resident Engineer, the contractor will be advised in writing that existing conditions shall not be disturbed until the required investigations are completed. Note that this clause regards two specific types of differing site conditions. The first involves subsurface or latent physical conditions at the site which differ materially from those indicated in the contract. The second involves unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

5-32. Disputes.

a. The Area/Resident Engineer should endeavor to resolve all questionable and/or disputed items as soon as they arise. If the contractor disagrees with the Area/Resident

Engineer's decision, they should be instructed to submit reasons for disagreement in writing. If the Area/Resident Engineer believes that they can settle the dispute, a reply should be given to the contractor furnishing complete justification of the position based upon plans and specification. If not, the contractor's letter should be forwarded to the Chief of Construction and the KO, along with a Summary of Findings containing comments and recommendations.

b. The Area/Resident Engineer should always acknowledge letters from contractors and state in reply the disposition being made of them. It is desirable that all problems be settled at field level. Requests for immediate Contracting Officer's decisions should be discouraged until the Area/Resident Engineer has developed facts and an attempt made to settle the dispute.

c. The Area/Resident Engineer shall be especially careful to record all facts, keep accurate records, and take applicable photographs, as soon as a dispute is known to exist or is anticipated.

5-33. Joint Inspection.

a. The Using Service representatives should be encouraged to inspect the facilities during construction. Some Using Services prefer to inspect the facilities at the quarter, half, and three-quarter points of the contract, as well as the pre-final and final inspections. The Area/Resident Engineer should initiate the necessary action to establish and conduct this type of inspection with the local Using Service. It has been found that during construction, joint inspections bring about better relationships between USACE and the Using Service and enable inadequacies, especially in design, to be brought out before the job is complete. The Area/Resident Engineer should make every effort to take care of and satisfy the customer.

b. The Area/Resident Engineer should hold joint inspections any time they are requested by the Using Service, unless conducting such an inspection on a particular date would disrupt a crucial operation of the contractor. In that case, the Area/Resident Engineer shall explain the situation to the Using Service, and reschedule the inspection for a time suitable for all parties.

5-34. Beneficial Occupancy Inspection. Some contracts require a beneficial occupancy that precedes the completion, and in other instances the District is requested by higher authorities or the Using Service to take occupancy of a facility or a portion thereof prior to its completion. FAR Clause 52.236-11, USE AND POSSESSION PRIOR TO COMPLETION, provides for such cases. In those instances, a Beneficial Occupancy Inspection shall be held. This inspection will be made jointly by the Area/Resident Engineer, representative of the Using Service, and the contractor. The Area/Resident Engineer shall arrange for the inspection as soon as the desired item is completed to the extent that it can be used as needed. It is very important that all the deficiencies in the inspection are carefully recorded and that agreement be received from the Using Service that it accepts the item being inspected with the construction deficiencies noted. A common mistake/omission made in beneficial occupancy situations involves access for both the User and the contractor. Access must be worked out and an agreement reached as part of the joint agreement. The contractor shall be required to correct the noted deficiencies as soon as

possible. It is the responsibility of the Area/Resident Engineer to prevent/resolve disputes arising after occupancy over the responsibility for missing, damaged, or incomplete work.

5-35. Completion and Closeout "Red Zone" Meeting, Military Construction. Towards the end of the construction contract, it is critical to identify actions necessary for completion of the work and have a plan for accomplishing these actions in a timely matter. This will include construction and fiscal issues. Early emphasis on known construction issues prior to beneficial occupancy will allow for a timelier closeout of the construction contract. Similarly, emphasis on fiscal issues as the end of the contract is reached will ensure the timely return of available funds without jeopardizing successful project completion. This phase of the construction contract has come to be known as the Red Zone phase. The term "Red Zone" refers to the last 20% or so of actual construction during which USACE, Contractor, and Installation team must make a coordinated effort to complete physical construction, as well as all required documentation, financial actions, permit requirements, system commissioning and training of operators. USACE has promulgated guidance on the Red Zone meeting as it applies to Military Programs. Since our Civil Works Program can also benefit from many of the same processes of the Red Zone meeting, it should be considered for Civil Works contracts as well.

a. The Area/Resident Engineer will coordinate with the PM to schedule the Red Zone meeting on all military construction contracts for the purpose of reviewing the final phase in completing contract requirements and to ensure the timely return of available funds without jeopardizing the successful project completion. Attendees include the representatives from the contractor, USACE PM, Area/Resident Engineer, COR, customer, and other PDT members as appropriate. The meeting will be scheduled at least sixty (60) days from the scheduled Beneficial Occupancy Date (BOD) or at 80% construction completion. The whole PDT meets to discuss the close-out process, to schedule the events and assign responsibilities for actions necessary to produce a timely physical, as well as fiscal, project close-out.

b. The agenda should include, but not be limited to the following:

(1) Status of progress vs. schedule of project.

(2) Pending modifications, time extensions, etc.

(3) Submittals - O&M Manuals and as-built drawings.

(4) Warranty information and periods, transfer procedures and responsibilities, and security requirements and key transfer.

(5) Posting of equipment instructions, training requirements for maintenance personnel, and pre-final and final inspection procedures.

(6) HVAC Commissioning, Building Commissioning, and Enhanced Commissioning.

(7) Correction of deficiencies (timely).

(8) Status of payroll requirements.

(9) Withholding of payments for outstanding deficiencies.

(10) Liquidated damages.

(11) Fiscal Items – Modifications required for BOD, post BOD modifications, mods funded by MIPRS.

(12) On Military Contracts – DD Form 1354 coding requirements discussed with the Real Property Accountable Officer.

(13) Joint occupancy requirements / fit-out / follow-on contractor coordination issues.

(14) LEED notebook.

c. It will be emphasized at this meeting that funds will be retained from payments due the contractor to assure completion of all contractual requirements in a timely manner. The Government's alternative action to assure completion of the work in event of failure of the contractor to perform should also is explained at this time.

5-36. Pre-Final and Final Inspections.

a. Contracting Officers (KOs) are authorized to accept contract work. The Area/Resident Engineer may accept work to the extent such authority is delegated by the KO; however, final acceptance of all work and/or services under a contract can only be made by the KO. The Area/Resident Engineer and their staff have no authority to waive the Government's rights to inspect, reject, require repair or replacement of defective or substandard work, or other contractual remedies for contractor breach of or noncompliance with contract provisions. It is the responsibility of the Area/Resident Engineer to obtain from the contractor complete compliance with the contract requirements. As soon as it is known when the contract will be substantially completed, the pre-final inspection should be conducted. Pre-final inspections should not be made until the work is substantially complete.

b. If few or no deficiencies are found, the pre-final inspection may be considered the final inspection. If possible, and if another inspection is necessary, the final inspection date should be established at the conclusion of the pre-final inspection. A conference should be arranged with the members of the inspection party to clearly define and discuss the deficiencies noted during the inspection the corrective action that will be taken on the construction deficiencies. Design deficiencies are to be identified and resolved, if possible, by the time final inspection is held.

The inspection party should be informed that the design deficiencies will be forwarded to the District for appropriate action.

5-37. Inspection of Completed Construction.

a. It is expected that work turned over to the end user will comply in all respects with the contract requirements and fully satisfy the operational requirements. However, some types of deficiencies in design, construction, or functional adequacy are not discernible until after the facility has been put into use. In order to insure that such defects are discovered and eliminated from future design or construction, Area/Resident Engineers will conduct a post-completion inspection of projects, in accordance with ER 415-345-38, Transfers and Warranties, http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-345-38.pdf. These inspections should be conducted with a representative of the end user and should occur approximately 4 months and 9 months after the facility has been turned over and placed in use. Prior to 4 and 9 month post-completion inspections, Area/Resident engineers should consider reviewing warranty service calls to determine if any trends exist that should be addressed prior to completing the 1-year warranty period. Deficiencies discovered during these inspections will be reported to the District Engineering office for necessary action to avoid recurrence. In addition to post-completion inspections, design criteria, feedback inspections, and design coordination conferences scheduled periodically are described in ER 415-345-38. Refer to paragraph 7-9. Transfer of Completed Facilities of this manual for post-completion inspections to be performed as part of warranty/procedures.

b. Latent defects. In specific cases, defects that were not detectable through normal means of inspection or which were covered before inspection could occur, may cause problems after expiration of a warranty period. In consultation with District contracting and legal experts, an ACO or KO may deem such to be latent defects of construction and require contractor correction. Area/Resident Engineers should be familiar with what legally constitutes latent defects and be prepared to discuss this with using agencies.

5-38. As-Built Drawings/Geotechnical and Concrete Material Completion Reports.

a. The contractor is required to maintain the specified number of contract drawings and/or Computer-Aided Design and Drafting (CADD) disk, marked up to indicate as-built conditions. The Area/Resident Engineer should routinely review these drawings to insure that they are being maintained in a current and accurate manner. This should occur monthly with the submission of the contractor's request for payment.

(1) The following are some of the general items that need special checking before the Area/Resident Engineer accepts the as-built drawings as being correct:

(2) Layout and schematic drawings of electrical circuits and piping.

(3) Correct dimensions and details transferred from shop drawings

(4) Verification of alignment, cross section, and layout of earthwork.

(5) Actual location of anchors, construction and control joints, etc., in concrete.

(6) Changes in location of equipment and architectural features.

(7) Cross out such words and phrases as "optional requirement," or equal," etc., and list specifically the items of material provided.

(8) Where necessary, sketches should be prepared to accompany the drawings.

(9) Inclusion of RFI responses and contract modifications which altered the original design conditions.

b. As-built drawings consist of two types: as-built contract drawings and as-built or record shop drawings. Procedures for submittal of as-built drawings should be in accordance with the contract requirements concerning as-built contract drawings and as-built (record) shop drawings. Normally as-built (record) shop drawings required by military construction contract specifications are furnished directly to the Using Service by the Area/Resident Engineer. It is not necessary to retain the as-built contract drawings until painting, seeding, site cleanup, etc., are completed. If as-built drawings are updated in the District, it is important that the drawings be submitted to the District at the earliest possible date. Timely submission will permit the timely correction of original CADD files and, if practicable, have the CADD disc ready to return with the DD Form 1354 at the time of transfer to the Using Agency.

c. On major projects and unique construction projects such as dams, the Area/Resident Engineer or the resident geologist and/or soils engineer should prepare the Geotechnical and concrete materials completion Reports, IAW ER 1110-1-1901, Project Geotechnical and Concrete Materials Completion Report for Major USACE Projects, which can be found at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-1-1901.pdf. These should be prepared IAW instructions from District Engineering when required. These reports should be kept current during project construction. The Area/Resident Engineer should forward a complete draft of Geotechnical and Concrete Materials Completion Report and accompanying original drawings to District Engineering.

d. The Area/Resident Engineer needs to be aware that the quality of the as-builts includes Geospatial Standards compliance as required by ER 1110-1-8156, Policies, Guidance and Requirements for Geospatial Data and Systems. See the following link for ER 1110-1-8156: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1110-1-8156.pdf. The Area/Resident Engineer should address this requirement in the BCOES process to ensure inclusion of the requirement in the contract. Coordination with appropriate District

assets (District Engineering/PM) is also required to ensure that this component of as-built review is performed prior to as-built acceptance.

5-39. Evidence of Insurance and Insurance Policies - Construction Contracts.

a. FAR Clause 52.228-7, INSURANCE-LIABILITY TO THIRD PERSONS, requires the contractor to maintain at least the minimum amounts of workers' compensation, employer's liability, comprehensive general liability (bodily injury), comprehensive automobile liability (bodily injury and property damage) insurance. All submissions of initial certificates and/or insurance renewal certificates shall include the cancellation clause verbatim.

b. Prior to issuing NTP on a contract, the KO shall obtain from the prime contractor the evidence of insurance required by contract provisions. Such evidence, which ordinarily takes the form of a certificate of insurance, will be reviewed by the Office of Counsel who will determine whether it complies in all respects with the contract requirements. If Office of Counsel determines that the evidence of insurance is acceptable, the original certificate will be returned to the KO for the file, and a copy will be provided to the Area/Resident Office. NTP should not be issued until the correct evidence of insurance is submitted.

c. Where subcontractors are utilized, the Area/Resident Engineer is responsible for obtaining compliance with FAR Clause 52.228-5, INSURANCE—WORK ON A GOVERNMENT INSTALLATION, subparagraph (c), which requires insurance on behalf of or on the part of subcontractors. The clause further requires a thirty (30) day notice of any adverse change in coverage and also that the insurance requirements be passed down in subcontracts. The prime contractor shall furnish evidence of subcontractor's insurance to the Area/Resident Engineer periodically upon request.

d. FAR Clause 52.222-11, SUBCONTRACTS (LABOR STANDARDS), requires that the contractor deliver a completed Statement and Acknowledgement (Standard Form 1413) prior to a subcontractor working on the site.

5-40. Contractor Employee Labor Hours. The number of hours worked by contractor employees on USACE construction contracts is part of the equation for determining accident frequency rates. These measure the success or failure of our safety efforts. RMS/QCS or Contractor's mode of RMS is a useful tool for the contractor to submit exposure hours, and for the Government to acknowledge same. In order to insure that an accurate count of contractor employee hours (exposure hours) is available, the Area/Resident Engineer has the responsibility to report these hours to the District Safety Office. Semi-annually, the information is compiled and reported through Office of Counsel channels.

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CHAPTER 6

DEFENSE PRIORITIES AND ALLOCATION SYSTEM

6-1. Priorities and Controlled Materials.

a. Military contracts may contain a clause requiring the contractor to abide by the rules of the Defense Priorities and Allocation Systems (DPAS) in obtaining materials and equipment required for the project. The use of priority rating for procurement of materials for the defense construction program is mandatory on these contracts. Such contracts will contain FAR Clause 52.211-14, NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE, and/or FAR Clause 52.211-15, DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS. The rating will be either "DO" or "DX". Purchases orders issued by contractors for materials must contain (1) a priority rating, (2) a required delivery date or dates, (3) the signature (manually placed order) or the name (electronically placed order) of a person authorized to sign the order, and (4) a statement that reads in substance:

This is a rated order certified for national defense use, and you are required to follow all the provisions or the Defense Priorities and Allocations System regulation (15 CFR 700).

b. DPAS is administered by the Department of Commerce, Bureau of Export Administration. Additional information and forms can be obtained from its website, at http://www.bis.doc.gov/dpas/default.htm.

6-2. Expediting Materials and Equipment.

a. The Area/Resident Engineer should check all orders to insure correctness of rating, statement, certification and delivery date. These orders should be checked to assure compliance with DPAS. Each request for assistance from the contractor must include all information required by Form BIS-999, Request for Special Priorities Assistance, which is located at http://www.bis.doc.gov/dpas/pdfdocs/dpasformbis-999.pdf, and be immediately forwarded to Chief of Construction.

b. After a request for assistance has been submitted, it is essential that the District be informed immediately of any change in conditions, which may alleviate the need for assistance or affect the delivery dates. The contractor must keep the Area/Resident Engineer informed in this respect. This is important as requests for assistance are frequently referred through HQUSACE to the Department of Commerce and it is necessary that it be informed of any change in conditions. The District Office shall be informed of the delivery of all material or equipment on which expediting assistance has been requested.

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CHAPTER 7

CONTRACT ADMINISTRATION

7-1. Field Office Engineering, General. It is the Area/Resident Engineer's responsibility, where so assigned by their organization, to run an effective and efficient office engineering section. The main duties of this office are to keep all engineering records; to maintain master sets of plans and specifications; to prepare partial and final contract payment estimates; to prepare progress reports; to review and check shop drawings, certificates, and samples for materials to be used by the contractors; to prepare cost estimates; to prepare findings of facts and negotiate change orders, to track project contingency funding; to prepare "as-built" drawings or to review contractor prepared "as-built" drawings; to solve engineering problems; and to disseminate engineering data to inspection forces.

7-2. Contractor's Payment Estimates.

a. The Area/Resident Engineer is responsible for the neat and accurate preparation of estimates for progress payment. The frequency for making payments to the contractor is set forth in the contract and is usually specified to be monthly but the Area/Resident Engineer and the contractor should mutually agree upon the pay period date during the pre-construction conference.

b. The contractor shall submit a schedule of values for progress payment purposes for review and approval by the Area/Resident Engineer.

c. Contractor's payment estimates under construction contracts will be prepared utilizing RMS on ENG Form 93, and entered in CEFMS. The contract details: original contract amount, supplemental agreements, change orders, revisions in quantities, etc., will be summarized on ENG Form 93. The amounts reflected on the summary will be supported by records of the Area/Resident Engineer, which provide complete listings of quantities, unit costs, contract amounts, and related contractor's earnings. Final payments will be summarized on ENG Form 93 supported by a complete contract itemized breakdown on ENG Form 93a or similar form. Final payment documents shall also contain a release clause. The "contract" columns of the ENG Form 93a will list the contract quantities, as modified, and the "description" column will identify all modifications affecting each item. Contracts that specify a Network Analysis Schedule (NAS) and a computer printout to include cost breakdown by bid item do not require the itemized breakdown on ENG Form 93a.

d. Estimates shall be numbered consecutively and should be submitted for each pay period in which substantial earnings accrue throughout the life of the contract. The last estimate shall be clearly marked "Final" and shall include a statement of release of claims. If little or no money is earned during a pay period, the period should be included in the next pay period in

which earnings accrue. The date on the estimate should be the inclusive period covered by this estimate. The period ending date of the progress payment:

(1) must not be beyond the contract completion date or acceptance date, whichever is later.

(2) must not be after the invoice date.

e. The estimates should be checked for value of work performed and shall be signed and approved for payment by the ACO or COR in CEFMS.

f. The contractor is required to certify in accordance with FAR Clause 52.232-5, PAYMENTS UNDER FIXED PRICE CONSTRUCTION CONTRACTS that payments to subcontractors and suppliers have been made from previous payments received and that the current payment request does not include any amounts that the prime contractor intends to withhold or retain from a subcontractor or supplier. If retainage or withholding is to be made by the prime contractor against any subcontractor earnings, the Area/Resident Engineer should be notified by annotation on the payment application. In these cases, subcontractor retainage will be held by the Government and annotated on the ENG 93 in an amount that matches the prompt payment certification subcontractor payment amount withheld by the prime. RMS/QCS or Contractor's mode of RMS contains a certification form that contractors can use when submitting pay requests that meets the FAR requirements.

g. Non-payment complaints, when the contract contains FAR Clause 52.232-5. When a subcontractor/supplier reports that proper payment has not been made, the prime contractor should be requested to provide an explanation to determine the validity of the complaint. If there is a dispute between them, the prime should be advised in accordance with the FAR Clause 52.232.5, that funds withheld from subcontractors are not to be requested by the prime. If non-payment by the prime contractor resulted from an oversight and the contractor pays the subcontractor, no further action is required. If however, there is a dispute between the prime and the subcontractor, the prime will be requested to indicate the withholding from the subcontractor on its next payment request. If the prime does not note the withholdings on their payment request, the KO/ACO cannot withhold payments to the prime during performance because of the subcontractors. If the prime is not cooperating on the payment issue, and there are several complaints from different subcontractors/suppliers, the subcontractor/ suppliers should be advised by the KO/ACO to contact the surety in accordance with the Miller Act. The KO/ACO should notify the surety. At this point the KO should consult with Office of Counsel and consider sending the matter to the Procurement Fraud Division in accordance with Army Regulation (AR) 27-40, Chapter 8. This kind of issue should also be considered in the contractor's performance evaluation.

h. If the contractor fails to submit an ENG Form 93 payment request within the earnings period, an estimated earnings accrual must be entered in CEFMS if the amount of earnings is

significant. Care must be taken to reverse the accruals when the earnings are actually invoiced in the following month(s) earning period.

i. When there is an unreconciled disagreement in the amount of contractor earnings, the contractor should state, in writing, the reason(s) that the amount is being protested.

j. Materials properly stored and protected on the site which have not been incorporated into the job may be included on the pay estimate, at the discretion of the Area/Resident Engineer. Payment shall be made in accordance with FAR Clause 52.232-5, PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS, and should be based on an inventory that is substantiated by invoices or other evidence showing the contractor's ownership and cost of the approved material to be incorporated in the job. Care should be taken in deducting the cost of the material when it has been incorporated into the job and paid for as such. Approved materials stored at a location other than the site may be considered for payment if authorized by the contract and if the prime contractor has acquired title to such materials. This material must be properly stored and protected, usually in a bonded warehouse or at the manufacturer's facilities. When Network Analysis Schedule (NAS) is used, work activities may be broken down into materials delivered and materials installed to permit easier control for payment purposes and eliminate double bookkeeping.

k. FAR Clause 52.232-5 must be applied as uniformly as possible to all contracts, consistent with the circumstances of each contract. In administering the clause consideration must be given not only to protecting the immediate interest of the Government but also to paying the contractor all that is due. The following guidelines are provided, as an aid in determining retainage required under the payments clause:

(1) If the contractor is on schedule, payment will be made without any retention.

(2) If the contractor falls behind schedule, a maximum of 10% of each pay request may be withheld as retainage until the schedule is regained. If retainage is held, the contractor must be notified.

(3) The contractor is required to provide an updated progress schedule in a timely manner, to include all modifications for time and money.

(4) If the contractor fails to provide a schedule within the time prescribed, approval of progress payments may be withheld until the Contractor submits the required schedule, in accordance with the FAR Clause 52.236-15, SCHEDULES FOR CONSTRUCTION CONTRACTS.

(5) When construction nears completion, the ACO/COR will ensure that there is sufficient retainage withheld to protect the interests of the Government.

l. FAR Clause 52.232-5 allows payment for performance and payment bond premiums when the contractor furnishes proof of payment to the surety.

m. If the performance date covered by the pay estimate extends beyond the established contract completion date (CCD) as modified, liquidated damages shall be deducted in accordance with the terms of the contract. Refer to paragraph 5-4. Period of Performance and Liquidated Damages of this manual. Withholding of liquidated damages will commence with the first payment estimate following expiration of the contract time as extended by modifications, if any, as follows:

(1) When it is known that the contractor is entitled to additional time excusable under the terms of the contract, liquidated damages should not be withheld from monies due the contractor merely because a formal modification has not been issued. Should this situation arise, the Area/Resident Engineer will attach a statement of facts to the payment estimate form.

(2) Partial Payment Estimates. The statement "Administrative deduction pending determination of assessment for liquidated damages," and total amount deducted will be shown on all partial payment estimates with calculations showing how the total amount was determined.

(3) Final Payment Estimates. The statement, "Assessment of liquidated damages, of the contract specifications," period of time covered, number of days, amount per day, and the total amount deducted shall be shown on the final payment estimate.

(4) Where liquidated damages are not stipulated by the contract and it has been determined that there are no actual damages due to delays in the work for which the contractor should be held liable, the following statement shall be submitted with the estimate "No damage caused to the Government as a result of delay in completion of the contract." A statement of facts will be attached to justify no requirement for assessment of actual damages.

(5) Once the Government has accepted the contract work, all additional payment estimates required should indicate in Block 9, of the ENG Form 93 that the period of performance is through the acceptance date.

n. The Area/Resident Engineer has the obligation to withhold monies for defective workmanship, failure to correct deficiencies, and wage violations as reported by the District Labor Relations Officer. However, the amount of funds withheld should not exceed the value of the items for which it is being withheld.

o. The Area/Resident Engineer has the responsibility to review contractor labor compliance documents. Contractor should submit payrolls and labor records as stated in FAR Clause 52.222-8, PAYROLLS AND BASIC RECORDS. Should the contractor fail to submit the required payroll records, subparagraph (c) of the referenced FAR clause allows the government to suspend further payments to the contractor with written notice. Additionally,

FAR Clause 52.222-7, WITHHOLDING OF FUNDS, allows the government to withhold monies for labor violations until the Area/Resident Engineer receives all payrolls due within the period covered by the pay estimate, verifies the accuracy thereof, and is satisfied that the contractor is in compliance with the contract labor standards clauses.

p. On contracts with unit price items have an overrun, a modification increasing the unit quantities and total contract price must be initiated. When there is a quantity overrun or underrun in excess of 115% or less than 85%, respectively, on those contracts that have unit price items, the Government or the Contractor can demand an equitable adjustment for increase or decrease in cost due solely to the overrun or underrun, as stated in FAR Clause 52.211-18, VARIATION IN ESTIMATED QUANTITY. This would not change the unit price, but would be a separate equitable adjustment modification. If an agreement cannot be reached, the Findings of Fact should explain why an agreement could not been reached, list the original and actual (or estimated) final quantities, existing price and recommended equitable adjustment. Typically, overruns may result in credit to the Government due to the contractor already recovering mobilization and overhead cost that the unit price included in the first 85% of quantity. Contractor errors in original unit prices are not considered by the Variation in Estimated Quantity Contract Clause. See paragraph 7-13 i, 7-13. Clauses Authorizing Modifications for explanation.

q. Deductions for costs of Government inspection and testing of materials for the contractor will not be made on the ENG Form 93 (Payment Estimate). Whenever the Government inspects and tests materials for the contractor, the Area/Resident Engineer will report the costs and other pertinent information by Memorandum through the Chief of Construction to the District Resource Management Office. A bill for collection will be prepared, billing the contractor for all direct charges plus overhead.

r. Payment of Cost Reimbursable Contracts will be made on invoices prepared by the contractor, and are considered as partial payments. These payments are different from progress payments for fixed price contracts. Certain fieldwork papers and certificate of cost are required. This will vary based upon the activity that requested the contract. In some instances the requesting activity (such as EPA or others) will have the billing, after USACE review, sent to its payment office with a copy to the appropriate Defense Contract Audit Agency (DCAA) office, which will perform the final audit. Therefore, the payment procedures should be determined and agreed to between the requesting activity and USACE prior to award of the contract. These procedures will then be provided to the contractor if not in the contract, then during the pre-construction conference.

s. Contracts that contain the special contract/technical provision, CONTINUING CONTRACTS – SPECIAL CONTINUING CONTRACT FOR CIVIL WORKS PROJECTS MANAGED BY THE USACE [DEVIATION], are those contracts for which funding for the total contract amount is not available at the time of award. In accordance with the clause, the contractor is informed of the amount of funds available and that failure of the Government to

make payment in excess of the amount reserved is NOT a contract breach that would entitle the contractor to a price adjustment. Should a contractor elect to work beyond the available funding, he shall be entitled to simple interest on any payment determined as earned under the contract, should additional funding become available. Such interest shall be calculated in accordance with ER 37-1-30 Financial Administration Accounting and Reporting, which can be found at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_37-1-30.pdf. See UAI Clause 52.232.5001 for additional information.

t. Contracts with the clause DFARS Clause 252.232-7007, Limitation of Government's Obligation, provide an obligation amount that is initially less than the contract amount. The clause has a threshold percentage of completion whereby a certain number of days before reaching this threshold the contractor is required to notify the Government. The Government cannot make payments greater than the obligation limitation. Payment approvers should be cognizant of this threshold percentage, the obligation limitation amount, and actions required by the Government to obtain additional funds or proceed with termination by the KO.

7-3. Progress and Progress Reporting.

a. This portion prescribes District policies and procedures for Area/Resident Engineers for reporting construction progress on all projects and the maintenance of related work records.

(1) To be of any use, a progress schedule must be maintained up-to-date so as to reflect the current operating procedures and all changes in the contract work. Since the contract clauses require that the schedule be maintained in an up-to-date condition, it is the responsibility of the Area/Resident Engineer to see that this is accomplished. Progress schedules for some Civil Works contracts are based upon amounts available for construction by fiscal year. The Area/Resident Engineer should assure himself/herself that the contractor is familiar with the funding limitations set forth in the contract specifications before recommending acceptance of any proposed progress schedule on a continuing type contract. Bar Chart Method of Scheduling Progress:

(a) Construction contracts require, under FAR Clause 52.236-15, SCHEDULE FOR CONSTRUCTION CONTRACTS, that the contractor shall, within five (5) days after commencement of work or within such time as determined by the KO, submit a practicable schedule showing the order in which it proposes to carry on the work. The Area/Resident Engineer is responsible to insure that the contractor submits a satisfactory schedule.

(b) The Area/Resident Engineer will carefully review the proposed schedule to determine whether or not it presents a feasible and practicable plan for doing the work according to contract requirements. If necessary, the contractor will be required to resubmit the schedule until it is acceptable. The schedule should show a breakdown of the principal features of contract work and contain a progress curve representing the progress of the overall job. The curve will be plotted to scale on a percent complete versus calendar date graph so that the percentage of work

scheduled for completion at any given date may be determined. The principal features having separate completion dates must be identifiable in the schedule and should include the contract cost of each and a bar graph plotted to scale representing the duration of the feature, indicating its starting and completion dates. ENG Form 2454 (Construction Progress Chart) is available for use by the contractor in preparing the schedule but its use is not mandatory.

(c) In reviewing the proposed schedule for acceptance, the Area/Resident Engineer should make sure that the breakdown of principal features is complete and none have been omitted. The sequence of work must be in a logical order and feasible. The sum of the feature prices amounts must equal the total contract price. The progress curve must be based upon and plotted from the work shown in the bar graphs. The percentage complete reflected on the bar graphs for any given day is the same as shown by the curve; and the curve is based upon the correct contract start and completion dates.

(d) During review and checking of the proposed progress schedule, particular attention should be given to the rate of acceleration or progress during the first and last 25 to 30 percent of the project. The Area/Resident Engineer should determine that the initial proposed rate of progress is realistic and that acceptance of such would not result in the actual progress reflecting the work behind schedule. Likewise, one must guard against a schedule with too much work scheduled for the latter months of the contract.

(2) Network Analysis Schedule (NAS)/Critical Path Method of Scheduling Progress. More complex contracts require the use of NAS for surveillance of the contract progress. These contracts will require the contractor to prepare the network of activities that illustrate the proposed method of conducting the work required under the contract. In the event that the contractor does not understand this system, the Area/Resident Engineer should provide guidance and suggestion to the contractor. Submittals and acceptances will be the same as that for progress charts as outlined above. The Area/Resident Engineer should review and discuss the following with the contractor, as soon as possible:

(a) Meeting required completion date.

(b) Indicating specified milestone dates.

(c) Reasonable logic and sequence of operations.

(d) Complies with contract restrictions on constraining activities and maximum durations.

(e) Contains contract required review periods.

(f) Correct contract values and pay item identity.

(g) Unbalancing for heavy, early payments.

(h) Adequate detail for control and analysis of progress.

(i) Mathematical accuracy.

(j) Funds availability on continuing—type contracts.

(k) Signature of contractor and date.

(l) Full performance with the NAS provisions in the contract.

(m) Advise contractor against time scaling the network since time scaling delays submission, is difficult to review, and is usually obsolete by the first updating report.

(n) Periodic revision of the network and printout due to changes in the contractor's sequence or plan of operations.

(o) Method of reporting input data for computer printouts and the frequency of printouts.

(p) Responsibilities for accuracy of input data to the computer and degree of participation by the Area/Resident Engineer in their determination.

(q) Submission of copies of accepted network diagram and date for submission of first report or computer printout.

(r) Provisions for changes to the NAS as a result of time extensions or modifications.

(s) Provisions for incorporating joint occupancy, beneficial occupancy, and incremental completion dates in the printout, if a contract requirement.

(t) Method of computing the schedule of anticipated earnings.

(u) Necessity for submitting a narrative report explaining actual or anticipated delays and actions taken or proposed to overcome these delays.

(3) When reviewing the contractor's initial schedule, in addition to the items listed above, attention should be directed to an early completion schedule. Extreme care should be taken if the contractor submits a schedule reflecting early completion. Discuss time issues and their related costs, if any, with the District Chief of Construction and/or Office of Counsel. Schedule specifications typically require contractors to meet stipulated criteria when presenting an early completion schedule. These include description of all activities that have been accelerated in their planning to finish the overall project early, as well as indication of positive float from the completion of their computed critical path to the contract completion date. Care should be taken to assure that acceptance of an early completion schedule does not commit the Government to

extra effort, such as a shorter submittal review time, or allow the possibility for extended conditions should contract changes impact a projected early completion. Be assured that the early completion schedule was not achieved through inadequate time for submittal preparation and review of submittals or the failure to include the effect of anticipated adverse weather delays on weather sensitive activates. In addition, when working with an early completion schedule, care and consideration must be given to just what affect things like adverse weather or changed work have on the actual time that the contractor will be required to be at the project site. A review of the clauses FAR Clause 52.243-4, CHANGES, and FAR Clause 52.249-10, DEFAULT (Fixed-Price Construction) shows that to be entitled to additional time the contractors' critical path work must be affected.

(a) The Changes clause states in part:

If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing.

(b) The Default clause also states in part:

If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended.

Generally, to be entitled to additional time the contractors' schedule must indicate that something (change in work or unforeseeable causes) has had an effect on their critical path work and therefore, their time at the project site has been changed. However, if that time change has not affected the contract completion date, no change to the contract time would be made. There may be exceptions to this if the contractor has forecasted/proposed, and the Government formally acknowledged, an early completion date. This should only be in rare circumstances. If a change in the work has had an effect on the critical path work, consideration must be given to the cost of the time involved. Contractors should declare their accounting practice used to calculate field office costs. Their declared accounting practice should be used whether their time on site is longer or shorter as a result of the change.

b. Report of Start of Work. The Area/Resident Engineer should record in RMS the date work is started on a contract. Any of the following will be considered as the start of work on the contract involved.

(1) Actual physical start of work.

(2) Setting up an office at the site of work.

(3) Mobilization of equipment at the site of work.

(4) Start of work, at the job site, on office or storage space required by the contractor for prosecuting the construction work.

(5) Placement of firm orders for materials or equipment in those cases where it is unreasonable to expect the contractor to start work prior to receipt of materials or equipment.

(6) Start of off-site fabrication of steel, concrete columns, structural panels, and the like when earmarked for the contract involved.

c. Items not considered representing start of work:

(1) Off-site mobilization of equipment.

(2) Setting up an office or storage space at a place other than the job site.

(3) Tentative offers or inquiries by the contractor for materials or equipment. Evidence of firm orders should be furnished by the contractor to be classified as start of work.

(4) Submission of construction submittals. While one can argue that USACE specifications requiring administrative submittals (Quality Control Plan, Accident Prevention Plan, etc.), may take a long time to submit, review and formally approve, the contractor should be advised by the Area/Resident Engineer to make partial administrative submissions for early construction activities so as to allow the earliest start of field activities.

d. Construction Contract Status Report. The status of all contracts is required to be maintained through the RMS system for use by both the Field Office and District level management. The type of information to be maintained within the RMS system is:

(1) Status of submission of NAS/Progress Charts, original and revised.

(2) Narrative of current phase of construction.

(3) Explanation of causative factors if actual progress is more than 5% behind schedule, with actions taken or to be taken to regain schedule.

(4) Identification of problems that could impact contract completion.

(5) Expected completion date if different from the required completion date.

(6) RMS System Milestones, Scheduled/Actual.

(7) RMS Status and Delay Code(s).

(8) Status of correction of deficiencies.

7-4. Maintaining Progress of Construction.

a. As indicated above, the contract requires the contractor to submit a construction schedule, either a BAR CHART or a NAS.

b. In accordance with FAR Clause 52.236-15, SCHEDULE FOR CONSTRUCTION CONTRACTS (APR 1984), the contractor is to submit, within five days after work commences, a practicable schedule showing the order in which the contractor proposes to perform the work. A preliminary schedule showing work activities for the first forty-five (45) days is acceptable while the contractor completes their total initial schedule submission. Also in accord with this FAR clause the KO may withhold approval of progress payments until the contractor submits the required schedule.

c. Also in accordance with FAR Clause 52.236-15, when a contractor is behind schedule for which the contractor is not entitled to a time extension, appropriate action should be taken to get it back on schedule. Proper steps to be taken include, but are not limited to, expediting material deliveries, providing additional manpower and/or equipment, working overtime or additional shifts, or revising the scheduled sequence of construction. If the contractor is due an extension of time for any reason due to a Government caused delay that extends the overall contract critical path, the schedule should be adjusted to include this time. If the contractor is entitled to an extension of time, and the facts are known, every effort to issue a time extension should be made before the contract is behind schedule.

d. If it has been determined that the contractor is entitled to a contract time extension, but a determination is made that the contract completion date cannot be further extended, a Government acceleration change/modification may be considered in an effort to "buy back" the additional time the contractor is rightfully entitled to.

e. The Area/Resident Engineer cannot under any circumstance order the contractor to complete the contract work in a period of time less than the original contract duration. This is called expediting, and is strictly prohibited.

7-5. Processing of Claims.

a. FAR Clause 52.233-1, DISPUTES (July 2002): As stated in sub-paragraph (b) of the Disputes Clause "all disputes arising under or relating to this contract shall be resolved under this clause". Sub-paragraph (c) defines a claim as "a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract".

b. The field office personnel must be alert for any request for equitable adjustment, notice of disagreement with the contract documents, or indication the contractor has interpreted any instruction as directing additional work. Notice can be as simple as a line in the "Contractor's Quality Control Report (CQCR) Daily Log of Construction". Upon receipt of any such request of notice to claim, the field office will immediately proceed with the following actions, as appropriate:

(1) Acknowledge the contractor's letter or notice and request additional information, as necessary.

(2) Assure that the incident giving rise to the request or notice to claim is thoroughly investigated and documented. Real and perceived legal questions will be discussed over the telephone with District Construction personnel or an attorney in the Office of Counsel.

(3) If, after documentation and evaluation, a contractor's request is determined to have merit, the issue shall be negotiated and a modification issued.

(4) If, after documentation and evaluation a contractor's request is determined to be invalid based on the documentation, the Area/Resident Engineer will advise the contractor of this position and the reasons therefore. The KO should also be notified. If the contractor does not agree with the Area/Resident Office, it may file its claim under the Disputes clause and request a Contracting Officer's final decision.

(5) After complete review, if the Area/Resident Office still believes that there is no merit to the request, the Area/Resident Office shall prepare a Summary of Findings (SOF) and forward all the documents to Chief of Construction, and should notify the KO.

(6) Once the contractor requests a Contracting Officer's final decision, the Government has sixty (60) days to issue it, if the claim is less than $100,000. If the claim is more than $100,000, the Government has sixty (60) days to inform the contractor when a decision will be issued. The contractor's remedy for the Government's non-compliance with these time frames is to assume a denial and appeal to the responsible Board of Contract Appeals or Court of Claims. The Area/Resident Office has the responsibility to contact the contractor and request it to defer its request for Contracting Officer's final decision, in writing, if the Area/Resident Office determines that more time is required to review the claim. The Area/Resident Office is also required to arrange to meet with the contractor to exchange positions, or to have the contractor present its case to the KO.

(7) Office of Counsel prepares final decisions for the KO's signature. It is important that the Area/Resident Office notify Office of Counsel as soon as a request for final decision has been received and that the Chief of Construction be provided an information copy.

(8) Chief, Construction will review the request for Contracting Officer's final decision and, if required, arrange for the field office to brief the KO and Office of Counsel on the contractor and Government positions.

(9) If claim resolution results in a modification, the Area/Resident Office is responsible for preparing the modification and documentation package.

(10) When claims are received, a copy of the claim, with comments on possible funds requirements, must be promptly furnished to the User and they must be kept informed of any significant changes in claim status.

c. The Area/Resident Office will maintain a file and log of requests and intents to claim for each contract, indicating where the present action rests. The Area/Resident Office will provide a claims summary to Chief of Construction and Office of Counsel routinely.

7-6. Excusable Contract Delays.

a. Non-compensable contract time extensions shall be granted the contractor if justified under the terms of the contract. The usual basic justification is set forth in FAR Clause 52.249-10, DEFAULT (FIXED-PRICE CONSTRUCTION). These are typically issued for unusually severe weather, acts of God, or as otherwise defined in FAR Clause 52.249-10.

b. Time extensions due to changed conditions or change order: Each modification for additions or changes in contract requirements shall be analyzed by the Area/Resident Engineer to determine if a change in contract time should be considered and if so, the extent of the change. The Area/Resident Engineer shall establish the amount of time required to accomplish the additional or changed work; shall determine if the subject change affects the critical path; shall determine if the contract completion date needs to be extended as a result of the change; and shall determine is the time extension is compensable or non-compensable.

7-7. Evaluation of Contractor Performance.

a. In July of 2014, the Construction Contractor Appraisal Support System (CCASS) and Architect-Engineer Contract Administration Support System (ACASS) were merged into a single application under the CPARS name. All contractor evaluations are required to be entered into CPARS as ACASS and CCASS no longer exist. Note that with these CPARS changes there is no longer an overall rating on performance evaluations, only a "would/would not recommend them for similar requirements" selection.

b. In accordance with FAR 42.15, a performance evaluation shall be prepared at least annually and at the time the work under a contract is complete. In addition, interim evaluations shall be prepared for unique circumstances as specified below. The CCASS module in RMS has been disabled and all performance evaluations must be entered directly into CPARS. Past

performance information collected in CPARS is passed to the Past Performance Information Retrieval System (PPIRS) where contractor evaluations can be retrieved by all Federal agencies for use in Source Selection activities. Access to both CPARS and PPIRS is restricted to those individuals with an official need to know.

c. It is USACE policy that the KO, or a designated representative of the construction office responsible for monitoring contractor performance, will evaluate construction contractor's performance and prepare the required CPARS performance evaluation report. .

d. The contract thresholds for construction performance evaluation preparation shall be in accordance with FAR 42.1502. Performance evaluations shall be prepared for construction contracts with a current contract value that exceed these thresholds:

(1) $650,000 or more;

(2) $650,000 or more for IDIQ task orders;

e. Performance evaluations shall be prepared for all construction contracts terminated for default regardless of dollar value. Performance assessments for USACE-awarded indefinite-delivery contracts (IDCs) may be combined and reported at the basic contract level if the work is performed by the same contractor and individual orders are similar in scope and nature, and are administered by the same office. Assessments are prepared for individual orders under an IDC if required by the KO.

f. The Assessing Official (AO) and Reviewing Official (RO) shall come from the Technical Division responsible for the construction over sight. Typically the AO is the Resident Engineer or Administrative Contracting Officer (ACO), and the RO is the one level above the ACO, or the Chief of Construction Branch or Division. In the event that the AO selects “I would not recommend them for similar requirements in the future” for a recommendation, the KO and RO shall be notified of the AO’s intent to process the evaluation in advance of it being sent to the Contractor’s Representative (CR). Local policy differences may exist.

g. Each District/Center administering construction contracts shall establish appropriate Focal Points (FP) to ensure effective administration of contractor performance assessment activities within their assigned organization.

h. The District’s or Center’s Primary FP, AOs and ROs all will be trained appropriately and resourced to effectively accomplish their roles, and their status will be maintained in the CPARS.

i. An interim performance evaluation shall be prepared and submitted at least annually for a construction contract or task orders with contract durations of longer than 12 months. When contract durations are between 12 and 24 months, it is recommended that an interim evaluation is completed at the midpoint of construction. An interim performance evaluation report must also

be prepared when a contractor's performance is unsatisfactory on one or more elements for a period of three months or longer. However, in circumstances involving a critical feature of the work that the contractor fails to perform satisfactorily or, if the project is of a short duration, an "Unsatisfactory" rating for poor performance may be issued without waiting for the expiration of the three month evaluation period. An interim performance evaluation can be prepared at other times at the Government's discretion.

j. An interim performance evaluation with a "would not recommend them for similar requirements" may be prepared for incomplete contracts when a contractor's overall performance is assessed as unsatisfactory in one or more rating performance elements, as discussed below in paragraph (l). The assessing official shall mark the specific rating category of unsatisfactory performance as such, and use their best judgment for the overall recommendation selection.

k. The period of performance, comprehensive description of the work, location, and other contract information shall be provided in the contract information tabs of CPARS. Narratives are required for all applicable rating areas (Quality, Schedule, Cost Control, Management, Utilization of Small Business, and Regulatory Compliance), and all selected ratings (exceptional, very good, satisfactory, marginal, and unsatisfactory) for evaluations created in CPARS. The Cost Control element is typically not rated in Firm Fixed Price contracts. Additionally, Utilization of Small Business would only be rated if the contractor is a small business. The modified CPARS also provides three additional "Other Evaluation Areas." Construction contract evaluations shall title "Other Evaluation Area (1)" as "Safety" and provide a safety evaluation. The remaining two "Other Evaluation Areas" can be used at the discretion of the local Assessing Official.

l. At the Pre-Work and/or Preconstruction Conference, the Area/Resident Engineer shall provide the contractor with an explanation of the performance elements against which the contractor's performance will be evaluated. This will include expectations for satisfactory performance. Refer to published ECBs for any updated information on CPARS, as well as ER 415-1-17, Construction Contractor Performance Evaluation. The CPARS will notify the contractor with an electronic message when a draft or completed performance evaluation is available for their retrieval from CPARS (or the Past Performance Information Retrieval System (PPIRS) for finalized evaluations).

m. Within sixty (60) calendar days after the period of performance to be evaluated, the draft performance evaluation should be transmitted via the CPARS to the contractor for their contractor review (presently thirty (30) calendar days). In order to meet this sixty (60) calendar day target, the AO should plan to prepare a draft performance evaluation not later than thirty (30) calendar days after the period of performance. The performance evaluation shall be completed in CPARS within one hundred twenty (120) calendar days after the period of performance. Exceptions may be allowed when major contract issues and circumstances occur (e.g., the contractor's actual completion is significantly after the CCD, etc.). The final performance

evaluation report supersedes any previous interim reports. Final performance evaluations may be amended, if warranted, to reflect changes in the evaluation of performance elements caused by resolution of contractor claims or compliance with warranty requirements occurring after the final performance evaluation was prepared. Amendments to final performance evaluations are accomplished through the same workflow process as the final evaluation. Final and amended evaluations should address all significant events that occurred over the duration of the contract.

n. An interim performance evaluation with "I would not recommend them for similar requirements" selected will be initiated when a contractor's performance is unsatisfactory in any rating element. An interim performance evaluation of this nature usually occurs after a significant period of documented unsatisfactory performance. However, an unsatisfactory rating for poor performance may be issued in an expedited manner when a critical feature of the work that the contractor must perform satisfactorily is involved, if a serious safety issue is involved, if the project is of a short duration, or in other time-sensitive situations. The ACO and COR must be alert for early indications of unsatisfactory performance. There are no rigid rules governing the number of elements on a performance evaluation that must be unsatisfactory before an interim or final "I would not recommend them for similar requirements" selection is issued. Unsatisfactory performance, in one or more of the rated elements, with detailed documentation, may be sufficient to justify an interim or final "would not recommend them" selection on a performance evaluation. Reference FAR Part 42.15 for additional information.

o. If an interim "would not recommend them" performance evaluation is contemplated, the AO will develop the draft interim performance evaluation and discuss it with the RO, KO, and Counsel. The contractor's representatives must be called to a conference with the Government representatives to discuss the documented problem areas and their resolution. The contractor should be informed that following the meeting a draft interim unsatisfactory performance evaluation will be issued promptly to the contractor via the CPARS. The contractor shall be advised that performance must improve within the sixty (60) calendar day CPARS contractor review period or within a reasonable period after contractor receipt of the electronic notice from CPARS. A Memorandum for Record (MFR) of the meeting will be prepared and placed in the contract file. After the meeting, the MFR will be sent to the contractor by serial letter with the notice that the contractor may meet with the KO during the sixty (60) calendar day CPARS contractor review period and the contractor must request the meeting within the first ten (10) calendar days of the sixty (60) calendar day period. A copy of this serial letter may also be sent to the bonding company and/or Small Business Administration, as appropriate.

p. During the sixty (60) calendar day CPARS contractor review period, the AO and field office staff will closely monitor and document the contractor's performance. At the end of the sixty (60) calendar day period, the AO may revise the existing evaluation, after considering the contractor's performance, the contractor's comments in CPARS, and/or discussions at any meetings. The AO will discuss the evaluation with the RO, KO, Counsel, and appropriate construction office officials. If no material improvement is noted, a letter will be sent to the contractor as notification of intent to issue an interim "Unsatisfactory" performance rating. The

letter will address previous meetings and identify the facts upon which the interim "would not recommend them" selection will be based. The AO shall then complete the interim evaluation (with "would" or "would not" recommend selected) and send it to the RO to be finalized. If the interim evaluation remains as "would not recommend", the KO shall sign as RO. An interim evaluation is not subject to appeal by the contractor. The bonding company should be notified of the unsatisfactory rating by letter but should not be provided a copy of the evaluation. If the contractor's performance improves sufficiently, a new interim evaluation may be issued. An interim unsatisfactory evaluation is not a prerequisite for issuing a final unsatisfactory evaluation.

q. The construction contractor receiving a final unsatisfactory performance evaluation may appeal the rating to the District's Senior Reviewing Official (SRO). For most Districts administering construction contracts, the SRO is typically the Chief of Contracting, but may also be the Chief of Construction. The SRO shall be identified in writing to the contractor when a final unsatisfactory performance evaluation report is completed. The contractor's appeal should be made within thirty (30) calendar days of the contractor's receipt of the automated CPARS notification that a final performance evaluation is complete. The contractor's appeal must be a written request to the KO stating the reasons why a further review of its performance evaluation is justified, and the circumstances that may cause the Government to revise its rating of the contractor's performance. If a change is deemed warranted, an amended final evaluation is processed as previously described. Interim unsatisfactory performance evaluations and final evaluations other than final unsatisfactory evaluations cannot be appealed.

r. Performance evaluations are not prepared for subcontractors (including Architect-Engineers subcontractors on D-B construction contracts). The government's contract is with the prime contractor and the prime contractor is responsible for effectively managing its subcontractors. For D-B contracts, the Architect-Engineer subcontractor's scope of work shall be summarized in the "Key Subcontractors and Effort Performed" area of CPARS. The Data Universal Numbering System (DUNS) number and name must be included so that the information may be found when source selection boards search for the firm in PPIRS. If a subcontractor is known to exert significant influence on the work or control progress through a special relationship with the prime contractor (as in the case of a subsidiary or an affiliated company), or by virtue of performing a significant portion of the contract, then the subcontractor's performance may be summarized through the "Key Subcontractors and Effort Performed" area of CPARS. The DUNS number and name must be included so that the evaluation will be found when source selection boards search for the firm in PPIRS.

7-8. Architect-Engineer (A-E) Performance Rating.

a. The Chief of Engineering in each operating command is responsible for the A-E performance evaluation process in the command. For most Districts and Centers, the Chief of Engineering or their Deputy will be assigned as the Reviewing Official (RO) for A-E CPARS

ratings. The RO is responsible for designating the CPARS Assessing Official (AO), facilitating timely review of performance evaluations, and signing the evaluation.

b. After construction contract bid opening for contracts using an A-E design, a final design-phase performance evaluation of the A-E will be prepared by the engineers, architects and other technical personnel who reviewed and accepted the A-E firm's work. After construction completion (i.e., beneficial occupancy or substantial physical construction completion) of USACE managed construction projects, the Area/Resident Engineer will be designated the assessing official and is responsible for preparing the additional construction phase evaluation of A-E performance. The "Other Evaluation Area (1), which will be named "Post Award Construction Phase Services" will be used to record the evaluation. The construction phase services evaluation is recorded on the same evaluation previously prepared for the design phase evaluation

c. Design services provided under a D-B contract are not given a separate A-E performance evaluation; however, coordination between the Chief of Construction and the Chief of Engineering is necessary to assure that an A-E firm's performance under D-B contracts is recorded in CPARS. Reference paragraph 7-7(s) above for detailed information regarding A-E Contractors as "Key Subcontractors."

7-9. Transfer of Completed Facilities.

a. To insure timeliness of transfer, the Area/Resident Office should accumulate the necessary information throughout the period of construction. The following material should be prepared by the date of the final inspection. Paragraphs b through d apply to Civil Works Projects only; paragraph f applies to Military only; and paragraph e applies to either civil works projects or some military SRM projects.

b. Transfer of Civil Works Projects, which require local cooperation. The letter of transfer will be prepared by Programs and Project Management Division and sent by registered mail. The policies and procedures are set forth in ER 415-345-38, Transfer and Warranties, http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-345-38.pdf.

c. DFARS, Appendix F contains procedures and instructions for DD Form 250, 'Material Inspection and Receiving Report'. These provisions apply to supplies or services acquired when DFAR Clause 252.246-7000, Material Inspection and Receiving Report, is included in contract.

d. Real Property Built By Contract or Hired Labor on Civil Works Projects. The Project Manager will prepare ENG Form 3013, Work Order/Completion Report as required by ER 37-1-30. A copy of ER 37-1-30 can be located using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_37-1-30.pdf.

e. Additions, Betterments, and Improvements to Existing Facilities on Civil Works Projects and some military SRM projects. The Area/Resident Office shall prepare DD Form 250 upon completion of additions, betterments, or improvements to existing buildings or structures. The receiving report shall reference the project, location, and shall include the name, unit cost, and work code of the addition/betterment/improvement and any change in the square feet.

f. Transfer of Military Projects. For D-B-B contracts, the original designer of record (DOR) obtains the Real Property Unique Identified (RPUID) from the User and prepares the draft DD Form 1354 (Transfer and Acceptance of Military Real Property), and provides same through the PM or design manager to the Area/Resident Engineer. For D-B projects, the preparation of the draft DD Form 1354 should be included in the Request for Proposal scope of work for the D-B contractor's designer of record to prepare. In both cases, upon partial or complete transfer, the Area/Resident Office will provide both a DA Form 2877 (Real Property Record Card) or a real property listing, as required, and an interim DD Form 1354 to the Using Service. Complete the DD Form 1354 in accordance with the following instructions:

(1) DD Form 1354 is prepared in accordance with Criteria for Transfer and Acceptance of Military Real Property (http://www.wbdg.org/ccb/DOD/UFC/ufc_1_300_08.pdf) and Category Codes DA Pamphlet 415-28 (http://www.army.mil/usapa/epubs/pdf/p415_28.pdf).

(2) The total costs to-date are provided for construction, S&A, Design During Construction (DDC), and Planning & Design (P&D). These costs are prorated among the Interim DD Form 1354 line items. The Interim Form DD Form 1354 shall also list separately amounts for construction, and may include, if known, the amounts for S&A, DDC, and P&D.

(3) Insert the following statement on all copies. "The cost of construction furnished on this form represents the best estimate available at this time. Upon financial completion, revised amounts will be furnished on DD Form 1354 for use in updating amounts furnished hereon."

(4) All facilities including buildings, structures, utilities, distribution systems, grounds, and paved areas will be listed whether new construction, rehabilitation, demolition or remodeling.

(5) Minor construction deficiencies found during final inspection and not immediately corrected will be listed on the back of DD Form 1354 with the date established for correction. Such deficiencies should not delay transfer. Design deficiencies will not be included. If the Area/Resident Engineer is unable to settle disputes concerning construction/design deficiencies, notify the District Office, in writing, of the facts concerning the dispute.

(6) The final DD Form 1354 will be prepared and signed, and shall include all final project costs, including the amounts for construction, S&A, DDC, and P&D.

g. Equipment Testing Record. All equipment tests required by the contract should be made prior to the pre-final inspection. A complete record of the tests and/or commissioning

report should be available for examination at the final inspection. The local user should be invited to participate in the tests. If training of user personnel is specified, such training should be completed prior to formal transfer. The User should be furnished a copy of the test report/commissioning report.

h. Shop Drawing Record. The shop drawing data should be compiled so that the drawings for any desired item can be made available at the final inspection. The type of electronic file should be identified in the contract, and the format should be coordinated with the end user. After the final inspection, the material should be provided electronically for transfer to the User.

i. Operating and Maintenance Instructions. For each operating piece of equipment, the Area/Resident Engineer shall obtain from the contractor the operating and maintenance instructions as required by the contract. These instructions, with an index, should be compiled for electronic transfer for the user. In addition, obtain record sets of wiring diagrams, piping layouts, valve charts, valve tags, color codes for wiring and piping, and spare parts catalogs.

j. Spare Parts and Tools. Where required by the contract, all necessary spare parts and tools shall be obtained from the contractor for transfer to the User as well as a spare parts list for the items of equipment, including the source of supplier and unit cost.

k. Keys. Special care should be taken during checking requirements for such items as master keys, keys for valves, hydrants, registers, and windows. All required keys should be labeled when obtained from the contractor and should be transferred to the User by letter, with a complete listing of all keys. Ensure to coordinate with site specific installations regarding local requirement for installing lock cores as well as keying newly constructed or renovated facilities; standard specifications relay these as contractor responsibilities without specific sources but some military installations require specific manufacturers of cores and/or installation of cores by a Government employee.

l. Guarantees. The Area/Resident Engineer shall assure that all required guarantees have been received from the contractor for transfer to the User. A list of the guarantees should be compiled and will include the names, addresses, and contact point for all parties responsible for implementing such guarantees, and the expiration dates.

m. Warranty Procedures. The Area/Resident Engineer is responsible for implementation of the Warranty Provisions of the contract. The Warranty of Construction clause states a warranty period of 1 year from the date of final acceptance of the work, although the 1 year warranty period may vary in some overseas construction contracts. Be reminded that if the Beneficial Use and Possession clause is invoked, the warranty period begins on that date, and not the final acceptance date. That date must be documented and tracked in accordance with the Beneficial Use and Possession clause by the Area/Resident Engineer. This should be documented in RMS close out tab. Tracking and warranty inspections and calls can be found in one location, and reports can be developed to handle monitoring and compliance. When the

Using Service finds a defect or deficiency, it will first determine if it is to be corrected under the warranty provisions or if it is an operations or maintenance problem. If it is a warranty item, the Using Service will contact the contractor/vendor. If the defect is major, the Using Service will notify the Area/Resident Engineer who will take the necessary steps to get the work corrected. If the Using Service is unable to get defects corrected in a timely manner, the Area/Resident Engineer will assist. If a contractor is negligent in responding to warranty problems, a revised Contractor Performance Evaluation should be prepared to reflect marginal or unsatisfactory warranty response. Post inspections shall be held four months and nine months after acceptance by the Using Service to identify any design defects or construction deficiencies that might have come to light, see ER 415-345-38, which can be located using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-345-38.pdf. This inspection can be documented in RMS QAR for the day the inspection was held. Design defects and construction deficiencies that are not the contractor's responsibility will be corrected by USACE provided funds are available. The Area/Resident Engineer is responsible for coordination and scheduling the post inspections with the Using Service, District Engineering, District Construction, and Programs and Project Management Division.

n. Leases and Contracts. All leases and contracts pertinent to the facilities being transferred shall be secured by the Area/Resident Engineer for transfer to the User.

o. Computation of Final Cost. Prior to the final inspection, the Area/Resident Engineer shall determine the approximate cost of the contract exclusive of possible claims. Revisions/updates to the interim DD Form 1354 costs to reflect modifications may be required.

7-10. Acceptance of Work. FAR Clause 52.246-12, INSPECTION OF CONSTRUCTION, obligates the Government to accept completed work promptly. Upon substantial completion of all or any part of the contract work that is specified to be accepted separately, the Area/Resident Engineer shall make a final inspection and accept the work for and on behalf of the KO. The acceptance letter will state if all construction work is substantially complete or if a portion of the work remains to be completed, and list construction deficiencies remaining to be corrected.

7-11. Completion Report and Closeout.

a. As soon as a contract is completed and all construction deficiencies are corrected, the Area/Resident Engineer shall prepare a Construction Contract Closeout Checklist (see RMS), indicating that all closeout actions have been accomplished.

b. The contractor, prior to final payment, must furnish a release of claims against the Government.

c. If Liquidated Damages were assessed with the final payment estimate to the contractor, additional action will be required to transfer funds withheld to the proper account such as the

military S&A revolving fund account or the Treasury. This funds transfer action often requires special coordination with the local District Resource Management Office.

7-12. Modifications, General.

a. Purpose. The purpose of this section is to establish procedures for uniform processing of all construction contract modifications. These procedures are to be used by all organizational elements involved in construction contract administration.

b. Contract Scope of Work.

(1) When issuing a modification, the ACO must evaluate if the work is considered within scope, such as:

(a) Within the scope of the contract work.

(b) Within the scope of what was authorized by Congress.

(2) Any work that is not considered to be within scope of the contract can only be added to the contract through a bilateral supplemental agreement in accord with FAR Part 6, Competition Requirements by the KO, not the ACO. However, the ACO or their staff may be required to prepare such a modification for the 'KO's execution. 10 U.S.C. 2304 and 41 U.S.C. 253 require, with certain limited exceptions, that KOs shall promote and provide for full and open competition in soliciting offers and awarding Government contracts. This requirement is often referred to as the Competition In Contracting Act or CICA. FAR Part 6, provides that there are seven reasons permitting other than full and open competition.

(a) FAR 6.302-1: Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements.

(b) AR 6.302-2: Unusual and Compelling Urgency.

(c) FAR 6.302-3: Industrial Mobilization; Engineering, Developmental, or Research Capability; or Expert Services.

(d) FAR 6.302-4: International Agreement.

(e) FAR 6.302-5: Authorized or Required by Statute. (e.g. sole source awards under the 8(a) or HUBZone programs).

(f) FAR 6.302-6: National Security.

(g) FAR 6.302-7: Public Interest.

(3) When considering a beyond the scope contract modification, a thorough review of the above FAR cites should be performed. Each of the above listed cites provides additional information on the conditions for each exception. A part of this review should include the additional instructions provided at DFARS 206.3 through 206.304.

c. Timeliness Requirement Objectives:

(1) Requests for modifications from District Engineering or Programs and Project Management Division will be handled expeditiously. This is highly variable, based on project needs and risks. Overall, modifications need to be executed to minimize adverse impacts to the project and minimize the risk /cost to the government.

(2) If the contractor's proposal is not submitted by the date specified in the request, follow-up will be made immediately, verbally or in writing, and documented in the modification file.

d. Definitions (FAR 43.103)

(1) Modifications. Any alteration in the drawings, specifications, contract period, price, quantity, or other terms of an existing contract, whether accomplished by unilateral action in accordance with a contract clause or by mutual action of the parties of the contract. Modifications include:

(a) Change Orders: A change order is a change within the general scope of a contract given to the contractor by the KO or the ACO in writing pursuant to a clause or clauses of the contract. Technically, modifications issued under FAR Clause 52.243-4, CHANGES, are unilateral and do not require acceptance by the contractor; however, to preclude protest or claim, the modification provides space for written acceptance by the contractor. The contractor may request an adjustment due to the modification within thirty (30) days, or, if the KO agrees, longer. In the meantime, the contractor must carry out the provisions of the modification. If agreement on the modification cannot be reached, the contractor may file a claim under FAR Clause 52.233-1, DISPUTES. If resolution requires a change to the modification, this will require a new modification.

(b) Unpriced Change Orders: An unpriced change order is an action taken by the KO or ACO when the contractor is issued a change order and directed to proceed with the change prior to an agreement on price and/or time. This type of action is taken when the nature of the work or change is such that the lack of immediate action would have an adverse impact on the contract, parties thereto, or others. This type of change order may be used where exploratory work is necessary to determine the extent of the work or avoid delay and/or impact on other work or for safety concerns. This type of modification is issued using a SF 30 which will state that the contractor is directed to proceed with the described work, will include a Not-To-Exceed amount, and will normally provide for a price adjustment pending a final determination of price and/or time. The modification will also state that the final adjustment will be included in a subsequent

modification. A letter may be used to transmit the modification to the contractor and request a proposal. Prior to issuance of an unpriced change order, the KO or ACO issuing the order shall document the justification for the action as set forth in UAI 43.102, Policy. An unpriced change order is not an "Undefinitized Contract Action (UCA)" as defined in DFARS Subpart 217.7401(d). Care must be taken to ensure timelines and cost thresholds described by UAI and DFARS are complied with. For example, amounts of funding associated with an UCO are limited to 50% of the anticipated cost previous to receipt of a qualifying proposal and up to 75% of the amount of a qualifying proposal. Care must also be taken to ensure that the contractor does not exceed the "not-to-exceed" dollar value or specific scope described by the UCO without further appropriate contract actions.

(c) Unilateral Change Orders: A unilateral change order is a modification prepared under the "CHANGES" or other clause of the contract for which the KO exercises their authority to place a modification into effect without the agreement of the contractor. This will normally occur in those instances in which the two parties are unable to reach timely agreements on adjustments in price and/or time. A formal Independent Government Estimate (IGE) is required for all unilateral change orders, even those under $150,000. Prior to issuance of a unilateral modification the KO or ACO issuing the order shall document the justification for the action. Unilateral change orders may also be executed when adjusting unit priced line item quantities within the +/- 15% allowance described by the Variations in Estimated Quantities Clause.

(d) Supplemental Agreements: In accordance with FAR 43.103(a), a supplemental agreement is a modification to a contract accomplished by mutual action of the parties, or a bilateral agreement. Therefore, any contract modification issued by the KO or the ACO becomes a supplemental agreement when signed by the contractor. Certain contract modifications must be bilateral or supplemental agreements. These situations will be so indicated on the SF 30, Block 13C and Block 13E, and will contain a statement in Block 14 that the contractor is required to sign before the change is in effect. The most common occasions requiring a supplemental agreement are the settlement of a claim when the accord reached was for settlement purposes only, and a change that is beyond the scope of the original contract. Authority to negotiate a change that is beyond the scope of the contract is 10 U.S.C. 2304(C), as implemented by FAR 6.300. Contracting without providing for full and open competition or full and open competition after exclusion of sources is a violation of statute unless permitted by one of the seven (7) exceptions in FAR 6.302. In accordance with FAR 6.303, the KO will justify in writing, prior to starting sole source negotiations that the action is in accordance with FAR 6.302. The justification shall contain the information required by FAR 6.303-2, including notice that the action was publicized in the CBD as required by FAR 5.201 or, if not, which exception under FAR 5.202 applies. The written justification must be approved in accordance with FAR 6.304.

(e) Administrative Changes: Administrative modifications are issued to make changes in paying office, appropriation data, correction of typographical errors, etc. An administrative modification is also used to change the contractor's address from that shown on the original

contract, if requested by the contractor. Administrative changes are issued under provisions of FAR 42.302, not contract provisions, and may be issued by the ACO in accordance with the ACO's Certificate of Appointment.

(2) Independent Government Estimates (IGE). As used herein, an IGE is a formal, independent estimate of price and time prepared prior to negotiations. Its purpose is to guide the conduct of negotiations and to establish reasonableness of price and time. IGEs are required for changes that are anticipated to exceed the Simplified Acquisition Threshold (SAT) (currently $150,000.00) and all unilateral modifications, regardless of amount. See paragraph 7-17. Government Estimates of this manual.

(3) Field Change. A change caused by field conditions that do not materially affect the approved requirements of the project as designed.

(4) Design Change. A change where redesign effort is required. A design change materially affects the approved requirement, the basis of design, or operating capability of the facility.

(5) Value Engineering Proposal. A formal written proposal, initiated and developed by the contractor under FAR Clause 52.248-3, VALUE ENGINEERING –CONSTRUCTION. Value Engineering changes revise the drawings, specifications, or other requirements of the contract that would result in a savings to the Government by providing less costly items or methods than those specified without impairing any of their essential functions or characteristics, such as service life, reliability, economy of operation, ease of maintenance, and necessary standardized features. See Chapter 8. Value Engineering.

7-13. Clauses Authorizing Modifications. Modifications to contracts are issued in accordance with either the contract documents and/or pursuant to the FAR or supplements thereto. The regulations provide for only a limited number of personnel that may enter into a contract or modify a contract. Only KOs or ACO's may modify a contract and then only within their authority limits. The following are the contract clauses under which an ACO may exercise their authority and then only when authorized by the KO for the given contract.

a. FAR Clause 52.243-4, CHANGES: The Changes clause provides that the ACO/KO may unilaterally make changes in the contract drawings and/or specifications within the general scope of the contract. The Government reserves this right so that required changes determined after award of the contract can be incorporated during the construction period without delaying performance. This clause further provides that if such changes affect the contract time/or price, an equitable adjustment will be made. If the Government and the contractor can reach agreement on the price and time, a bilateral agreement will result. On the other hand if the parties cannot reach agreement, the ACO/KO may issue a modification setting forth the change in plans and specifications and establishing the price and/or time adjustment deemed by the Government to be reasonable. While the contractor may not be expected to accept the modification, the burden

would then be on the contractor to either accept or appeal this modification, but in the interim the contractor must proceed with the work as set forth in the modification.

(1) Paragraph (a) of the clause establishes that the Government has the authority to "make changes in the work within the general scope of the contract". The clause makes it clear that the changes in the work must be within the general scope of the contract, and that the change may relate to any aspect of the work to be performed. To show this, the clause sets forth illustrative categories for the making of changes that includes not only changes in the drawings, designs and specifications, but also changes in the method or manner of performance of the work, in the provision of sites and services or requiring acceleration in the performance of the work. This clause does not cover a change that would delay or slow down the work; this would be covered under the Suspension of Work clause. This clause does not authorize the ACO/KO to alter any of the collateral aspects of contract performance, such as covered by the payment and the so-called boilerplate clauses.

(2) Paragraph (b) states that "Any other written or oral order (which… includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; Provided, that the Contractor gives the Contracting Officer written notice stating -(1) The date, circumstances, and source of the order; and (2) That the Contractor regards the order as a change order". This would be considered to be a constructive change. Thus all Government personnel must be careful of their statements and any direction given to the contractor. As stated previously, notice could be as simple as a comment in the contractors' daily reports, that it was directed by some named person to paint the room or move the rock, etc., could be later interpreted by a court as notice.

(3) Paragraph (d) states that, "If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing". In other words the contractor is to be provided a modification to their contract that provides an equitable adjustment in time and/or money. An equitable adjustment is defined as "A contract adjustment in price and/or time to compensate the contractor for expense of delay incurred due to actions of the Government or to compensate the Government for contract reductions. The object of an equitable adjustment is to put the contractor in the same financial position after the change as he was before the change was issued".

(4) Design Change.

(a) When a problem is identified, the Area/Resident/Resident Office personnel are to notify the design office/PM of the problem and provide information as to when direction on the issue is required to avoid and/or reduce impact on the construction progress. If the design was prepared by an A-E, the Design Manager/PM is to assure that the A-E is given the opportunity to

provide corrective action. If the A-E is not provided the opportunity to correct its design, it may preclude damage recovery from the A-E.

(b) When a change is required, a request for modification will be forwarded to the Area/Resident Office by the PM/Design Manager. The modification request is to clearly describe the work to be changed, to include a narrative description of the change, the change in specifications and the change in the contract drawings. No modification considered a design change should be done without at least an e-mail request from the PM/Design Manager providing the complete change. The request should include assurance that the A-E has been informed if it is an A-E design. An estimate of cost will be attached to each modification request when the value of the change is expected to equal or exceed the SAT of $150,000.

(5) Time extensions for work ordered after the scheduled contract completion date should extend the contract by the number of days that represents the delay attributable to the change, if the change actually delays the acceptance of the project. This holds true whether the change is ordered before or after the original contract completion date. If the change work does not actually delay the acceptance of the work, then time can be given "for this change only", and should not actually extend the contract performance period. Extensions of contracts granted for changed conditions should be based upon applicable schedule analysis; in the case of network analysis schedules this typically includes a "fragnet" showing the impacts made by the change which ultimately lengthened the contract's critical path to complete beyond the contract completion date. Note: The contractor can be directed to perform work, which is within the scope of the contract, at any time up to final contract payment.

b. FAR Clause 52.236-2, DIFFERING SITE CONDITIONS: Provides for modification of the contract to cover subsurface or unknown physical conditions differing materially from those indicated in the contract or from conditions ordinarily encountered in the character of work in the contract. This clause is used only when the cost or time of performance of work under the existing contract is affected. The contractor should bring a differing site condition to the attention of the COR, ACO or KO before such condition is disturbed.

c. FAR Clause 52.249-10, DEFAULT (Fixed-Price Construction):

(1) USACE construction contracts provide either a completion date or a number of calendar days during which the contractor is to complete the work required by the contract. If the contractor fails, or it becomes apparent that it will fail, to meet the contract completion requirements, the Government may terminate the contractor's right to proceed with the work or some portion of the work. Should the Government terminate the contractors right to proceed for default the contractors bonding company will be given the option of completing the required work with a new contractor acceptable to the Government. If the bonding company chooses not to complete the work, the Government may have the work completed by another contractor or by other means. Regardless of how the work is completed, the contractor and its surety shall be liable for any additional damages to the Government.

(2) The Default clause also states that the contractor's right to proceed will not be terminated nor charged with damages if the delay in completion of the required work arises from unforeseeable causes beyond the control and without the fault or negligence of the contractor. For this reason the terms of the Default clause provides for a time extensions for delays in completing the work arising from unforeseeable causes beyond the control and without the fault or negligence of the contractor. The clause provides eleven (11) examples of such causes, but the clause does not provide for any additional costs resulting from such delays. One of the eleven (11) examples is unusually severe weather. In addition to the Default clause, the paragraph entitled "TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER" located in SECTION 01100, GENERAL, must be considered. This paragraph provides the anticipated adverse weather delay for the specific location of the contract work normally based upon a five (5) day workweek. This paragraph also provides information on conversions when the contractor is working other than a 5-day workweek and converting workday delays to calendar days. The ACO only has authority to modify the contract under this clause when the delay to critical path activities are for unusually adverse weather, or when the time is for the unreasonable delay due to acts of the Government in its contractual capacity under the Suspension clause. In such instances as the Government caused a delay (such as late approval of shop drawings), and the contractor agrees to additional time at no cost, the modification granting additional time should be written under both Suspension and Default clauses for the KO's signature. As costs are not allowed under the Default clause, both clauses must be referenced to show that costs were considered. Remember that whatever the cause, the delay must impact the critical path work. To be entitled to additional time under the Default clause, the contractor's schedule must indicate that one of the unforeseeable causes, be beyond its control and without its fault or negligence, has had an effect on its critical path work, and therefore, its time at the project site has been changed. However, if that time change has not affected the contract completion date, no change to the contract time would be made.

(3) Weather delays. The Government is unilaterally responsible to obtain weather facts, determine the extent of delay in contract completion, and extend the contract performance period when justified. The Area/Resident Engineer shall make evaluation within thirty (30) days after the end of the month in which adverse weather could be a delaying factor. The contractor will be informed of the findings, and concurrence or rebuttal requested within ten (10) days. Investigation, evaluation, and extension of time for unusually severe weather will not be postponed until the contractor requests it or until the end of the job. Time lost due to weather will be kept current, and modifications issued in a timely manner so that disputes over the number of days lost are minimized.

(4) On contracts containing the Special Clause, "Time Extensions for Unusually Severe Weather," the number of days to be granted will be determined in accordance with the contract. Anticipated weather delays will normally be stated in the Special Provisions and relate to impacts to the critical path caused by weather.

(a) On contracts without the Special Clause, the amount of time granted for delays attributable to unforeseeable unusually severe weather will be based on a comparison of the average climatological data with the actual weather conditions and the type of work being performed. Documentation submitted with time extension modifications must show that unusually severe weather actually occurred and its effect on contract completion on the critical path. Severe conditions such as damaging hail storms, tornadoes, and blizzards qualify as severe weather without regard for historical climatological averages.

(b) HQ USACE has established a policy in ER 415-1-15 Construction - Construction Time Extensions for Weather. Refer to the following hyperlink for a copy of ER 415-1-15: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_415-1-15.pdf.

(5) River Stage Delays. Time extensions may be granted for delays due to high river stages. When considering a delay for this cause, a normal expectancy as associated with floods may be disregarded. When contract performance is delayed by a high river stage, additional time may be granted on a day-for-day basis to the extent that contract completion is delayed. However, care should be used to avoid the use of the word "flood" when a time extension is granted for a high river stage. Time extensions may also be granted for delays due to low river stages if the circumstances warrant such an excusable delay.

(6) Other delays. For other delays as enumerated in this clause, the contractor will be required to advise that a delay exists, within ten (10) days from its beginning unless a further period of time is granted. The contractor should submit a request for extension of contract time not later than ten (10) days subsequent to the date that the extent of delay becomes known. Delays of this nature, such as a prolonged strike, will also be processed on a monthly basis.

(7) Documentation. All extensions of contract time must be documented to indicate clearly the cause, extent, and effect on interim or overall time of performance, and must be supported with a time analysis. A request based on delays in receipt of materials or equipment due to strikes, acts of the Government, or other reasons, must also establish the fact that the delay was unforeseeable and not due to fault or negligence on the part of the contractor, subcontractor, or supplier. This involves such factors as timely submittal of shop drawings and data requiring approval, prompt placement of orders, and subsequent follow-up. Causes must actually have a delaying effect on interim or final completion dates to qualify for extension of time for overall performance. When a delay is encountered, it does not automatically follow that overall completion will be delayed. Assessment of effects of delays or Critical Path Method (CPM) analysis is generally conclusive; however, the mere fact that a CPM analysis shows that there has been a delay is not enough to classify the delay as excusable. Documentation must also include a statement of the contractor's established workweek, such as 5, 6, or 7-day workweek. Sufficient calendar days will then be granted to provide equivalent workdays based on the established workweek (i.e., multiply number of workdays of delay by 7/5 or 7/6 to determine number of

calendar days of delay). Due care will be exercised to preclude duplication if two or more delay factors occur concurrently.

d. FAR Clause 52.246-12, INSPECTION OF CONSTRUCTION: The contract may be modified under the terms of this clause when contract work is suspected of being defective and the contractor is required to perform tests, remove the work, or otherwise incur costs at the direction of the KO. If it is determined that the work did meet the contract requirements, the contractor is paid for reasonable costs involved and granted an equitable extension of time.

e. FAR Clause 52.242-14, SUSPENSION OF WORK: An act of the Government may cause delay and result in additional costs to the contractor. Accordingly the Suspension of Work Clause has been incorporated into USACE contracts. The use of this clause may be required as a result of a directed suspension or a constructive suspension. In accord with the Suspension clause the Government has a reasonable amount of time to provide direction appropriate to the conditions encountered. The Suspension clause also states that no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. In other words, a modification could be required that would be written under several contract clauses, such as;

(1) Suspension of Work; to provide for the cost to the contractor to have their equipment idled while awaiting direction.

(2) Default; to provide for the portion of the time, if any, determined to be an unreasonable delay, (acts of the Government in its Contractual capacity).

(3) Differing Site Conditions; to cover, for example, the difference in cost to remove rock as opposed to the earthwork indicated in the contract documents.

(4) Changes; to provide for the change in the work necessitated by the conditions encountered, spread footing in lieu of piles, which could include a change in cost and/or time.

f. FAR Clause 52.229-3, FEDERAL, STATE, AND LOCAL TAXES: This clause provides for contract adjustment (of Federal excise taxes only) if new taxes or duties become effective or if the contractor received a rebate of taxes during the contract period, when the effect is in excess of $250.00. Such an adjustment will be based on actual costs or rebates. The contractor initiates the request for adjustment in contract price.

g. FAR Clause 52.236-11, USE AND POSSESSION PRIOR TO COMPLETION: This clause provides for equitable adjustment in contract price and time of performance if progress of the work is delayed or additional costs are incurred when the Government assumes use or

possession of any completed or partially completed part of the contract work. The contractor will initiate a request for adjustment as applicable.

h. FAR Clause 52.245-2, GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS); and FAR Clause 52.245-4, GOVERNMENT PROPERTY (SHORT FORM): These clauses provide, among other things, for adjustments in contract price due to late delivery, decrease, substitution, or withdrawal of Government-furnished property, and repair, upon written request by the contractor. Adjustment will be made pursuant to the procedures of the "CHANGES" clause.

i. FAR Clause 52.211-18, VARIATION IN ESTIMATED QUANTITY (Apr 1984): This clause provides for contract price adjustment where the actual quantity of a pay item varies more than 15% above or below the estimated quantity stated in the contract. An equitable adjustment in contract price shall be made upon demand of either of the contractual parties. The equitable adjustment is applied only to the quantities outside the 15% above or below the estimated quantity. HQ USACE has determined that any variation from the estimated quantity must be accounted for in the final contract amount. Final quantities, if different from those estimated, must be covered in an administrative modification if not eligible under the VARIATION IN ESTIMATED QUANTITY clause. See UAI for additional information on Variation in Estimated Quantity.

(1) The Area/Resident Engineer should be aware of the variation in quantities and on other than civil continuing contracts, as soon as any quantity is found to be in excess of the estimated amount, action should be taken to insure that available funds are checked and obligated prior to authorization of additional work. On continuing contracts, this will be accomplished by memorandum to PPMD.

(2) When considering an equitable adjustment in contract price for overruns or underruns, any adjustment shall be limited to the number of units by which actual quantity varies more than 15% of the original estimated quantity. The United States Court of Claims has stated that neither party can use the total price method for pricing the quantity overrun. The following is the most recent interpretation of the VARIATION IN ESTIMATED QUANTITY clause:

The portion of the clause at issue is the sentence that reads, "The equitable adjustment shall be based on any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity." It is the opinion of counsel that the decision in this case will follow the previous holding in Victory Construction Company, Inc. v. U.S., which held that the party seeking adjustment must show that the contractor achieved per-unit cost savings, or incurred per-unit cost increases, solely as a result of the quantity overrun (or underrun). This means that the government would be entitled to an adjustment from the as-bid per-unit price quantities outside the VEQ range changed solely as a result of the excess (or the lack of quantity). If such economies of scale cannot be proven, then the contractor is entitled to be paid its as-bid price. One remaining point to remember during the administration of the contract is

that, if the increase or decrease in quantity is the result of a differing site condition or a change to the terms of the contract, then the position should be taken that an equitable adjustment will be made pursuant to the Changes Clause or other appropriate clause.

(3) Time extensions may be granted if any actual quantity exceeds 100% of the estimated quantity and causes an increase in the time necessary for completion, provided the extension is requested and justified in writing by the contractor.

j. FAR Clause 52.248-3, VALUE ENGINEERING – CONSTRUCTION: This clause provides for equitable adjustment in the contract price if a cost reduction proposal is accepted and applied to the contract. See Chapter 8. Value Engineering.

k. FAR 43.103 (b)(1), UNILATERAL ADMINISTRATIVE MODIFICATIONS: Administrative Changes are those changes that do not change the contract work or dollar amount of the contract, nor do they affect the substantive rights of the parties. They are changes such as change in paying office, appropriation data, change in the contractor's mailing address, etc.

l. Use of Supplemental Agreements, (beyond the scope of the contract). Authority for negotiating supplemental agreements is usually 10 U.S.C. 2304 and 41 U.S.C.253, as implemented by one of the paragraphs in FAR 6.000. This authority, however, does not include authority for a sole source procurement, which must be approved by the KO or a level above the KO, depending on the estimated value (FAR 6.304). Execution of sole source supplemental agreements is reserved to the KO.

7-14. Contract Clauses Not Within ACO Authority. As stated above in paragraph 7-13. Clauses Authorizing Modifications, modifications to contracts are issued in accordance with either the contract documents and/or pursuant to the FAR or supplements thereto. The following are some of the contract and FAR clauses under which an ACO may not exercise authority, but the ACO and/or their staff will at times be required to negotiate, and draft modifications, with the recommendation that they be executed by the KO.

a. FAR 17.207, Exercise of Options: When exercising an option to a contract, the KO shall provide written notice to the contractor within the time period specified in the contract. In addition, before exercising an option the KO shall make a written determination for the contract file that exercise is in accordance with the terms of the option, the requirements of this section (FAR 17.207), and FAR Part 6. To satisfy requirements of FAR Part 6 regarding full and open competition, the option must have been evaluated as part of the initial competition, be exercised exactly in the terms specified, and be exercisable at an amount specified in or reasonably determinable from the terms of the basic contract.

b. FAR 22.404, Davis-Bacon Act Wage Determinations: Construction contracts must be awarded with applicable Davis-Bacon Wage Determinations. Service contracts are not subject to Davis-Bacon requirements, but rather subject to the McNamara-O'Hara Service Contract Act.

In some cases the incorrect determination must be deleted and the current or correct determination added to the contract. The specific FAR cite requiring the wage determination change will be provided to the ACO along with the current determination. Once received, the ACO will issue an RFP to the prime contractor requesting their proposal for the affect that the changed wage rate on their costs.

c. FAR Clause 52.225-9, BUY AMERICAN ACT – CONSTRUCTION MATERIALS; and FAR Clause 52.225-10, NOTICE OF BUY AMERICAN ACT REQUIREMENT:

(1) The Buy American Act requires that only domestic construction materials be used in construction in the United States, except when:

(a) the cost would be unreasonable (i.e., the cost of domestic construction material exceeds the cost of foreign construction material by more than 6 percent, unless the agency head determines a higher percentage to be appropriate;

(b) the head of the contracting activity or designee determines the construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality;

(c) the agency head determines that application of the restrictions of the Buy American Act to a particular construction material would be impracticable; or

(d) the agency head determines that application of the restrictions of the Buy American Act to a particular construction material would be inconsistent with the public interest (under this authority agencies may have an agreement with foreign governments that provide blanket exceptions to the Buy American Act, for example, the Trade Agreements Act and NAFTA).

(2) The KO/ACO is responsible for conducting Buy American Act investigations when available information indicates such action is warranted. Unless fraud is suspected, the KO shall notify the contractor of the apparent unauthorized use of foreign construction material and request a reply, to include proposed corrective action. If an investigation reveals that a contractor or subcontractor has used foreign construction material without authorization, the KO shall take appropriate action, including one or more of the following:

(a) Process a determination with regard to the inapplicability of the Buy American Act;

(b) Consider requiring the removal and replacement of the foreign material;

(c) If removal and replacement of the foreign construction material incorporated in a building or work would be impracticable, cause undue delay, or otherwise be detrimental to the interest of the Government, the KO may determine, in writing, that the foreign construction material need not be removed and replaced. A waiver as described above may be requested as

appropriate from the head of the contracting activity or the agency head. Such a determination to retain the material does not constitute a determination that an exception to the Buy American Act applies, nor does it affect the Government right to exercise contractual right, such as a reduction in contract price or termination for default, nor does it affect the Government right to suspend and/or debar the contractor, subcontractor, or supplier. If noncompliance appears to be fraudulent, the matter shall be reported to the appropriate agency fraud officials. See FAR 25.206.

(3) In accord with the clause, the KO could determine that it was in the best interest of the Government to not remove noncompliant items/materials. That decision, if made, would be allowable under sub-paragraph (f) of FAR Clause 52.246-12, INSPECTION OF CONSTRUCTION. A modification under that clause would document that decision.

7-15. Contracting Officer (KO) and Administrative Contracting Officer (ACO) Authority.

a. Federal procurement is done in accordance with the FAR. Contracts may be entered into and signed on behalf of the Government only by KOs. Further, KOs have authority to administer or terminate contracts and make related determinations and findings. KOs may bind the Government only to the extent of the authority delegated to them. KOs shall receive from the appointing authority clear instructions in writing regarding the limits of their authority. KOs are also responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships.

b. Contractual authorities delegated to the KO or Chief, DoC for out-of scope, sole source Supplemental Agreements, and the approval authority for same are covered by FAR 6.304. The limits for this work changes periodically.

c. To aid in accomplishing the responsibilities identified in paragraph a above, a KO often appoints an ACO. ACO appointments are done under the authority of UAI paragraphs 1.602-1-100.

(1) For an ACO to have authority on a contract they must be specifically appointed by the KO for the contract for which the ACO is to have authority. Less authority than that allowed by the regulations may be identified. Also their authority under the Default Clause is limited to weather time extensions and that time granted in conjunction with a Suspension of Work Clause modification. It should also be noted that an ACO is only given authority to modify a contract under specific clauses that are listed within the contract. Appointment letters are issued by the KO on each contract and the authority of the ACO is set forth within the appointment letter.

(2) It must also be noted that the ACO's dollar amount authority is limited to an absolute value amount of the additions and deletions included in the modification, and that breaking up a modification to be under a threshold is strictly forbidden.

(3) Area/Resident Engineers who hold a warrant and are appointed ACO authority are authorized to sign modifications under the "CHANGES" clause when the amount involved does not exceed an absolute value of their warrant amount, normally $500,000. Each individual appointed is furnished a DD Form 1539 or SF 1402 (Certificate of Appointment). Final action and execution of contract modifications not within the ACO warrant will be reserved for the KO.

(4) The Certificate of Appointment specifies the limitation on the authority, which may be exercised by the appointee. The individual appointed is referred to as the ACO, and will function on specified contracts when so authorized by the KO in the ACO letter. Within the limits of authority, an ACO may execute modifications under the following clause: Default; Value Engineering; Differing Site Conditions; Variation in Estimated Quantity; Suspension of Work; and Changes. Limitations are prescribed below:

(a) Increase not exceeding the amount stated on the Certificate of Appointment.

(b) Decrease not exceeding the amount stated on the Certificate of Appointment.

(c) Any combined amount of increases and decreases, provided the aggregate total does not exceed the amount stated on the Certificate of Appointment. Thus, an increase of $250,000 and a decrease of $255,000 for a combined total of $505,000 exceeds the ACO's authority.

(d) Under the Default clause, authority is limited by UAI 1.602-1-100 and the ACO's warrant.

(5) This authority may not be exercised when the modification involves any of the following conditions or circumstances:

(a) A unilateral or supplemental agreement that is beyond the scope of the original contract.

(b) A modification resulting in alteration of design criteria, unless the change has been previously approved or directed by Engineering Division.

(c) Variation in estimated quantity of any bid item in excess of the warrant amount.

(d) Differing site conditions in excess of the warrant amount.

(e) Termination of contract for default or convenience of the Government.

(f) Acceptance of a value engineering proposal in excess of the warrant amount. The ACO shall execute a modification within the warrant amount only after the KO has approved the proposal in concept.

(g) Issuance of a Contracting Officer's appealable decision.

(h) Exercise of Optional items.

7-16. Funding.

a. General. Funds reservation for contracts and contract modifications is performed in the corporate financial system CEFMS. The mechanism is a Purchase Request and Commitment (PR&C). Use CEFMS to query the applicable contractual PR&C. Enter a new amendment number. This number is unique to the PR&C and does not correlate with CEFMS obligation amendments or contract modification numbers. Also may require P2 scheduling action to increase budget, prior to amending the PR&C.

b. Funds Reservation (Civil Projects). The instruction in this paragraph are applicable to all construction contracts except those continuing contracts for which the contractor has not been notified that funds are available for completion. A PR&C for all contract changes shall be entered into CEFMS to insure the availability of funds prior to issuance of a written order, if any, and prior to issuance of the modification.

(1) When the contract modification is signed by the ACO, the obligation must be entered into CEFMS and a copy of the SF 30 is sent to District/Center Contracting Office and PM. Refer to paragraph 7-23. Distribution of Modifications and Accompanying Documents of this manual. SPS/PD2 obligation has to be done as well.

(2) Continuing Contracts (Funds not available for completion). On continuing contracts for which the contractor has not been notified that funds are available for completion, in lieu of the procedure above, the ACO will notify the PM of each proposed modification so that, if necessary, adjustments may be made in allocation of funds. Generally, after this notification has been furnished the ACO may proceed with issuance of a modification. The following statements should be included in the "Funds" subparagraph of each such continuing contract modification: "The funding of the work covered by the modification is subject to Special Clause 'Continuing Contracts' of the contract specifications." Whenever a continuing contract reaches the point where the contractor is notified that funds are available for completion, the increased funding and obligation shall be entered in CEFMS. In all cases, this action needs to be closely coordinated with the District/Center Contracting Office, the PM, Office of Counsel, and the local District/Center Resource Management Office.

c. Funds Reservation (Military Projects).

(1) When the need for a change to a military project is identified, the Area/Resident Office will assign a tracking number. That number will be employed to identify the change both within the District and in upward reporting systems.

(2) When the settled amount of a change is determined, the PR&C will be amended and certified. If the modification is to be signed by the ACO, the ACO shall enter the obligation in CEFMS prior to signing the modification. Modifications that are not within the ACO's authority shall be forwarded to the KO. Entry of contract changes into SPS, the computer system currently recognized by the Contracting Community as the official repository of contract change, should take place within a reasonable time of the CEFMS obligation and SF-30 signature. SPS entries should be carefully reviewed to ensure they reflect the correct date of agreement, type of change executed, terms of change, funded line items, cost of change and any change to the delivery schedule (i.e. contract completion date) on the SPS SF-30 generated document. The SPS Contract Action Report should also be reviewed for accuracy before the ACO or KO approves and releases the change. Refer to paragraph 7-21. Modification Form of this manual.

d. Limitation of Government's Obligation. (Funds are not available for completion. This could apply to both Civil and Military Projects).

(1) On incrementally funded contracts that include the Contract Clause 252.232-7007, LIMITATION OF GOVERNMENT'S OBLIGATION (LOGO), the clause paragraph "(a)"contains line item(s) and the amount presently available with contract award. Clause 252.232-7007 paragraph "(j)" provides the dates that set the period and amount of the Government's limitation of obligation for the contract.

(2) Modification that Increases the Funding Amount Available for Payment: Increases to the amount available for payment are increases to the obligation amount. There is no change to the contract amount. Modifications issued pursuant to this clause shall cite the increase in obligation amount, the new total amount of the obligation, and shall revise the amount in 252.232-7007, paragraph "(a)" accordingly. The obligated amount must increase the obligation amount in CEFMS.

(3) Modifications that Increase or Decrease the Contract Price: The LOGO clause contains contract line items that are funded based on incremental funding. Contract modifications for non-incrementally funded work shall not revise the contract line items cited in 252.232-7007, paragraph (a). For modifications that add new contract line items, and if the new contract line items are incrementally funded, the change shall revise the text in paragraph (a) to incorporate the new incrementally funded contract line items. No CEFMS action is required for an incrementally funded modification that increases the contract price. An incrementally funded modification that increases or decreases the contract price shall include in the CLOSING STATEMENT the following applicable text:

(a) Modifications that add work: Reference is made to Contract Clause 252.232-7007 and the provisions contained therein. This Contract modification is being issued without increasing funds pursuant to the above Contract Clause. Accordingly, payment for work covered by this modification will be made from the current available funds obligated for expenditure under this

contract. The contractor shall consider the effects of this modification in scheduling work for compliance with the dates of the Government's limitation of obligation stated.

(b) Modifications that delete work: Reference is made to Contract Clause 252.232-7007 and the provisions contained therein. This Contract modification is being issued without decreasing funds pursuant to the above Contract Clause. Therefore, the issuance of this modification does not affect the current available funds obligated for expenditure under this contract. The contractor shall consider the effects of this modification in scheduling work for compliance with the dates of the Government's limitation of obligation stated in the above Contract Clause.

(4) The listed funding schedule in Contract Clause 252.232-7007 paragraph "j" shall be used to establish the contractor's rate of performance as the contractor defines in its Network Analysis Schedule (NAS) for the contract. This must be considered in review of the contractor's NAS for acceptance. If the NAS shows work stoppage due to exhaustion of funds prior to the next listed dates in Clause 252.232-7007 paragraph "j", then the contractor shall be notified and advised that if it elects to perform as shown on the NAS that this performance is at the contractor's risk and expense for costs incurred while waiting for the next date of contract incremental funding.

(5) This Contract Clause and its schedule dates for incremental funding places a contractor on notice of the funds available for the stated period, and that it is responsible to plan its work accordingly. In the event the contractor places the Government on notice as required by the clause, then the Government shall respond in accordance with DFARS 232.704-70.

(6) The Government has no liability for shutdown, demobilization, remobilization, care of the project, continuing warranty and permit costs, or all other costs incurred by the contractor unless the allotment of additional funding is not provided as described in the contract clause.

(7) Upon receipt of notice from a contractor the ACO should immediately notify Chief of Construction and the PM of this notice so that correct procedures will be followed.

(8) The PM shall immediately inquire through its channels to determine if interim funding is available. The PM shall request a response within 5 working days. If interim funding is not available, then the contractor shall be notified as required in DFARS 232.704-70.

7-17. Government Estimates.

a. An Independent Government Estimate (IGE) shall be prepared for all modifications anticipated to exceed the simplified acquisition threshold (SAT) (currently $150,000) and for all unilateral contractual actions regardless of value. The KO or ACO, at their discretion, may require a formal IGE for any action less than the SAT. A structured approach will be developed by each District/Center/Division to comply with Procurement Instruction Letters (PIL) or other

guidance regarding who may prepare, review and approve Independent Government Estimates. PIL 2012-03R1, dated August 14, 2012, is the current PIL that establishes procedures for IGE as the publication date of this EP. For changes exceeding $500,000, it is a best practice to involve District Cost Estimating early in the IGE development process. For changes exceeding $150,000, the estimate may be prepared, reviewed and approved at the Area/Resident Office as long as it meets the requirements of the PIL. Per the referenced PIL, the IGE must be prepared by a competent individual familiar with the scope of work who is employed by the Government, or under contract to the Government. The IGE reviewer must be a Government employee one management level above or organizationally independent of the IGE preparer. The IGE approver must also be independent of the IGE preparer and the IGE reviewer, and cannot be the ACO/KO for the modification. For design changes where the designer of record is a contracted A-E, that A-E should provide an estimate of the change that can then be reviewed/approved by Government personnel to develop the IGE. If the design was provided by in-house resources, the IGE should be provided by the District Cost Engineering, or by field personnel as deemed appropriate. The KO or ACO shall ensure the IGE is received prior to the receipt of the contractor's modification proposal, or if proposal is received prior to completion of the IGE, the proposal is safeguarded so as not to influence the IGE.

b. Modifications less than $150,000. The preparation of an IGE in connection with construction contract modifications of less than $150,000 is optional with the KO or the ACO. Where in the opinion of the KO or ACO an IGE is required concerning construction amounting to less than $150,000, it will be treated in the same manner as an IGE of $150,000 or more. Where the KO or ACO elects to use a contractor's estimate, bid, or proposal for changes of less than $150,000 in lieu of an IGE, the contractor's estimate will be reviewed using the prices reasonableness method to verify that the proposal is equitable. If the review of the contractor's proposal indicates a perceived flaw, the proposal may be marked up accordingly and can be used as a Government estimate for the purpose of negotiation with the contractor. The result of the review will be dated and recorded. The forwarding to the District Office of an IGE for a modification is not required for changes involving sums less than $150,000 (total numerical value of deletions and additions) when adequate documentation can be presented to support the settled price and time. For modifications less than $150,000 the ACO is responsible for determining the basis which will protect the interest of the Government. The ACO will adequately document the equity of a contractor's proposal by obtaining quotations from suppliers, manufacturers, etc., and be satisfied that the work can be performed by the amount of the proposal. This documentation shall be indicated in the Price-Negotiation Memorandum (PNM).

c. Unilateral change orders. A Government estimate is required for all unilateral change order modifications regardless of the amount of price adjustment.

d. Modifications of $150,000 or more. The estimate must be prepared, reviewed and approved as required by the above mentioned PIL. The estimate may be printed and reproduced in legible form or typed. The original of the signed and dated estimate will be included in the

modification package. Government estimates for modifications will be designated For Official Use Only (FOUO) with the stamp entitled "FOR OFFICIAL USE ONLY" in addition to the FOUO on preliminary estimates prepared by Cost Engineering. The following items should generally be included in the Government estimates:

(1) Labor: The estimate should include the crafts to be used, the man-hours per craft, wage rates, and benefits to be paid. Insurance, taxes, social security, etc., are considered direct costs.

(2) Materials/Supplies: The estimate should set out the estimated quantities of materials and equipment to be incorporated into the construction, together with the applicable unit costs of such material and equipment. Applicable sales tax is considered a direct cost.

(3) Plant/Equipment: Evaluation of cost for the use of construction plant and equipment, which are owned or controlled by the contractor or a subcontractor and are furnished for the proper and economic performance of a fixed-price contract, shall be based upon actual cost data unless otherwise specified in the contract Special Clauses. For equipment not owned or controlled by the contractor, the contractor will furnish proof of rental rates.

(4) Job Office Overhead: The total amount allowed for overhead costs will vary with each job, depending primarily upon its location, size, and nature of work. Job office overhead, sometimes referred to as field office overhead, is allowable when there is a time extension, provided the accounting practice used is in accordance with the contractor's established and consistently followed cost accounting practices for all work. Items for consideration:

(a) Mobilization and demobilization.

(b) Temporary buildings.

(c) General expenses such as light, water, heat, supplies, telephone, transportation, and similar items in connection with the operation of the field office and other temporary facilities used at the job site.

(d) Superintendence.

(e) Other miscellaneous job expense not specifically included elsewhere.

(f) In some instances, if much of the work to be performed is subcontracted, the allowable overhead rate may be lower for that portion of the work subcontracted.

(5) Impact: Impact including, but not limited to, changes to unchanged work, the effects of a multiplicity of changes, and inefficiencies caused by crowding, overtime, and disruptions to

work must be considered in preparing the Government estimate. If any such costs are included, they are to be identified separately in the estimate.

(6) Profit: In preparing a Government estimate and/or where profit is negotiated as an element of price, either prime or subcontractor, a reasonable profit shall be negotiated or determined for each procurement. Consideration must be given to reduction in profit when risk is reduced, such as when negotiations are conducted after the work is done and when a high percentage of the work is subcontracted. The basis for the weights selected must be documented. See UAI 215.404-73-101, Alternate Structured Approaches – Construction Contracts, for additional information.

(7) Bond: Bond costs should be included at the rate as determined by a review of the contractor's agreement with their surety.

(8) Home Office Overhead

(9) The Government estimate is to be prepared independently of any bid, estimate, or proposal submitted by the contractor and based on the best estimating practices of the construction industry and in the same careful manner as a contractor preparing a competitive bid. The best means of insuring that our Government estimates are prepared independent of contractor's proposals is to prepare and approve estimates prior to receipt of the proposal. This, however, may not always be feasible due to the nature of our work priorities. Therefore, each office that receives contractor proposals for modifications to construction contracts will establish procedures to insure that estimators do not have access to contractor's proposals for modifications, which do not have a Government estimate. The procedure should provide for:

(a) Appointment of an individual and, in their absence, alternates with responsibility for safeguarding contractor's proposals;

(b) Separate filing of proposals in lockable cabinets or drawers;

(c) Release of individual proposals to other than the estimator on a need-to-know basis, such as to prepare a technical analysis or to transmit a copy with a request for audit;

(d) Safeguarding contractor proposed costs and prices referenced in audit reports until approval of corresponding Government estimates;

(e) Transfer of proposals to change order files upon completion of corresponding Government estimates.

7-18. Requests for and Receipt of Proposals.

a. Requests for Proposal (RFP). RFPs are to provide a suspense date for submission of the proposal and will include the requirements for an adequate price and time breakdown. It is considered a best practice to make sure funds are available to cover the estimated cost of the change prior to issuing the RFP. If proposals are not submitted by the date specified in the request, follow-up is to be made and immediately documented in the modification file. Current PIL requires signature by ACO or higher.

b. Proposal. The contractor is required to furnish a price breakdown in accordance with AFARS 252.236.7000, MODIFICATION OF PROPOSALS - PRICE BREAKDOWN. The proposal is to be in sufficient detail to permit an analysis of all materials, labor, equipment, subcontracting, overhead, and profit. If the construction contractor's proposal is considerably less than the Government estimate the Area/Resident Engineer will assure that there is complete understanding as to the scope of work. Discussions with the contractor will attempt to develop the reasons for the differences for consideration in the preparation of future Government estimates. A record of any discussions will be included in the PNM.

c. Certification of Requests for Equitable Adjustment. DFARS Clause 252.243-7002 requires the contractor to certify their proposal for all modifications over $150,000 indicates the required certification statement. This certification of proposal is in addition any required certification of cost and pricing data.

d. Modifications in Excess of $700,000. FAR 15.403- 4 and 15.408 require the contractor to submit cost or pricing data when the modification involves a price adjustment with aggregate increases and decreases are expected to exceed $700,000. The contractor is also required to certify (FAR 15-406-2) the cost or pricing data submitted. This requirement also applies to subcontractors, at any tier, when the subcontract price adjustment is expected to exceed $700,000. The cost or pricing data may be submitted in the format indicated in Table 15-2 of FAR 15.408 or the KO may permit submission in the contractor's format.

(1) Cost or pricing data is required, unless an exception is granted based on exceptions contained in FAR 15.403-1.

(2) Requirements for cost and pricing data are contained in three contract clauses, FAR Clause 52.214-27, PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA – MODIFICATIONS; FAR Clause 52.214-26, AUDIT AND RECORDS – SEALED BIDDING; and FAR Clause 52.214.28, SUBCONTRACTOR COST OR PRICING DATA – MODIFICATIONS – SEALED BIDDING. The requirement applies to certain negotiated contracts and modifications exceeding the threshold specified in FAR 15-403-4, currently $700,000, by operation of the law and requires the contractor to submit to the KO, in writing, cost or pricing data and to certify in writing that to the best of its knowledge and belief the cost or pricing data submitted is accurate, complete, and current. The final certification will be in the

exact amount of the negotiated price for the proposed modification. The final certificate will not be furnished until negotiations have been completed and agreement reached. This cost or pricing data and certificate shall become a part of the modification file.

(3) The Area/Resident Engineer must obtain a Contract Pricing Proposal (cost or pricing data) from the contractor, unless the KO determines an exception applies. The reason cost or pricing data was not obtained shall be documented in the modification file. The Area/Resident Engineer should also obtain supporting schedules from the contractor to fully explain cost items within the proposed modification. The supporting schedules shall be prepared to satisfy the instructions and appropriate format of FAR 15.408, Table 15-2 except that supporting schedules may be devised by the KO to require data considered necessary and reasonable for the construction industry and the contracts estimating system. The supporting data should include such items as:

(a) Labor hours by craft.

(b) Labor rates including fringe benefits.

(c) Type and quantity of materials.

(d) Material rate per quantity.

(e) Type and usage hours of all equipment.

(f) Equipment charge-out rates.

(g) Individual overhead components and applicable cost.

(h) Base used in developing overhead rate.

(i) Period covered by overhead rate.

(j) In addition, statements providing the basis for any escalation rates, small tools and miscellaneous materials rates should be included. The availability of the contractor's supporting schedules will greatly affect the timeliness and effectiveness of the audit.

7-19. Negotiations.

a. Analysis of Contractor's Proposal. A cost or price analysis (FAR 15.404-1) and profit analysis are to be made on all proposals for all contract modifications. The extent of the analysis, however, will depend on the value and complexity of the modification. The purpose of the analysis of the contractor's proposal is to assure that the negotiator is thoroughly familiar with all aspects of the proposal, and has established pre-negotiation objectives.

b. Pre-negotiation objectives are to be established prior to negotiations with the contractor. The negotiator shall be familiar with the work to be changed, and will have either a formal IGE if over $150,000, or an informal estimate if under $150,000, as well as a copy of the contractor's current proposal. The pre-negotiation objectives on these small changes need not be formally documented; however on changes in excess of $150,000, the KO or ACO shall establish formal pre-negotiation objectives in accordance with FAR 15.406-1 that are approved one level above the negotiator. The pre-negotiation objective memorandum (POM) shall clearly indicate the extent of review of all available information, describe the differences between the contractor's proposal and the IGE, and establish the pre-negotiation objectives, or the Government position.

c. If the contractor's proposal is not reasonable and all negotiation attempts fail to reconcile the differences between the Government and the contractor's position, appropriate details of the failed negotiations shall be recorded in the PNM. This record of negotiations shall be used to justify further contract actions, such as:

(1) Issuance of a unilateral modification.

(2) Cancellation of the modification request. Issuance of an unpriced change order (UAI Part 43, Contract Modifications, provides additional requirements for this action).

d. Should negotiations be successful, the negotiations shall be documented in a Price Negotiation Memorandum (PNM). See paragraph 7-18 g, 7-18. Requests for and Receipt of Proposals, of this manual. Should final negotiations reach a tentative settlement that exceeds the IGE, care must be taken to explain in the PNM the logic used to reach the tentative settlement. A revised IGE is not required.

e. Audit of Cost or Pricing Data. FAR 15.404-2 allows an audit review of a proposal in excess of $700,000 prior to negotiations. The KO may elect not to audit if sufficient reliable data is available to assure a fair and reasonable settlement. Reasoning for not obtaining audit assistance shall be documented in the modification file. It is important that the contractor's cost or pricing data be audited at the earliest practicable date so that negotiations will not be unnecessarily delayed. DCAA made some changes to their internal policy in 2010, and is aggressively enforcing these policy changes. Unless the contract action exceeds $10M (FFP) or $100M (Cost Reimbursable), they will not entertain any request for audit services. DCAA will audit a termination for convenience, as the FAR specifically requires this type of action to be audited.

f. It is the responsibility of the Area/Resident Engineer to prepare a technical review (FAR 15.404-1) and a cost analysis of the contractor's proposal for use by the auditors. The technical review should contain an analysis of the quantities, man-hours, and equipment hours necessary for the change. The contractor's proposal, supporting data and technical review shall be forwarded to Chief of Construction with a request for audit.

g. Price Negotiation Memorandum (PNM) (FAR 15.406-3).

(1) A PNM will be prepared in each case and signed by the person conducting the negotiations. The record will include:

(a) The date purpose and place of negotiations.

(b) The names and positions of the negotiators for the contractor, subcontractors and Government.

(c) Recite appropriate details concerning the efforts in identifying and reconciling differences between the proposal and Government estimate.

(d) Documentation with regard to extension of contract time, indicating the basis on which time extension is or is not applicable.

(e) If cost or pricing data was not required in the case of any price negotiation exceeding the cost or pricing threshold, the exception used and the basis for exception.

(f) If cost or pricing data were required, the extent to which the cost or pricing data submitted by the contractor was used in determination of the negotiated price.

(g) A resume of actual negotiation proceedings with particular reference to details of mutual understandings between the contractor and the Government.

(h) For modifications which an audit was provided the memorandum shall explain how the audit was used and why any cost questioned by the audit were allowed. If any costs were allowed which the audit recommended to be unallowable, this must be addressed and the auditor so notified.

(i) A statement that the amount of time extension has been discussed with the contractor and that it does or does not agree with the time extension allowed. Every effort will be made to settle time prior to issuance of the modification. On contracts that require a NAS, the addition or lack of time required will be supported by the NAS.

(j) Include a statement that final settlement is subject to approval by the ACO/KO and to availability of funds.

(2) The PNM shall be documented as a separate document and made part of the modification file.

7-20. Modification Packages.

a. Each modification to a contract is in a sense a new contract action within itself. At the completion of the negotiations, the negotiator is to put together a modification package that will include all the documentation required to justify the contract adjustment in total. The documentation required for the modification package will vary due to the dollar amount and modification authority. The following is a list of the general type of documents to be provided within the modification package:

(1) SF 30. In addition to the instructions on the back of the SF 30, the following shall be included on the SF 30:

(a) For Block 13E, the choice is "Contractor is not required…" or "Contractor is required…"

(b) Block 14:

- The Change or Scope of the Change. Start by referencing the contract element which is being changed. Provide a description of what is being changed in the contract sufficiently written to be understood as a standalone.

- Change in Contract Specifications. Describe changes to the text of the specifications or list specification sections/paragraphs to be added/changed/replaced as shown or attached or "None" will be indicated.

- Change in Contract Drawings. Describe changes to the drawings or list drawings to be added/changed/replaced as shown or attached or None will be indicated.

- Change in Contract Time. A "No Change" in contract performance time shall also be included as applicable. As a best practice, include the specific contract completion date which results from the change (to include listing the date for actions which do not affect the contract completion date). If multiple modification preparation actions are underway at the same time, care should be exercised to coordinate these actions to preclude inadvertent errors.

- Change in Contract Amount. This may include new or revised bid items. As a best practice, include the revised contract amount which results from the change. If multiple modification preparation actions are underway at the same time, care should be exercised to coordinate these actions to preclude inadvertent errors.

- Funds. The funding data may be provided in this paragraph or Block 12 of the SF 30, at the writer's discretion or as space requirements dictate. If the "Funds" paragraph is used, Block 12 shall contain a note to "See Block 14 below".

- Closing Statement. A closing statement such as the following should be included in the modification:

Special Provisions: In consideration of this modification agreed to herein as complete equitable adjustments for the contractor's proposal for adjustments, the Contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to this adjustment.

(2) Evidence of Funding. PR&C or CEFMS obligation documentation is required to reflect adequate funding for the modification.

(3) Consent of Surety and Increase of Penalty Form (SF 1415): When the ACO signs a modification that requires Consent of Surety and Increase of Penalty in accordance with FAR 28.106-3, the ACO must insure the form is correctly executed. The form should be used as a guide in preparing Consents of Surety and Increase in Penalty.

FAR 28.106-3 Additional bond and security: When additional bond coverage is required and is secured in whole or in part by the original surety or sureties, agencies shall use Standard Form 1415, Consent of Surety and Increase of Penalty.

(4) Pre-Negotiation Objective Memorandum (POM) (FAR 15.406-1). The Area/Resident Office shall establish pre-negotiation objectives before any price negotiation. The scope and depth of the analysis supporting the objectives depends upon the dollar value, complexity and importance of the pricing action. The objectives should be based on the analysis of the proposal, technical analysis, audit report, and IGE, where applicable.

(5) Price Negotiation Memorandum (PNM). A PNM shall be included in all modification documentation packages. Regardless of the format, the following information will be included;

(a) Necessity for the change.

(b) Reason for omission from the original plans and specifications.

(c) Authority for the change (contract or FAR clause).

(d) Justification for both time and price.

(e) Comments regarding possible Architect-Engineer liability, if applicable.

(6) Copies of referenced correspondence, specifications, drawings, sketches, BCD, IGE, funding documentation, work classification memo, etc., and any other documentation needed to support the change.

7-21. Modification Form.

a. SF 30. Any modification issued pursuant to any contract clause or other authority may be issued on this form. This includes, but is not limited to, the following more common modification situations:

(1) Time extensions for weather and strikes.

(2) Time and/or pricing adjustments due to quantity variations.

(3) Value Engineering changes.

(4) Administrative changes.

(5) Government-furnished property changes.

(6) Pursuant to the Changes clause.

(7) Pursuant to the Differing Site Conditions clause.

(8) Pursuant to the Suspension of Work clause.

(9) All clauses or provisions authorizing modifications of relocation contracts.

b. Modifications for construction contracts are to be prepared in RMS. RMS will provide a Mod reference number that begins with an "R" and is unique for each modification. This RMS modification will be signed by the ACO or KO as applicable. Correspondence with the contractor should reference this number. The USACE automated information system for procurement (currently Procurement Desktop Defense (PD2), provides the modification number ("P" or "A" number as applicable). To obtain the modification number from PD2, basic modification data must be entered into PD2 including the general description under "The Change" or "Scope of Work" and the change in contract amount. When the modification is released in PD2, a modification number will be generated by the system.

c. Each contract modification must stand on its own, i.e., it must contain a complete and detailed statement of work so that no question can arise as to the change to be made. As a general rule, the modification must clearly reference the element(s) of the contract which is being changed and describe the change in sufficient detail to be a stand-alone record of the change. Care should be taken to ensure modifications properly reference actual contract documents for D-B contracts, which typically consist of the original RFP/contractor’s proposal/betterments as opposed to referencing 100% plans and specifications as is common for D-B-B contract modifications. If a revision is required to a modification, a different

modification number will be assigned with reference made to the previous modification. For example, "two-part" change orders will result in two or more modifications.

d. Signatures. Block 16a in the lower right-hand corner of the SF 30 shall contain "Administrative Contracting Officer" as the title on ACO modifications. Use of electronic signatures should be determined through the District's Legal, Contracting and Construction supervisory chain.

7-22. Unilateral Change Orders.

a. Use of Unpriced Change Orders (UAI Part 43, Contract Modifications, provides additional requirements for this action).

(1) If there is not sufficient time to negotiate a price adjustment before the cost of a change would be significantly increased or if work must progress before conditions are sufficiently known to permit a modification covering all details of a change, an unpriced modification may be issued as contemplated by the Changes clause. The change order will state that a subsequent modification will be issued containing the final price and time adjustment, if required. It will also state that the 30-day period within which the contractor may assert a claim under the Changes clause will begin upon receipt by the contractor of the subsequent modification. Prior to issuance of an unpriced change order, a Contracting Officer's Support Document must be prepared and approved by the ACO or KO.

(2) When the change is definitized or if additional change is needed to the initial modification, another modification number will be assigned that references the previous modification. The description in Block 14 of the subsequent modification/s will be started with a statement such as "This is supplementary to Modification No R00009." Separate activity numbers will be assigned for each modification issued, so that each individual modification can be properly tracked. The modification number/s of the original and all previous associated supplementary modifications shall be listed. Supplemental modifications or the final definitization modifications shall include the same type of information as indicated in paragraph 7-19. Negotiations. Each item within the modification such a Change in Drawings, Specifications, and/or Contract Amount shall indicate the change from the previous modification or state 'no change' from the previous modification. The RMS modification reason code shall be the same as the initial modification.

(3) A not-to-exceed amount will be included in the description of each modification to insure that the government funds are not obligated in excess of funds available. Care must be taken to provide a reasonable amount, and insure the contractor is well aware of that limit. The not-to-exceed amount must be determined on a case by case basis, depending on the cost of the work, and timing and impact of the change. The modification must state that the contractor will notify the government within a specified time prior to exceeding the not-to-exceed amount. The specified time must also be determined on a case by case basis. When the contractor notifies the

government that it will exceed the not-to-exceed amount, the KO shall determine the appropriate course of action.

b. Unilateral priced modifications, except for administrative changes, should not be issued until all reasonable efforts to reach an agreement have failed. A unilateral priced modification may also be justified when a contractor is delinquent in submitting a proposal, will not seriously participate in negotiations, or when failure to start work on the change will unnecessarily impact the schedule. Every effort will be made to reach an agreement on contract price and time with the contractor at the earliest possible date and to issue a bilateral agreement.

7-23. Distribution of Modifications and Accompanying Documents.

a. ACO Modifications.

(1) The ACO's signature and the date of execution are required on the original RMS version of the SF 30, along with a duplicate original (ultimately provided to the contractor). The SF 30 and the duplicate original should be provided to the contractor for their signature. Once the RMS SF 30 and duplicate original are signed and returned by the contractor, the ACO signs both documents, as well as the PD2 version of the modification. Additional copies may be made from the original SF 30. After the ACO signs the modification, distribution will be made immediately as follows:

(a) Contractor. The duplicate original of the SF 30 plus a copy of all specifications and drawings that describes or clarifies the change as stated in the SF 30.

(b) The Area/Resident Engineer will forward the fully executed original of SF 30 to District/Center Contracting Office , and retain a copy for the Area/Resident Office file, along with evidence of funding, BCD, POM, PNM, and any other pertinent documentation.

b. Modifications issued by the Contracting Officer (KO). As above, after signature by the contractor, the modification package will be forwarded to the District/Center Contracting Office for signature. The modification package should include the original and duplicate original for signature and two copies with documentation as described paragraph 7-19. Negotiations of this manual.

7-24. Architect-Engineer (A-E) Responsibility.

a. A-E contractors are responsible for the professional quality, technical accuracy, and coordination of all services required under their contracts and may be liable for Government costs resulting from errors and deficiencies in design. FAR 36.608 require the KO to enforce A-E liability and recover costs if in the Government's interest. See EP 715-1-7 Architect-Engineer Contracting in USACE. A copy of EP 715-1-7 can be located using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_715-1-

7.pdf. All modifications, therefore, will be reviewed by the Area/Resident Engineer to determine if, in their opinion, the A-E may be liable for increased cost to the Government as a result of a design error or deficiency. The Area/Resident Engineer shall evaluate the following conditions:

(1) Is the construction issue attributable to a design error or omission by the A-E?

(2) Does the error or omission result from the A-E's negligent failure to meet the standard of care reasonably associated with the A-E profession or from a breach of contractual duty?

(3) Has the Government suffered damages as a result of the design error or omission?

b. If, in the opinion of the Area/Resident Engineer, all conditions above are true, then the Area/Resident Engineer will complete an A-E Responsibility Issue Form (AEIF) and forward it along with supporting documentation including applicable construction contract modifications packages to the District A-E Responsibility Coordinator (AERC). The Area/Resident Engineer's summary of the issue should include:

(1) Issue title.

(2) Project name and location.

(3) Construction contract number.

(4) A-E firm name.

(5) A-E contract number.

(6) Description of the issue.

(7) Modification number, amount, description.

(8) Explanation of alleged damages.

(9) Estimate of the damages.

(10) Modification (SF 30).

(11) Mod Findings of Fact within the PNM.

(12) Other supporting documents and drawings.

c. The AERC will obtain input from the Design Manager/PM and will forward the issue to the A-E Responsibility Review Board. The AERC will provide the completed action to Chief of Construction who will forward to the Area/Resident Engineer.

7-25. Contracts with the Small Business Administration.

a. General: Section 8(a) of the Small Business Act of 1958, PL 85-536, permits Government agencies to negotiate and contract with qualified (by the Small Business Administration (SBA)) small disadvantaged business enterprises. Reference FAR Clause 52.219-11, SPECIAL 8(a) CONTRACT CONDITIONS, and FAR Clause 52.219-12, SECTION 8(a) AWARD.

b. Administration: Upon award of an 8(a) contract, the District/Center Contracting Office will notify the Area/Resident Office administering the contract of the name and telephone number of the point of contact in the SBA for coordination during contract performance. Administration of the contract is accomplished in the same manner as other contracts. One area of emphasis is the 8(a) contractors have strict self-performance requirements. The Area/Resident Engineer must ensure that the 8(a) contractor is complying, or notify the SBA of noncompliance. The SBA is to be informed of the small business contractor's progress and performance only if there is a problem. The District/Center Contracting Office shall provide a copy of all small business contracts to the SBA.

CHAPTER 8

VALUE ENGINEERING

8-1. General. The Area/Resident Engineer and Area/Resident Office staff should be familiar with the principles and applications of value engineering. See ER 11-1-321 Army Programs Value Engineering. This publication can be found using the following hyperlink: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_11-1-321.pdf.

8-2. Responsibilities.

a. Area/Resident Engineers should create and maintain an awareness of the importance of value engineering among both Government and contractor personnel.

b. The Area/Resident Engineer shall expedite processing all Value Engineering Change Proposals (VECPs) as outlined below. It is to be noted that the contractor shall be notified of the status of the VECP within 45 calendar days after the KO receives it.

c. The Area/Resident Engineer and engineering and inspecting staff should encourage contractors to informally discuss potential value engineer proposals. Submission of a VECP concept to "test the water" should be discouraged. The Area/Resident Engineer should answer questions the contractor may have in regard to proper submission requirements of the proposal.

d. The Area/Resident Engineer and engineering and inspecting staff should review a proposal received from the contractor to determine if it includes the seven requirements as stated in paragraph (c) of FAR Clause 52.248-3, VALUE ENGINEERING – CONSTRUCTION. The proposal shall include all seven items (listed below) before it is forwarded for review.

e. The Area/Resident Engineer is the point of contact with the contractor. Any contact with the contractor about the VECP should be coordinated with the Area/Resident Engineer and a determination made as to who should contact the contractor.

f. A Value Engineering Officer (VEO) is appointed by the District Commander at each District and serves as a special assistant to the Commander on issues relating to VE and upward reporting.

8-3. Processing Value Engineering Change Proposals (VECP).

a. As noted in paragraph (d) Submission, of the VECP clause, the contractor shall submit the complete proposal to the Area/Resident Engineer. The date the Area/Resident Office receives the complete VECP commences the 45-day review process. The review process for processing of formal proposals from contractors is noted below.

(1) The Area/Resident Engineer will review the proposal for completeness, making sure that all the required data in paragraph (c), VECP Preparation, of the VECP clause has been submitted. If the proposal is incomplete, for whatever reason, the contractor shall be requested to furnish the complete proposal before the review of the proposal commences. Having a complete proposal will save time in the review and negotiation process. Paragraph (c) of the VECP clause is as follows:

(a) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(b) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(c) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(d) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(e) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(f) A prediction of any effects the proposed change would have on collateral costs to the agency.

(g) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(h) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(2) In certain situations, it may be important for the User to have a chance to review the VECP. In those situations, the Area/Resident Engineer will furnish a complete copy of the VECP to the User for its review and should request its comments. The User’s comment will be furnished to the Area/Resident Engineer who will forward a copy to the Chief of Construction.

If the User has problems with the VECP that cannot be overcome, the review of the proposal may be terminated at this time.

(3) The Area/Resident Engineer will review the proposal for acceptability and forward the complete VECP, their comments and the User's comments (when received) to the Chief of Construction and the VEO for coordination of the technical review. At this point, the Area/ Resident Engineer should commence the cost proposal review in anticipation of the VECP being acceptable.

(4) The Chief of Construction and the VEO will coordinate with the PM/Design Manager for the technical review of, and the Independent Government Estimate (if over $150,000) for, the VECP to assure the proposal is given careful consideration in a timely manner for approval in whole or in part or disapproval. The PM/Design Manager will furnish the technical evaluation and the IGE (if over $150,000) to the Chief of Construction and VEO. Include in this evaluation a recommendation whether to approve in whole or in part or disapprove the VECP. Any required conditions of acceptance are to be listed. Definite reasons for disapproval must be furnished.

(5) The Chief of Construction will forward the VECP, technical review, IGE (if over $150,000) and other reviews with their comment indicating the results of the VECP review to the Area/Resident Engineer.

(6) If the VECP is approved in whole or in part, the Area/Resident Engineer shall review the VECP documents, evaluate the proposal for negotiation and shall negotiate an equitable cost/time adjustment to the contract. The Area/Resident Engineer shall execute the VECP modification within their authority or negotiate and prepare a VECP modification for the KO's signature. The final status shall be forwarded to the VEO.

(7) If the VECP is disapproved, the Area/Resident Engineer shall give the contractor written notification of the decision stating the reason(s) for its disapproval. A copy of the written notification shall be furnished to Chief of Construction and the VEO.

b. The KO's decision to accept or reject all or part of any VECP shall be final and not subject to the Disputes clause or otherwise to litigation under the Contract Disputes Act of 1978.

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CHAPTER 9

SAFETY

9-1. General. Each contract must include the requirements for the contractor to conduct the work according to the safety standards of the USACE. The general Safety considerations which must be applied are contained in the U. S. Army Corps of Engineers Manual, EM 385-1-1 (http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1_2008Sep_Consolidated_2011Aug.pdf), Safety and Health Requirements, Special Clauses and Technical Provisions of the specifications, and such other safety codes and standards as are applicable to the work at hand. Many codes and standards of the National Fire Protection Association (NFPA) and the American National Standards Institute (ANSI) are included in EM 385-1-1 by reference.

9-2. Responsibility. The responsibility for safety compliance rests with the contractor. The responsibility for assuring compliance rests with the USACE resident staff. The prime contractor is responsible for the safe performance of subcontractors. It is USACE policy that job safety monitoring will be the responsibility of the Area/Resident Engineer and staff. The District has professional safety engineers whose services are available to the Area/Resident Engineer upon request.

9-3. General Procedure.

a. Attention given job safety is directly dependent upon the attitude of the contractor's and the USACE representative in charge of the work. For this reason it is absolutely essential that the USACE' personnel and the contractor's supervisors have a mutual understanding of the safety requirements before commencement of work. A special clause of the contract requires a meeting for this purpose. This pre-work safety conference will be coordinated and conducted by the Area/Resident Office staff. Minutes of this meeting will be prepared by the Government and sent to the contractor for their concurrence, with a signed copy returned to the Government for the contract file.

b. EM 385-1-1, The USACE Safety and Health Requirements, as amended, is a general-purpose safety specification applicable to all activities under the jurisdiction of the USACE. No single specification can be written which will be perfectly tailored to all jobs. In order to insure that our demands upon the contractor are reasonable and practical, authority is granted the Area/Resident Engineer to approve adaptations of EM 385-1-1. Such deviations shall meet the obvious intent of the requirement and permit the work to proceed as safely as it would have if the requirement had been in strict compliance.

c. Accident prevention control must start with the planning of the work and be constantly implemented throughout the progress of the job. In order to be effective it must be integrated into all work activities and not be considered as something separate and apart. The

Area/Resident Engineer shall require an acceptable Accident Prevention Plan from the contractor and insist on the application of the program during the progress of the work. See Appendix A of EM 385-1-1 for the "Minimum Basic Outline for Accident Prevention Plan". This plan must be submitted and accepted prior to any construction commencing.

d. Accident reporting. The Area/Resident Engineer must ensure timely and accurate accident reporting, to include Preliminary Accident Notification (PAN) releases through the ENGLink Interactive system at https://englink2.usace.army.mil/englink/login.seam?p_cid=518/, as well as contractor completion and Government coordination of the ENG 3394 United States Army Corps of Engineers Accident Investigation Report. See the following link for ENG 3394: http://www.publications.usace.army.mil/Portals/76/Publications/EngineerForms/ENG_FORM_3394_1999Mar.pdf. Care must be taken to ensure the corrective actions are addressed on the ENG3394 form and are followed through as improvements by the contractor.

9-4. Pre-Work Safety Plans/Accident Prevention Plan.

a. In order to have a high level of quality production and safety on the job, the progress of the work must be well thought out prior to the start of the job. In this way, obstruction of the orderly progress of work can be anticipated and controlled or avoided.

b. In order to avoid accidents and obstructions on the job, which are caused by lack of planning, a Pre-Work Safety Plan/Accident Prevention Plan is required for each phase of the project, and must be submitted and accepted prior to the start of construction. A Pre-Work Safety Plan should list the steps of a job in sequence, the probable hazard associated with the type of work, and the control action to be taken. Often reference to applicable provisions of EM 385-1-1 or other safety standards will be included as part of the control action.

c. It is impossible to provide a list of phases that will cover every type and size of construction project. A good deal of judgment based on individual consideration must be used when evaluating the acceptability of a Pre-Work Safety Plan. Construction activities will be divided into three general types; heavy construction (including highway and bridge construction); building construction (including recreation facility buildings and administrative buildings on civil works projects); and river construction. Pre-Work Safety Plan/Accident Prevention for heavy construction should include at least the following phases, as applicable:

(1) Mobilization. Setting up office facilities, shop buildings, storage and maintenance area. This phase should include the hazards and preventive action in regard to fuel storage and electrical circuits.

(2) Clearing and Grubbing. Outline the use of protective apparel and equipment for protection against poisonous plants, insect, and snakes. Safe operation of power and hand tools (chain saws, axes, etc.) should be outlined. Dozers utilized in cutting should be equipped with

steel mesh fabric to protect the operators, roll over protection, seat belts, and reverse signal alarms.

(3) Excavation and Embankment. Include drilling, blasting and quarry operation transportation handling, drilling, loading and firing of explosives, lightning detection apparatus and seismic recording devices, where required. Shoring and/or sloping of excavations, protection of excavations by fences or guardrails where required. Embankment operations should include access ramps and haul roads, including width, grade traffic pattern, traffic control, delineators, and dust control.

(4) Placement of Slope Protection Material. If hand labor is required, include details on personal protective apparel and equipment.

(5) Seeding and Mulching. Outline provisions to control hazards of working equipment on slopes.

(6) Roadway Construction. Include subgrade preparation, base course laydown, surface treatment, and installation of guardrail delineators, traffic control, barricades, and signs.

(7) Foundation Preparation. Safety hazards involved in the use of air tools, high-velocity water jets and/or compressed air, access ladders, walkways, guardrails, toe boards, and lifelines.

(8) Concrete Construction. Include batch plant erection and operation, concrete conveyances carpenter shop, guarding on machines and power tools, care and use of hand tools, etc. Miscellaneous concrete items, installation of reinforcing steel, cleanup of surfaces preparatory to placement, sandblasting, concrete placement, curing, and form removal.

(9) Bridge Construction. Concrete operation will be the same as paragraph h. Girder erection (steel or concrete), safety nets, stripping buggies, scaffolding guardrails, toe boards, painting, etc.

(10) Mechanical Installations. Includes tainter gates, service, emergency and sluice gate installation, powerhouse, generator and turbine installations, electrical installation, roadway and interior lighting, and cranes working under power lines.

(11) Foundation Drilling and Grouting. Includes access, work platforms, etc., and inspection records on wire rope.

(12) Safe Clearance Procedures. Implemented in accordance with EM 385-1-1 when appropriate (i.e., powerhouse construction, etc.).

(13) Material handling.

d. Pre-Work Safety Plan/Accident Prevention Plan for building construction should include at least the following, as applicable:

(1) Mobilization. Same as heavy construction.

(2) Site Preparation. Includes clearing and grubbing, structural excavations, explosives, dewatering and control of water in excavations, sloping, and snoring

(3) Concrete Construction. Much the same as heavy construction.

(4) Masonry. Includes scaffolding, guardrails, toe boards, material storage and handling, access, ladders, etc.

(5) Carpentry. Use of power and hand tools, guarding, grounding maintenance, ladder, scaffolds, etc.

(6) Roofing. Includes erection of truss members, bar joints, decking, insulation, shingles, built-up roofing, wind hazards, guardrails, fall protection, material hoists, etc.

(7) Interior Finish. Dry wall, plastering, ceiling, ceramic and quarry tile, painting, trim, etc.

(8) Miscellaneous Items. Heating and air conditioning, electrical, plumbing, exterior painting, landscaping, demobilization, etc.

(9) Material handling.

e. Pre-Work Safety Plan/Accident Prevention Plan for river construction should include some of the elements of heavy construction with additions or deletions according to the type of work. At least the following should be included, if applicable:

(1) Mobilization. Same as heavy construction and includes facilities on both land and water. Plan should cover abandon ship, fire and rescue drills, alarm systems, use of personal flotation devices, etc.

(2) Transportation. Transporting of personnel, equipment and materials, includes land and water, safeguards, capacity of floating equipment, inspection and certification of floating plant and operators, etc.

(3) Miscellaneous. Includes ladders and landings, guardrails, open hatches, inspection and maintenance of equipment records, lockout procedures, cofferdam emergency excavation plans, lighting for night operations, and skiffs and other motor boats.

(4) Material handling.

(5) Dive plan (if applicable). EM385-1-1 requires the presence of a properly trained and certified USACE Diving Inspector to be present for each contract dive

f. Effective application of the Accident Prevention Plan requires a continual follow-up by the USACE personnel to see whether the contractor is fulfilling contractual obligations in accordance with agreements reached at the preconstruction conference. Construction inspectors will provide safety supervision over work as one of their primary assignments. This requires each inspector to acquire a working knowledge of the appropriate safety requirements. The Area/Resident Engineer will provide safety supervision over operations not usually included in the scope of the inspector's jurisdiction through specific assignment.

g. The Area/Resident Engineer will insure that their staff is briefed on safety issues monthly to help insure safety awareness. Minutes of the meeting/briefing will be maintained within the Area/Resident/Project Office.

9-5. Accident Investigation. The accident reporting system prescribed by the contract is designed so that every reportable accident is promptly investigated. Usefulness of the accident reporting system depends on careful review and verification of the facts presented and specific action taken to control the cause. Accident investigations are to be reported on ENG Form 3395, "U.S. Army Corps of Engineers Accident Investigation Report" as prescribed by Supplement 1 to AR 385-40.

9-6. Authority. Under the terms of the contract, the KO or Government Designated Authority (GDA) has full authority to require the contractor to take any steps deemed necessary for maintaining safe operating conditions. When unsafe conditions are noted, the Area/Resident Engineer will first attempt to gain the cooperation of the contractor's representative to eliminate such unsafe practices or conditions. If the contractor fails or refuses to comply with their safety contractual obligation after all efforts to gain compliance with safety have failed, the Area/Resident Engineer shall ISSUE AN ORDER STOPPING ALL OR PART OF THE WORK until satisfactory corrective action has been taken. The Area/Resident Engineer will immediately notify the Chief of Construction when a safety suspension order is issued.

9-7. Compliance with Federal, State, and Local Regulations. Compliance with Federal, State, and local regulations is required under the terms of the contract. Handling and storage of explosives, operation of boilers, operation of cranes in the vicinity of power lines, operations in the vicinity of flight paths, mine and quarry operations, and other related activities normally require State or local permits and may require periodic inspection by State or Federal personnel, or by other entities requiring extensive coordination/approval (i.e. railroads). The Area/Resident Engineer shall cooperate with all local, State, and Federal authorities in requiring observance of all applicable laws and regulations. If working overseas, there may be significant host nation requirements that must be adhered to as well.

9-8. Occupational Safety and Health Act of 1970.

a. Contract clauses require contractor compliance with OSHA standards on USACE projects. However, the Chief of Engineers has directed that USACE personnel will enforce only contract clauses and EM 385-1-1, Safety and Health Requirements, on USACE projects.

b. USACE personnel shall conform to the following policies:

(1) USACE personnel should be responsive to the requests of OSHA inspectors who may accompany them, if agreeable with both the contractor and the Compliance Officer. USACE personnel shall not vouch for the security clearance or authority to visit job sites located in sensitive areas nor become involved in discussions between the contractor and OSHA.

(2) USACE personnel who learn of an impending OSHA inspection shall not inform the contractor. Compliance inspections are to be unannounced. There is a fine of up to $1,000 and imprisonment for not more than 6 months for anyone giving advance notice of an inspection.

(3) USACE personnel may discuss the OSHA regulations, standards, penalties, etc., with contractors as long as the contractor realizes the USACE is not directly involved with OSHA enforcement. If a contractor follows the requirements of the OSHA standards he/she will generally be meeting the requirements of EM 385-1-1.

(4) Many contractors or customers may be participating in OSHA's Voluntary Protection Program (VPP).

9-9. Hazardous, Toxic and Radiological Waste Projects. With the addition of hazardous, toxic, and radiological waste (HTRW) cleanup projects to the USACE workload, there are additional safety issues that the Area/Resident Engineer must address. They include the following:

a. For those USACE employees who have QA responsibilities on HTRW projects, 40 hours of HTRW site safety training shall be provided as called for in 29 CFR 1910.120 paragraph (e) Training. In addition to the 40 hours of training, this paragraph also requires 8 hours of refresher training annually. These requirements also apply to contractor personnel.

b. A respiratory protection program shall be developed for USACE employees who must enter an exclusion zone, which requires such protection in order to perform their duties. Prior to wearing a respirator, these employees must be evaluated by a physician to determine if they are medically and physically qualified to wear a specified type of respirator.

c. A medical surveillance program shall be developed for USACE employees who must enter exclusion zones for 30 days or more a year or wear a respirator for 30 days or more a year. USACE employees who have been injured in an emergency incident due to overexposure to a hazardous substance or health hazard shall also be in the medical surveillance program. This

would consist of a background physical initially and follow-up physicals every twelve months, unless the attending physician believes a longer interval (up to two years) is appropriate.

d. As part of the QA program, the Area/Resident Engineer and their staff must assure that all contractor and government personnel who enter exclusion zones are wearing protective clothing and equipment as called for in site Safety and Health Plan.

e. The Area/Resident Engineer and Area/Resident staff should check during the BCOES review to see that specifications contain provisions requiring the contractor to provide protective clothing and equipment to Government personnel, as required. S&A funds should not be used for providing protective clothing and equipment for Government personnel, with the exception of hard-toed shoes.

9-10. Monthly Safety Exposure Reports. EM 385-1-1, Safety and Health Requirements Manual, requires contractors to prepare and submit monthly safety and exposure reports. The District Safety Office should utilize the Monthly Injuries/Illnesses and Exposure report in RMS to report District exposure hours and lost time accidents to HQUSACE. The data is reported quarterly and HQUSACE tallies the data by fiscal year. After the end of the third month in the quarter, the contractor must provide monthly exposure data by the 7th day of the next month. The Area/Resident Office should complete the review of this data and forward to the Safety Office by the 10th day. All labor exposure hours and lost time accidents for the quarter must be included in RMS. This data gets into RMS via imports from contractor QCS or Contractor's mode of RMS data or it is entered by the Government Representative for non-QCS contracts.

9-11. District Office Assistance. The District Safety Office is available for consultation relative to safety matters. Safety engineering service will be provided on request.

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CHAPTER 10

LABOR RELATIONS AND LABOR STANDARDS ENFORCEMENT RESPONSIBILITY (US ONLY)

10-1. Labor Responsibility.

a. The prime contractor has the basic responsibility for handling labor difficulties and work stoppages caused by labor disputes.

b. The Area/Resident Engineer has responsibility for establishing and maintaining good relations with the contractor, contractor's organizations, and labor and acting promptly to avoid or reduce to a minimum any work stoppage which will affect timely completion of a contract. The Area/Resident Engineer shall take such actions in connection with labor relations problems as are consistent with their authority and responsibility. The Area/Resident Engineer should always seek to obtain a voluntary agreement between management and labor so as to permit uninterrupted prosecution of all contracts. The Area/Resident Engineer should be careful not to let their activities involve the Government in the merits of a labor dispute.

c. The Area/Resident Engineer should not take part in the adjustment of jurisdictional disputes between unions other than attempting to bring the parties in dispute together to settle their difference.

d. The Area/Resident Engineer shall make a careful and timely check of all contractors' and subcontractors' payrolls, conduct regular routine employee interviews, check wage rate and equal employment opportunity posting, and secure SF 1413 for subcontractors.

e. It is especially important that FAR Clause 52.222-17, LABOR STANDARDS FOR CONSTRUCTION WORK—FACILITIES CONTRACTS, be followed by all contractors.

f. See ER 1180-1-8, Labor Relations – Reference is to ER 1180-1-8, which provides guidelines for USACE employees tasked with the administration and enforcement of statutory and contractual labor standards on construction contracts. ER 1180-1-8 can be found at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_1180-1-8.pdf.

10-2. Labor Disputes.

a. Where there is a labor dispute, work stoppage, or threat of a work stoppage the Area/Resident Engineer shall make a prompt investigation, initiate appropriate action, and report the facts to the District Labor Relations Officer by the most expeditious means. In addition, a full written report shall be made. As much of the following information as possible should be obtained:

(1) Name and location of project.

(2) Name of prime and subcontractor(s) whose work is affected.

(3) Type of contract (unit price or lump sum) and contract number.

(4) Date and hour work stoppage began.

(5) Classification(s) of labor involved

(6) Name, local number, and address of union involved.

(7) Names of local and regional labor representatives contacted and result obtained.

(8) Actual or estimated number of workmen of each craft involved who are out and the percentage of the craft this figure represents.

(9) Actual or estimated total number of workmen in all classifications who are out.

(10) A precise statement of the cause of the disagreement, the position taken by the contractor and the position taken by the labor organization or group concerned.

(11) A statement of action contemplated by the contractor and recommendation as to action that might be taken.

(12) If assistance is needed make a specific request for action desired

b. When the Area/Resident Engineer first becomes aware of a possible dispute at a military installation the Staff Judge Advocate should be informed of the possible dispute and that a reserve gate system might be necessary. If a strike occurs, the Staff Judge Advocate should then be requested to implement the reserve gate system as soon as possible so that work not under strike on the installation can continue.

c. The District Office shall be kept currently informed of any significant changes in the situation as originally reported.

10-3. Posting Labor Rates. The Area/Resident Engineer shall ascertain that a copy of the wage determination is posted in a conspicuous place on the project site and assure that such posting is accessible to all employees. In addition, a Department of Labor Wage Information Poster (WH-1321) and the poster "Equal Opportunity is the Law" shall be furnished the contractor to be posted with the wage rates.

10-4. Additional Classification. During the early part of each contract, preferably at the Preconstruction Conference, the Area/Resident Engineer should determine if the labor classifications set up in the contract are adequate for the type of trades the contractor and subcontractor will employ throughout the duration of the contract. If there is a need for additional classifications the contractor shall be furnished a SF 1444 and instructions for adding the necessary classifications. When the form is prepared, signed, and returned by the contractor it shall be checked by the Area/Resident Engineer and, if in order, forwarded to the District Labor Relations Officer. Upon the approval of the additional classification(s) it shall be posted (refer to paragraph 10-3. Posting Labor Rates).

10-5. Notification of Subcontracts.

a. In accordance with the contract clauses, the contractor is required to furnish a statement setting forth the name and address of subcontractor(s) and a summary description of the work subcontracted within seven days after the award of any subcontract by the contractor or a subcontractor. The contractor is required at the same time to furnish a statement signed by the subcontractor acknowledging the inclusion of the labor standards clauses in the subcontract. This is to be accomplished on SF 1413, Statement and Acknowledgement, and is required within 14 days of signing the subcontract.

b. Contractors and subcontractors to comply with the above requirement shall use SF 1413. The Area/Resident Engineer shall make certain that these forms are furnished, checked, and forwarded to the District Labor Relations Officer.

10-6. Payroll.

a. The contractor and all subcontractors are required to submit a weekly payroll record on laborers and mechanics working at the site of construction on each contract. The Area/Resident Engineer shall check for the receipt of these payrolls and maintain a log of payrolls received. The Area/Resident Office shall check the payrolls. The Area/Resident Engineer will determine if all the information required for a pay record is included on the payroll. Check for items such as employee name and 4 digit identifier, daily and weekly hours worked, including correct classification identification of each employee; to include owners, independent contractors, etc., and method of fringe benefits payment. Check also for any unauthorized deductions; validity of apprentice and trainee registration, etc.; and failure to comply with the forty-hour week law.

b. Contractor should submit payrolls and labor records as stated in FAR Clause 52.222-8, PAYROLLS AND BASIC RECORDS. Should the contractor fail to submit the required payroll records, subparagraph (c) of the referenced FAR clause allows the government to suspend further payments to the contractor with written notice. Additionally, FAR Clause 52.222-7, WITHHOLDING OF FUNDS, allows the government to withhold monies for labor violations until the Area/Resident Engineer receives all payrolls due within the period covered by the pay

estimate, verifies the accuracy thereof, and is satisfied that the contractor is in compliance with the contract labor standards clauses.

c. If violations are apparent, a letter (with a copy to Office of Counsel) will be sent to the contractor citing the discrepancies found and the corrective action required, including submission of a supplemental payroll. Evidence obtained as proof of restitution will be either receipts of restitution signed by the employee, or copies of cancelled paychecks for restitution payments submitted by the contractor. This evidence will be incorporated in the contract files. When violations are not readily adjustable the facts shall be submitted to the District Labor Relations Officer for resolution.

10-7. On-The-Site Investigation. The Area/Resident Engineer shall conduct contractor and subcontractor employee interviews to insure that the contractor is in compliance with the labor standards clauses of the contract. SF 1445 shall be used for this purpose. The type of work and the number of workers employed on each contract and subcontract shall determine the number of employee interviews conducted each week. Interviews on a work site should provide a cross-section of the work force including employees of subcontractors, and should be accomplished on a routine day-by-day basis. Information obtained from the interviews shall be compared with information contained on the weekly payrolls. Labor interview data should be entered into RMS.

10-8. Apprentices and Trainees.

a. Apprentices. Employees receiving apprentice wages for work performed at contract work sites must be individually registered in bona fide apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with State apprenticeship agencies recognized by the Bureau. Otherwise employees must be in the first ninety (90) days of probationary employment as apprentices in properly registered programs and be certified by the Bureau of Apprenticeship and Training or State Apprenticeship Councils.

b. Trainees. Employees receiving trainee wages for work performed at contract work sites must be receiving on-the-job training in construction occupations under U.S. Department of Labor approved programs.

10-9. Self-Employed Contractors. Self-employed contractors must report themselves as owners on copies of their weekly payrolls submitted to the KO.

10-10. Labor Organization Representatives Entering Work Sites. Labor organization representatives should be admitted to contract work sites for the purpose of conducting union business (excluding organizing activities, collective bargaining discussions, and other matters not directly connected with the project being visited) provided that the visit will not interfere with the contract work and will not violate pertinent safety or security regulations.

10-11. Equal Employment Opportunity. Contractors performing work under contracts for $10,000.00 or more are precluded from discriminating against employees or applicants for employment because of race, color, religion, sex, or national origin and contractors must take affirmative action to ensure nondiscrimination. Contractors are required to post in a conspicuous place on the project site the poster "Equal Employment Opportunity is the Law" as set forth in FAR Clause 52.222-26, EQUAL OPPORTUNITY.

10-12. Employment of the Handicapped. Contractors performing work under contracts in excess of $2,500 are precluded from discriminating against employees or applicants from employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified, as set forth in FAR Clause 52.222-36, AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS.

10-13. Small Business and Small Disadvantaged Business Subcontracting Program.

a. It is the policy of the Government that small business and small business concerns owned and controlled by socially and economically disadvantaged individuals shall have the maximum practicable opportunity to participate in the performance of Government contracts. The contractor is required to accomplish this to the fullest extent consistent with the efficient performance of the contract and agrees to cooperate in studies and surveys as may be conducted by the Government.

b. Prior to award of a contract for construction of a public facility in excess of the threshold set by FAR 19.702 (currently $1,500,000.00) to a large business concern, the apparent low bidder is required by the contract clauses to submit a subcontract plan which separately addresses subcontracting with small business concerns which will be made a part of the contract. The plan shall include the eleven elements listed at FAR 19.704. Upon award of the contract to a large business concern, the contractor is required to implement the plan in accordance with FAR Clause 52.219-9, SMALL BUSINESS SUBCONTRACTING PLAN, which includes the submission of Individual Subcontracting Reports (ISR) and Summary Subcontracting Reports (SSR). The ISR is submitted two times per year; by April 30th for the period ending on March 31st and October 30th for the period ending on September 30th. The ISR is also due within 30 days after contract completion. The SSR is submitted annually by October 30th for the period ending September 30th. The Area/Resident Engineer will insure that the forms are properly submitted.

c. When a construction contract/order contains the FAR Clause 52.219-14, LIMITATIONS ON SUBCONTRACTING, the contractor is required to perform a certain percentage of work (i.e. (3) General Construction: The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees; or, (4) Construction by special trade contractors. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees). The

Area/Resident Engineer will assist the KO, if necessary, in oversight of contractor compliance with the requirements of FAR Clause 52.219-14.

10-14. Independent Contractors. Any employee classified as an independent contractor must meet Internal Revenue Service's definition. Verification must be provided to the Area/Resident Engineer where the classification is used. For specific guidance on what constitutes an independent contractor refer to the following hyperlink: http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Independent-Contractor-Defined.

CHAPTER 11

PHYSICAL SECURITY

11-1. General. The Physical Security Program (PSP) objective is to assure adequate protection of USACE assets located on military installations, stand-alone facilities, and civil works and like projects, and other locations under USACE responsibility. The program, as explained in the establishing regulation, AR 190-13, is intended to counter threats to assets during peacetime, contingencies, mobilization and wartime by addressing the spectrum of aggressors, aggressor tactics and human threat tools, weapons and explosives.

Physical security measures are physical systems, devices, personnel, animals, and procedures employed to protect security interests from possible threats and include, but are not limited to, security guards, military working dogs, lights and physical barriers, explosives and bomb detection equipment, protective vests and similar equipment, badge systems, electronic entry control and access control devices, security containers, locking devices, electronic intrusion detection systems, standardized command, control and display subsystems, radio frequency data links used for physical security, security lighting, delay devices, artificial intelligence (robotics), and assessment and/or surveillance systems to include closed-circuit television.

11-2. Responsibility.

a. Each District has a Security Manager, often dual-hatted as the Physical Security Officer, with the responsibility for administration of the PSP.

b. The Area/Resident Engineer shall be responsible for the supervision of adequate physical security within their area of responsibility and is authorized to deal directly with the District Security Manager on physical security matters.

c. The Area/Resident Engineer will:

(1) Request physical security requirements or enhancements beyond their means from their District's Security Manager.

(2) Identify potential mission essential or vulnerable areas (MEVA), to be included in the District's Physical Security plan.

(3) Forward a copy of the physical security plan or site-specific security plan to the District's Security Manager, to be included as an annex to the District's physical security plan.

(4) Use AR 190-13 (Physical Security) for further details supporting the physical security program.

(5) Reference current Integrated Protection OPORDs for additional supporting protection programs.

11-3. Reporting.

a. The Area/Resident Engineer shall report all criminal or suspicious activities within their area of responsibility to the appropriate law enforcement authority. On a military installation, this is the Provost Marshal's Office (PMO), often located with the Department of Emergency Services (DES). The District Security Manager will be notified of such activity by telephonic means, email and ENGLink Incident Reporting System (IRS). ENGLink IRS Serious Incident Reports (SIR's) will be used to report the following:

(1) Offenses/incidents, and monetary losses in excess of $1000.00 per incident.

(2) Recovery of property previously reported lost or stolen.

b. Incidents in excess of $1000.00, will be submitted directly to the District Security Manager within three workdays subsequent to report/discovery of offense/incident.

c. ENGLink IRS Minor Incident Reports (MIR'S) will be used for incidents under $1000.00.

d. Reports to the District Security Manager will be made on incidents considered to be of a serious nature. These incidents include but are not limited to fraud, bribery, conflicts of interest, malfeasance, or any incident which would create adverse publicity or which would adversely affect public confidence. Discovery or receipt of a complaint or allegation of such incidents will be reported immediately and without delay.

e. Applicable investigative personnel (Local, State, Federal, Military) will be notified for investigation of all incidents. Area/Resident Engineers are not required to make investigations except in those incidents where criminality is not an issue.

11-4. Physical Security Assistance.

a. The Physical Security Officer is available to assist the Area/Resident Engineer in all phases of the site-specific security plan development and execution. This assistance can include: physical security and crime prevention surveys, consultations relative to unusual physical security conditions, and for request for information pertaining to physical security.

b. Where construction sites or facilities are located within the boundaries of a military reservation, assistance relative to physical security may be rendered by other authorities. Coordination should be made with the military installation Provost Marshal to determine extent

of support to be rendered the Area/Resident Engineer and to clarify actions in resolving differences incident to security matters.

11-5. Visitors. United States citizens may be admitted to activities under direct supervision of USACE (provided access to classified information is not involved) at the discretion of the Area/Resident Engineer, with due regard for the safety of such visitors and noninterference with the project work. At military activities, in addition to the foregoing, the rules prescribed by the Base/Post Commander must be observed and followed. Higher authority must approve all visits by foreign Nationals prior to commencement of the visit. Self-invited or non- USACE sponsored visits will not be honored.

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CHAPTER 12

REAL ESTATE

12-1. General.

a. Each District's Real Estate Division has the responsibility to assure that all real estate required for construction has been acquired prior to the award of a contract. The Area/Resident Engineer should assure that this has been accomplished prior to the contractor entering on the property. In general, property for construction is acquired by purchase, lease, or by obtaining an easement. Temporary rights of entry are sometimes obtained to permit exploration and survey work prior to construction.

b. The policies and procedures to be followed in the acquisition of real estate are set out in ER 405-1-12, the Real Estate Handbook , the Real Estate Handbook is a restricted file. Contact the District Publication POC for a copy. This ER applies to the acquisition of Civil and Military Property.

12-2. Responsibility in Connection with Real Estate.

a. The Real Estate Division is responsible for all real estate matters. All real estate interests acquired by USACE are retained on the accountable property records of the local geographic District. Real estate acquired for a cost-shared project is the responsibility of the local sponsor and responsibility for those records lies with the local sponsor.

b. The District Office will furnish the Area/Resident Engineer with plans and specifications regarding construction requirements and limits of Government-owned land in connection therewith.

c. It is the Area/Resident Engineer's responsibility to know the boundary of the Government-owned land or leased property, as well as appropriate easements and rights of way in connection with construction needs, and to make sure that there is no trespassing or use made of any property, which is outside the boundary of the property acquired. In the event that additional real estate is required for the accomplishment of the construction, the Area/Resident Engineer should immediately notify the District Office and include the reasons and justifications therefore.

d. The Area/Resident Engineer shall seek consultation and guidance from the District on real estate problems encountered that they cannot answer.

e. Due to the sensitive nature of the land acquisition policy, all questions from landowners and/or the general public regarding overall project boundaries should be referred to the District Office or Real Estate Division.

f. Any vandalism or trespassing detected by the Area/Resident Engineer that constitutes violation of the Government's exclusive possession should be reported immediately to the District Office and Real Estate Division.

12-3. Disposal of Real Estate and Real Estate Components. The disposal of real estate and real estate components will be accomplished in accordance with applicable policies and procedures set out in ER 405-1-12, Chapter 11.

12-4. Granting Use of Acquired Real Estate to Others. Granting use of acquired real estate to others by lease, easement, license, or permit will be accomplished in accordance with applicable policies and procedures cited in ER 504-1-12, Chapter 8.

CHAPTER 13

ENVIRONMENT

13-1. General. This chapter is not meant to address HTRW remediation or removal, but rather to address general environmental issues associated with general construction.

a. The Area/Resident Engineer will be familiar with the methods of controlling contamination of air and water and furnish this information to contractors.

b. The Area/Resident Engineer should be especially watchful for any detrimental waste and pollutant spillage into streams within the project boundary and immediately report it to the District Office.

c. The Area/Resident Engineer should, at all times, be conscious of the effect that air and water pollution may have on the ecological balance of an area and insure that necessary corrective measures are taken.

d. Most contracts require the contractor to prepare an Environmental Protection Plan, which must be reviewed and accepted prior to the start of construction.

e. The Area/Resident Engineer should be aware of state/local NPDES and storm water management permit requirements, and make sure that all necessary permits are received prior to award of the construction contract as part of the BCOES process. Post award the Area/Resident Engineer is responsible to insure proper contract compliance with all permits.

13-2. Responsibility. It is the responsibility of the Area/Resident Engineer to see that contractors take the necessary precautions to protect the environment during construction operations. The Area/Resident Engineer will require compliance with the "Environment Protection," section of the contract specifications. The Area/Resident Engineer will discuss the section thoroughly during the Preconstruction Conference by covering the following items:

a. Protection of Land Resources. This will include a discussion on prevention and restoration of landscape defacement. The selection of the contractor's office and storage Area/Resident must be considered from an environmental protection viewpoint.

b. Protection of Water Resources. This should include some discussion on prevention of oil, chemical, and other spillage into streams and lakes and methods the contractor proposes to use in cut and fill operations to minimize erosion and the resulting stream siltation.

c. Dust and Noise Control. The contractor should be advised of the requirement for dust control within and without the project boundaries. The requirement for noise controls should be thoroughly discussed, if applicable.

d. Construction and Demolition debris tracking. Many military installations require tracking of construction and demolition (C&D) waste streams, to include amounts diverted from landfills through recycling and reuse efforts.

13-3. Sources of Pollution. All construction operations are potentially degrading to the environment unless adequate safeguards are instituted. It is incumbent upon the Area/Resident Engineer to become familiar with the kinds of pollution generated by construction operations inherent to their project and to institute safeguards that eliminate pollution, or control pollution, within tolerable and legal limits. The following list of common sources of pollution is provided for guidance:

a. Common sources of air pollution are:

(1) Dust created by quarry drilling and rock crushing operations.

(2) Dust created by clearing, grubbing, and stripping operations.

(3) Dust created by excavation and embankment operations.

(4) Dust created by cement and aggregate handling operations.

(5) Dust created by blasting operations.

(6) Dust created from haul roads.

(7) Dust created by sandblasting and application of gunite.

(8) Volatiles from bituminous mixtures.

(9) Smoke from heating units.

(10) Smoke from any type of burning.

(11) Smoke from asphalt plants.

(12) Fumes and sprays from paint applications.

(13) Fumes and sprays from application of herbicides and insecticides.

(14) Odors from sanitary facilities.

(15) Dust created by wind erosion.

(16) Hazardous materials as defined by RCRA or Title V air permits that occur due to construction activities. Examples could include unearthing and movement of buried pesticides or asbestos containing utilities.

b. Common sources of water pollution are:

(1) Wastes from floating plant.

(2) Drill cuttings and wastewater from drilling operations

(3) Aggregate washing.

(4) Cement and concrete spillage.

(5) Water curing.

(6) Waste water from lift cleanup and preparation.

(7) Spillage and waste of curing compounds.

(8) Waste from equipment cleanup and maintenance

(9) Fuel spillage.

(10) Crankcase drainage.

(11) Waste from sanitary facilities.

(12) Erosion.

c. Common sources of land pollution are:

(1) Spillage and waste.

(2) Temporary stockpiles and embankments.

(3) Haul roads.

(4) Clearing.

(5) Sanitary facilities.

(6) Excavations and embankments.

(7) Erosion.

(8) Crankcase draining.

(9) Hydraulic line/fitting failure.

d. Common sources of noise pollution are:

(1) Drilling operations.

(2) Machinery operations.

(3) Blasting operations.

13-4. Federal, State, Base, and Local Regulations. The Area/Resident Engineer should be familiar with all-applicable Federal, State, Base, and local regulations concerning pollution of rivers, streams, and air and should cooperate with other Government officials administering these regulations. The Area/Resident Engineer should cooperate with wildlife and fish management personnel so that they can take necessary steps and furnish guidance when a construction operation, such as dewatering a stilling basin or a river channel, might interfere or disturb fish or wildlife.

13-5. Staff Inspections. Representatives from the District, higher HQ, or other agencies may periodically conduct joint staff inspections of projects. The Area/Resident Engineer shall apprise the inspection party of environmental problems and recommend procedures for elimination of the problems on present and future contracts.

CHAPTER 14

DESIGN BUILD METHOD OF DELIVERY SYSTEM

14-1. General.

a. The design-build (D-B) method of delivery (MOD) system changes the dynamics of the project delivery process. Its primary advantages are single source of design and construction responsibility, leveraging industry innovation and collaboration between the designer and constructor, and concurrently designing and constructing (fast-tracking) the project. Conflicts, errors and omissions in the plans and specifications are no longer the responsibility of the Government. Disadvantages include a more complicated procurement process, the owner's lack of control over design solutions and the difficulty in fully defining requirements in performance terms. To have a successful D-B project we must learn to concentrate on accurately defining our requirements. This type of contract contain special provisions that pertain solely to Design-Build. A complete listing of these provisions is found in UAI 52.236-5000 thru 52.236-5010. The following paragraphs highlight the most important of these D-B provisions.

b. The plans and specifications are no longer contract documents, but rather a deliverable of the D-B contract, similar to shop drawings or O&M manuals. When determining the contract requirements and reviewing the design documents, the RFP and the contractor's proposal are indispensable. Everyone involved in the administration and review of the contractor's work must have a copy of each of these documents.

c. DESIGN-BUILD ORDER OF PRECEDENCE. This provision is included to define the formal contract as the solicitation in its entirety, along with the successful offeror's proposal and sets the order of precedence for these documents, as follows:

(1) Betterments: any portion of the accepted proposal that both conform to and exceed the provisions of the solicitation.

(2) The provisions of the solicitation.

(3) All other provisions of the accepted proposal.

(4) Any deliverable under the contract e.g. shop drawings and design documents.

d. Design responsibility.

(1) Designers Role. In any project delivery system the designer's role is to ensure the technical integrity of the project. These roles include the following:

(a) Produce plans and specifications from which the construction is accomplished.

(b) Review shop drawings to ensure they meet design requirements.

(c) Correct any errors or omissions that might arise during construction.

(d) Resolve field problems.

(e) Provide site inspections of ongoing work.

(2) Contractual Relationships.

(a) There are three main participants in any project delivery system: the owner/ agent, the designer, and the builder. In traditional design-bid-build (D-B-B) contracts, contractual relationships exist between the owner/agent and the designer, as well as a separate relationship between the owner/agent and the builder. The designer has no contractual relationship with the builder.

(b) Under D-B the project participants don't change but the contractual lines of authority do. The designer is no longer obligated to the owner/agent, but instead owes its obligation to the builder. One widely held misconception with D-B is that the designer controls the level of quality. In reality, when quality is a cost issue, the builder dictates the level of quality consistent with the RFP and the accepted proposal. The designer is obligated to make the design cost effective and to ensure technical integrity, which is identical to its role in D-B-B. The important concept to understand when managing a D-B contract is that USACE expects the same technical integrity responsibility placed on the contractor’s designer of record as we would if we procured an A-E under Brooks Act procedures.

(3) Paradigms to overcome.

(a) In D-B, the Government is responsible for the design criteria, not the design itself. The synergy between the designer, builder, and supplier is one of the greatest advantages of D-B.

(b) At first glance, it seems that by controlling the design, the D-B contractor can cut corners by designing a lower quality product than required. In reality, the quality level is articulated in the contractor's proposal and the RFP.

(c) Historic process has been to be prescriptive in providing requirements. However, technical performance, quality and function can be effectively specified and substantiated in performance specifications. If performance parameters are specified, then how these parameters are measured (substantiation) should be specified in the RFP. Performance requirements avoid the selection of materials or systems but leave the responsibility for those choices to the D-B contractor and its designer of record.

e. Increased Performance Risk. In most D-B contracts the prime contractor is the builder because of the associated risk and its ability to obtain bonding. Under this delivery system, the

D-B contractor is guaranteeing a price before design details are developed, therefore assuming more risk, especially with respect to errors and omissions in the design. Typically a D-B contractor may shift some of the risk to others, such as their design subcontractor, or to other subcontractors. It may have some of the major subcontractors provide the design for their portion of the work, thereby relieving some liability associated with design for that portion of the work.

14-2. Conferences.

a. Post Award Conference. In D-B-B, many of these items are discussed during the pre-construction conference, but in D-B construction may not start for some time. It is the COR's responsibility to coordinate this conference, with the primary goal being to initiate building the project execution team and lay the foundation for all other conferences. Items that should be discussed include:

(1) Authorities, Responsibilities and Expectations.

(a) USACE PCO, ACO and COR.

(b) Contractor personnel.

(2) Schedule.

(3) Payments.

(4) Changes.

(5) Submittal Management.

(6) Authority to Begin Construction.

(7) Design Quality Issues.

b. PARTNERING. The only difference between the objectives for D-B vs. D-B-B is that the contract execution now includes both design and construction. Partnering conferences are a voluntary process with costs typically shared between the Government and the contractor. UAI Clause 52.236-5009 provides additional information on this topic.

c. Initial Design Conference.

(1) The purpose of the initial design conference is to gather the necessary information to complete the design. The RFP sets the performance standards, and the contractor's accepted proposal sets the approach, but actual design, resulting in project plans and specifications, will

normally require discussions between the Designer of Record (DOR), the contractor and the user. The initial design conference requires the D-B contractor to visit the site and conduct extensive interviews, conduct problem solving discussions with the individual users and installation personnel to acquire all necessary site information, review user operations and discuss user needs. The contractor documents all decisions and the design will be finalized as a direct result of those meetings. Sometimes the initial design conferences are referred to as "program verification".

(2) The contractor explains its proposal to the owner/agent and the customer, performs a program verification, and provides a design needs list to the Government. Depending on the size, complexity, and other factors, more than one meeting may be required. This is the first chance the contractor has to get one-on-one feedback from the end user, concerning the design they are about to complete. Make sure the right people from each of the organizations capable of making decisions are present. It is of particular importance to include RFP development personnel in these discussions.

(3) Even though performance requirements and the contractor's approach have been formalized by the contract, there are many design decisions still to be made. No less quality is expected in the D-B designer's ability to meet the owner/agents needs than is expected under D-B-B. In order to assure these expectations are met the contractor needs the insight gained from this meeting to guarantee a complete understanding of all the nuances in the requirements.

(4) A universal goal of every project is to provide a high quality product that meets the customer's requirements within its budget constraints. Many design decisions have yet to be made, and in order to adequately complete the design, the DOR needs to know how the users intends to function and operate to gain a better perspective of the requirement. The knowledge acquired will allow the DOR to make discretionary decisions that improve the function and operation of the end product. The insights gained from this meeting can help the DOR make decisions that will result in a better end product.

(5) While it is not the intent of this meeting to materially alter the contract requirements or ask for changes, the best way to minimize the impact of changes is to identify them early. During the initial design conference the D-B contractor should be advised to notify the Government of any direction or interpretation that it believes are changes consistent with the notice requirement in the Changes clause. The Area/Resident Engineer must be alert to possible changes. Discussions from users that could lead to changes should be handled carefully. Make sure the contractor understands not to proceed on any items considered in excess of the minimum contract requirements absent a formal change order.

d. Design Reviews/Conferences.

(1) General. The contractor determines how to best plan and execute the design and review process for the project. As a minimum, we generally expect to see at least one interim

design submittal, at least one final design submittal before construction of a design package may proceed and at least one design complete submittal that documents the accepted design. The contractor may sub-divide the design into separate fast track packages for each stage of design and may proceed with construction of a package after the Government accepts the final design for that package. The KO should already have issued a NTP on the contract. The COR is responsible to determine if construction operations can begin. In addition to the technical design, the COR must insure the contractor has acceptable Safety, CQC, and Environmental Protection plans.

(2) Fast Tracking.

(a) To facilitate fast-track D-B activities the contractor may submit a site and utility design as the first design submittal. Following review, resolution, and incorporation of all Government comments, and submittal of a satisfactory set of site/utility design documents, and after completing all other pre-construction requirements, the COR should allow the contractor to proceed with site construction activities. No on-site construction activities should begin prior to written Government release for construction.

(b) Alternatively, the contractor may submit either a single interim design for review, representing a complete package with all design disciplines, or split the interim design into smaller, individual design packages as it deems necessary for fast-track construction purposes. The contractor submits its design and construction packaging plan to meet the contract completion period.

(c) To facilitate a streamlined design review process, the Government and the contractor may agree to utilize "over the shoulder" (OTS) reviews. Successful OTS reviews can occur remotely between team members, utilizing conference calls and emails, or more sophisticated conferencing methods such as interactive web-based meeting sites (e.g. WebEx, GoToMeetings.com, etc.). It is critical for the D-B contractor to manage these meetings, publish meeting minutes and distribute those minutes to all the participants prior to the following meeting. This enables the team to track down the people and the answers necessary for the design to move forward.

(3) Design Configuration Management (DCM). The contractor should develop and maintain effective design configuration management (DCM) procedures to control and track all revisions to the design documents, as well as manage fast tracking documents that have been released for construction while other design is still under development. During the design process, this will facilitate and help streamline the design and review schedule. After the final design is accepted, this process provides control of and documents revisions to the accepted design.

(4) Design and Code Checklists. The contractor should develop and complete various discipline-specific checklists to be used during the design and quality control of each submittal.

These completed checklists should be submitted with each design submittal, as applicable, as part of the project documentation.

(5) Interim Design Requirements.

(a) Interim design deliverables generally include drawings, specifications, and design analysis for the portion of design that the contractor considers ready for review. Drawings should include comments from any previous design conferences incorporated into the documents to provide an interim design for the portion of the design submitted. The DOR should prepare and present design analyses with calculations necessary to substantiate and support all design documents submitted.

(b) When required by the contract, all project documentation related to LEED should conform to USGBC requirements for both content and format, separate from other design analyses. The contractor should maintain and update the LEED Project Checklist throughout project progress. Use of the LEED Letter Templates is recommended. The DOR should prepare and present LEED documentation with calculations and other data necessary to substantiate and support all design documents submitted.

(c) The contract may allow specifications from any of the master guide specification sources such as MASTERSPEC from the American Institute of Architects, SPECTEXT from Construction Specification Institute or Unified Facility Guide Specifications (UFGS), etc. (including specifications from these sources). The D-B contractor’s DOR edits the appropriate specifications to insure that all project design requirements, codes and standards are met.

(6) Interim Design Reviews and Conferences. At least one interim design submittal, review and review conference should be required for each design package. The contractor may include additional interim design conferences or OTS reviews, as needed, to assure continued Government concurrence with the design work. The interim submittal review periods and conferences should be included as separate activities in the project schedule and should indicate what part of the design work is at what percentage of completion. The Government review will be for conformance with the technical requirements of the solicitation and the contractor's accepted proposal. This is not the time to establish new requirements via the review process. If the contractor disagrees with any Government comment and does not intend to comply with the comment, it must clearly outline, with ample justification, the reasons for noncompliance in order that the comment can be resolved. The contractor should be cautioned that if it believes the action required by any comment exceeds the requirements of this contract, it should take no action and notify the COR in writing immediately.

(7) Conference Documentation. The contractor should identify, track resolution of and maintain all comments and action items generated during the design process and make this

available to the designers and reviewers prior to the Interim and subsequent design reviews. The D-B contractor should prepare the meeting minutes and enter final resolution of all comments into the DrChecks system.

(8) Design Complete Submission. After the final design submission and review conference for a design package, the contractor should revise the design package to incorporate the comments generated and resolved in the final review conferences, perform and document a back-check review and submit the final, design complete documents, which will represent released for construction documents.

e. Pre-Construction Conference. The Pre-Construction conference is typically specified as a Special Contract Requirement. D-B pre-construction conference requirements do not typically vary from those found in D-B-B contracts. The purpose of this meeting in D-B is to discuss site and construction issues. The meeting should concentrate on such items as Safety, Labor Compliance, subcontracting goals, temporary power, construction quality control, construction submittal procedures, base permits, site logistics, etc.

14-3. Schedule Management.

a. General. Schedule management for a D-B project is similar in many ways to that of a D-B-B project. However, there is one major difference between the schedules for these two different delivery systems. Obviously, the D-B project schedule must include design, design review, and any permit activities in addition to construction activities.

b. Preliminary Schedule. The D-B preliminary schedule should include detailed design and permitting activities, including identification of individual design packages, design submissions, reviews and conferences. It should also include permit submissions and any required Government actions and long lead item acquisition prior to design completion. The preliminary schedule should include activities for the entire construction effort with as much detail as is known at the time of submission. As a minimum it should include all construction start and completion milestones and detailed construction activities through some sort of "dry-in" milestone for building construction.

c. Initial Schedule and Updates. The initial schedule should include all planned design and construction activities as the contractor understands them even before the design package(s) is fully developed. As the design proceeds, the monthly schedule updates can address any adjustments the contractor needs to make to the schedule. If necessary, the schedule can be revised, and should be reviewed by the Government for acceptance. Construction activities must be constrained by Government acceptance of the associated designs. When the design is complete, the contractor incorporates all remaining detailed construction activities.

d. Sequence of Design-Construction.

(1) USACE has developed two different approaches to address the sequencing of construction with respect to design development.

(a) One approach requires a complete design before the initiation of any construction.

(b) The alternative approach allows construction start before the entire design is complete (fast-tracking). With fast tracking, the D-B contractor incrementally completes and submits portions of the design for Government conformance reviews. Once the Government completes its review and all comments are resolved, the ACO/COR will release that design package for construction. Thus, in fast track D-B, design and construction proceed concurrently.

(2) When fast tracking is allowed, each fast-track package should be examined for a proper sequencing of activities within the fast-track package and in relation to other fast-track packages contemplated. This sequence should begin with design interviews and program verification. It includes the initial design conference and any other meetings necessary for the designer to begin work. Next, the designer should take the data and develop plans and specifications for that feature of the work and submit them to the Government for review (or the Government may conduct over the shoulder reviews). If a subcontractor and/or vendor selection process is applicable, it should be included in the schedule. The next step in the sequence is the shop drawing preparation, submittal and review process. The contractor must schedule the entire process and include the appropriate activities in the project schedule.

14-4. Quality Management.

a. General. The D-B delivery system integrates the design and construction processes. Quality management of the design and construction processes, therefore, must also be integrated. The quality standard on D-B projects must be established at the beginning of the process during requirements definition and are incorporated into the Request for Proposal. There are two major concepts which are imperative to the quality of a D-B project:

(1) Quality begins with accurate requirements definition and development of the RFP, continues through design development and construction.

(2) Quality is measured by the performance of the end product, not just strict compliance with prescriptive plans and specifications.

b. CQC.

(1) CQC Plan. Because the contractor is responsible for technical integrity of the design, workmanship, material selection and all other aspects leading to the successful performance of

the end product, the CQC Plan must be comprehensive. The interactions, contractual relationships, responsibilities and authorities of the DOR, consultants, suppliers, subcontractors, fabricators, commissioning agents, etc., are among items which must be addressed. The RFP should address these items, and how they will be submitted and documented, to ensure the CQC Plan is a contractual requirement.

(2) Design Quality. The contractor must integrate a Design Quality Control Plan into the overall CQC Plan, implemented by a Design Quality Control Manager. Plans for tracking and managing design deficiencies must be addressed. Design should not initiate until submission and acceptance of the CQC Plan by the Government. The Design Quality Control Manager is typically required to be a registered architect or professional engineer.

(3) Commercial codes. References in the contract to the International Code Council (ICC) and inspections by the "Building Official" are interpreted to mean inspections by the CQC staff and must be included in the plan.

(4) Independent Technical Reviews (ITR). The contractor may be required to perform independent technical reviews (ITR) of its design by professionals other than those preparing the design. Discipline specific checklists are completed and submitted with each design phase.

(5) Coordination Meeting. A coordination meeting is conducted after receipt of the plan and before acceptance and initiation of design or construction.

(6) Construction CQC. The three phase CQC process is similar to the D-B-B delivery system. Compliance with performance specifications may be checked and verified (substantiated) by calculations, physical observations, and testing based on specified criteria.

a. Quality Assurance (QA).

(1) The Area/Resident Engineer must prepare a QA Plan that documents its performance responsibilities that all quality requirements of the contract are met, which now includes insuring the contractor performs CQC of the design process. Many of the tools used to ensure contract compliance have been used extensively in construction quality assurance and are familiar to Government QA personnel. The addition of design activity QA to the process introduces the need for additional management tools and processes. Since the RFP is typically prepared by other design professionals, these preparers should be included in the QA planning for design review for conformance to the RFP. Meetings are held during the design phase to monitor design progress, resolve design related issues and to insure the customer' requirements are met.

(2) The contract administration office is responsible for managing the process and must stay organized and in control of the drawing/document control process to ensure all parties are working off the same version or revision.

(3) There are two general areas in which the challenge for Government QA personnel is greater in this delivery system.

(a) They must be knowledgeable of referenced codes and standards rather than just UFGS technical provisions.

(b) They must realize that contractor prepared plans and specifications may change during the project without a modification to the contract, provided compliance with the RFP and accepted proposal is maintained.

(4) Both CQC and Government QA personnel must have ready access to the appropriate codes and standards. When CQC or QA representatives identify a potential problem with the work on-site, they must refer to the appropriate source document which could include the plans, specifications, RFP or accepted proposal, to determine which code or standard applies to the particular issue. Then the proper document must be located and read before a determination can be made on the initial problem. This process can become quite lengthy. QA and CQC personnel must be trained in the use and interpretation of the appropriate building codes and standards.

d. DEVIATING FROM THE ACCEPTED DESIGN. With D-B projects, the contract is the RFP and the contractor's accepted proposal. The plans and specifications are deliverables under the contract and can change during the project, as long as they still meet the RFP and proposal. This provision provides the contractually required process for revisions to plans. This can be a difficult concept to grasp, but it must be understood to successfully administer a D-B contract. Refer to UAI 52.236-5006 for further information on this topic.

14-5. Submittals.

a. General. All design and construction submittals are tracked in the submittal register, coded, and comments made and returned if applicable. Design submittals should be scheduled in the submittal register with submittal numbers. Another variation with these design submittals is that actual comments are not normally found in the RMS database, but rather in DrChecks.

b. Design Submittals. Design submittals are generated by the DOR and based on its interpretation of the contract requirements.

(1) Classified as: CR - Government Conformance Review of Design. The Government reviews all intermediate and final design submittals for conformance with the technical requirements of the solicitation. Contract section titled "Design After Award" covers the design submittal and review process in detail. Review is only for conformance with the applicable codes, standards and contract requirements. Generally, design submittals should be identified as Design Data submittals. All reviewers need to have copies of the RFP and the accepted proposal to compare the design submissions against.

(2) RFP Developer Review. An important key to a successful D-B project is to have those individuals who prepared the RFP and reviewed the contractor's proposal review the contractor's design for conformance. This means the Area/Resident Engineer must maintain a good working relationship with its Engineering Division. Design engineers should have a greater familiarity with the RFP requirements and code issues. Engineering should verify, within reason, that things such as the proper lighting levels are being used, cooling loads given in the RFP are being met, etc.

(3) Customer Review. Customer coordination is very important at this stage for they are the final word on whether the design meets their needs. With the D-B delivery system, the Area/Resident Office has the responsibility to manage this process and consolidate comments.

(4) Design Plans and Specifications.

c. Unless otherwise specified, the design detail in D-B will generally not be at the same level normally expected in a D-B-B project.

d. In the D-B-B delivery system, the Government typically specifies its requirements to maximize competition among multiple product manufacturers. The D-B contractor, however, can collaborate with suppliers, fabricators, and subcontractors and vendors to make the design cost effective while at the same time ensuring it meets the contract performance requirements. The D-B contractor may solicit proposals based upon performance requirements and/or limited design, or specific manufacturers, and use input to make the design more cost effective. The DOR can then decide if the suggestions can be incorporated, and is still responsible for the overall design integrity.

(1) Design Reviews:

(a) Design reviews will be for general conformity with the design performance criteria and any prescriptive requirements. The design reviews should not be duplicative of the DOR responsibilities and as such should not include checking all design calculations, but focus on QA of the design.

(b) Technical reviews will essentially be conducted to insure code compliance and technical compliance with the solicitation and accepted proposal. Technical reviews of contractor’s designs may include mandatory reviews by Technical Centers of Expertise (CX) and Centers of Standardization (CoS) when required by policy.

(c) USACE is ultimately responsible to its customers for project success; therefore an appropriate balance must be achieved between the level of effort and the cost to the project to perform post-award design reviews and the benefits received. The goal is to balance the costs incurred and the risks avoided by performing effective and efficient quality design reviews to accomplish USACE’s responsibility as the design and construction agent to ensure technically

adequate, quality facilities are acquired consistent with our fiduciary responsibility. USACE will determine the minimum level of effort (and anticipated funding requirements for an appropriate allocation of DDC) which must be included in the PMP well in advance of contract award. ER 37-1-30, Financial Administration Accounting and Reporting provide guidance on USACE funding guidelines in funding post award efforts, including funding of design reviews.

e. Construction Submittals. Construction submittals are prepared by suppliers, subcontractors, vendors and fabricators.

(1) Classified as:

(a) DA – DOR Approved. The DOR approval is required for extensions of design, critical materials, any deviations from the solicitation, the accepted proposal, or the completed design, equipment whose compatibility with the entire system must be checked, and other items as designated by the KO. The contractor submits a copy of the approved submittal to the Government.

- The Government may, but not required to, review DOR approved submittals for conformance to the RFP, the accepted proposal and the completed design.

- Except for submittals designated as deviating from the RFP, the accepted proposal or completed design, the contractor may proceed with acquisition and installation upon approval by the DOR.

- For those submittals proposing deviations from the accepted design and in compliance with the RFP and accepted proposal, the DOR must approve and the Government must concur before the contractor is authorized to proceed with material acquisition or installation.

- The Government may non-concur with any deviation to the design reflected in construction submittals, which may impact furniture, furnishings, equipment selections or operations decisions that were made, based on previously reviewed and concurred designs.

- Unless prohibited or provided for otherwise elsewhere in the contract, where the accepted contract proposal named products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification, and the contractor desires to substitute manufacturer or model after award, the contractor must submit a requested substitution for Government concurrence. The submittal must include substantiation, identifying information, and the DOR's approval, as meeting the contract requirements and that it is equal in function, performance, quality and salient features to that in the accepted contract proposal.

(b) GA - Government Approved. Approval is required for any deviations from the RFP or accepted proposal, which may constitute a change to the contract terms, or any item specifically

designated as requiring Government approval in the solicitation, particularly any prescriptive requirement.

(c) FIO - For Information Only. All submittals not requiring DOR or Government approval will be for information only.

(2) After award and some level of design development, the subcontractors and suppliers produce shop drawings, catalogue cuts, calculations, and other technical submittals that are reviewed by the DOR and the contractor, and submitted to the Government after approval. The Government must perform a risk analysis to determine what component, subsystem and system designs it must review to assure the contractor maintains technical integrity of the design.

14-6. Changes.

a. General Categories of Modifications.

(1) Errors and omissions in the request for proposal may cause changes to the contract. If the Government fails to include a requirement in the RFP, the only way to make the requirement a part of the contract is through a contract modification.

(2) User Requested Changes. The user does not see the complete design until after contract award, and sometimes realizes that their use of the facility could be enhanced by a change. These should be handled as discretionary changes.

(3) Differing Site Conditions. The Government must provide enough information e.g. topographic information, hazardous materials, geotechnical information, and utility information in the solicitation to allow offerors to prepare and price the proposal. If actual conditions are materially different than indicated in the RFP, a modification may be required.

(4) Value Engineering. Although its scope and use is more limited, the concept of value engineering applies to D-B projects and may be a source of changes. Value engineering may be applied to prescriptive portions of the contract.

(5) Variations in Estimated Quantities. Unit priced items may be included in the price schedule. In the event any unit priced item quantities are overstated or understated, the Government and/or the contractor should use FAR Clause 52-211-18, VARIATION IN ESTIMATED QUANTITY, as the basis for any entitlement.

(6) FAR Clause 52.242-14, SUSPENSION OF WORK. The contractor may seek entitlement for express or constructive suspensions of work by the Government.

(7) Technical Direction. Another common source of changes is constructive changes arising from technical direction to the contractor in the form of design review comments,

customer input etc. It is also the most dangerous source because often the direction is given without the Government knowing all the impacts of the change. The contractor must notify the Government pursuant to the Changes clause if it considers any direction provided by the Government to constitute a change to allow the government the opportunity to change its direction to mitigate cost.

b. Pricing Changes. Because of the performance based nature of D-B, pricing changes can prove challenging.

(1) Contract interpretation can be a point of contention in deciding if a contract modification is even required. The RFP, accepted proposal, referenced standards, codes and other criteria must be examined and evaluated to determine the objective intent of the basic contract. Before the Government comes to a conclusion respecting the proper interpretation of the basic contract, a significant amount of research is required. The A-E that developed the original RFP should be consulted as well as the Source Selection Documentation and any pre-award documentation between the Government and the offerors.

(2) Pricing prior to design development. Neither the Government nor the D-B contractor may be able to develop a detailed cost estimate or proposal until the change is designed, and the Government may not wish to pay for the design until the change is settled.

(a) One solution to this dilemma is to use two modifications or a two part change order. The first change order or the part 1 of a two part change is for a detailed design. The contractor can estimate the design cost well enough to submit a proposal, and the Government should be able to determine the reasonableness of the proposal and negotiate a price for design. After the change is designed, both parties will have enough information to develop construction cost estimates, negotiate a construction price and settle the second modification or the part 2 of a 2 part change. This process protects both parties and allows for the development of enough information to more accurately price the change order work.

(b) Another method is to define the change in performance terms and perform a parametric estimate for the construction and a more detailed estimate for the design, similar to what was done by both parties prior to contract award. This method may eventually be more costly because of the unknowns and risk transfer to the contractor; however, the benefit to the Government is the cost and risk is fixed early in the process. It should be recognized that the contractor typically includes design and construction contingencies in the basic contract to cover unknowns. Therefore this method of pricing a change may also require the inclusion of contingencies. This method may be more advantageous to the Government in volatile market conditions where future material and labor costs are unknown.

(c) Deductive modifications. It is difficult for the contractor and Government to agree on the value of work removed from a project which has not yet been designed. Generally, the

Government would like to delete the design effort as well as the construction to realize the maximum savings. Sometimes, however, this is not practical. If the two parties cannot agree on a price, it may be best to have the contractor continue with the design and then develop estimates based on that design. The Government does not realize a design cost savings, but it may be worth it to obtain an accurately priced settlement based on a detailed estimate.

14-7. Other D-B Issues.

a. Designer performance. Designer performance problems can create schedule delays in the same manner as construction contractor performance problems. Late submission of design documents, incomplete design submittals, and disorganized submittal packages can all make it difficult to meet project timelines. Contract clauses allow the KO to hold up to 10 percent of the contractor's monthly pay request if insufficient progress is made. In addition, no payment for materials incorporated in the work will be made if all required DOR or required Government approvals have not been obtained. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the RFP or accepted proposal.

b. Progress payments. Payments are made based on progress against the cost-loaded project schedule. In D-B projects, cost loaded design activities must be assessed and progressed just like the construction activities. Construction personnel are sometimes not familiar with how to assess the percentage complete of design activities and may require the assistance of district engineering personnel who may be more experienced. Cost loaded activities should be included in the schedule for DOR activities that are required during the construction phase of the project as well.

c. Environmental issues. Many times environmental compliance (NEPA, NPDES, etc.) is a shared responsibility between the owner, the designer and the contractor, and outside federal, state and local Government agencies control the review of permit applications and permit issuance. Care must be taken to investigate the necessary permits required during the RFP development stage, and then again during design development and construction to insure compliance.

d. Contract substantiation and acceptance. When the contract requires compliance with performance specifications, there must be some form of testing or substantiation to ensure the project performs as required. The contract must specify objective performance requirements, and substantiation procedures. Other forms of substantiation may include engineering calculations, visual observations, manufacturer's certifications, and manufacturer's warranties.

e. Contract close-out. D-B project closeout is similar in many respects to the processes used in the D-B-B delivery system, however, there are some unique aspects. The D-B contractor's DOR is responsible to approve any deviation to its design. Such deviations should

of course be included on the as-build documentation. LEED requirements necessitate the DOR participate in the LEED documentation requirements.

f. Continuing rights to the design. Pursuant to DFARS Clause 252.227-7022, Government Rights (Unlimited), the Government has unlimited rights in the design developed in the performance of the contract, including the right to use the design on any other project without additional compensation to the contractor. The contractor in effect grants to the Government a paid-up license throughout the world.

g. Design and Construction Warranties.

(1) Responsibility of the Contractor for Design. The contractor is responsible for a professional quality design and is responsible to correct its errors and omissions. The standard of care for the design services is expected to be consistent with the skill ordinarily used by members of the A-E or engineering professions practicing under similar conditions. However, if the contract requires the achievement of a particular performance requirement, that requirement must still be met irrespective of the standard of care in the industry. Refer to UAI Clause 52.236-5004 for additional information.

(2) Warranty of Design. The contractor warrants the design. The warranty period commences upon the Government's acceptance of the work and is effective through the Statue of Limitations and Statute of Repose as applicable to the state which the project is located. This will be longer than the typical one year warranty for a design-bid-build project. Refer to UAI Clause 52.236-5004 for additional information.

Statute of Repose: Statutes of repose bar actions against architects and engineers after a specified period of time following the completion of services or the substantial completion of construction.

Statute of Limitations: Statutes of limitations bar actions against architects and engineers after a specified period of time following an injury or discovery of a deficiency.

h. Seamless contract administration. For D-B to work properly, design and construction cannot be considered to be separate entities and activities. There should be one project schedule which integrates both design and construction and one NTP. There is one budget, and after award the D-B contractor's price is cost loaded into an integrated design and construction schedule. There is one contract, one contractor to perform design and construction, and the one contract must be administered by one contract administrator. Contract administration should be performed by the construction function (Area and Resident Engineers) for the entire contract.

FOR THE COMMANDER:

2 Appendices
Appendix A References/Links
Appendix B Acronyms

D. PETER HELMLINGER
COL, EN
Chief of Staff

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APPENDIX A

References/Links

FAR Federal Acquisition Regulation
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http://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html

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ER 37-3-22, Carryover Supervision and Administration,
http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER_37-3-22.pdf

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ER 415-1-10, Contractor Submittal Procedures
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ER 415-1-15 Construction - Construction Time Extensions for Weather
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ER 415-1-16, Fiscal Management,
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APPENDIX B

Acronyms

AAA	Army Audit Agency
AASHTO	American Association of State Highway and Transportation Officials
ACASS	Architect-Engineer Contract Administration Support System
ACE-IT	Army Corps of Engineers Information Technology
ACO	Administrative Contracting Officer
A-E	Architect Engineer
AE	Area Engineer
AFARS	Army FAR Supplement
ANSI	American National Standards Institute
AO	Area Office, Assessing Official
ARIMS	Army Records Information Management System
ASTM	American Society for Testing and Materials
BCE	Base Civil Engineer
BCOES	Biddability, Constructability, Operability, Environmental and Sustainability
BOD	Beneficial Occupancy Date
CADD	Computer Aided Drafting and Design
CCASS	Construction Contractor Appraisal Support System
CCD	Contract Completion Date
CEFMS	Corps of Engineers Financial Management System
COR	Contracting Officer's Representative
CORM	Contracting Officer's Representative Module
CORMS	Contracting Officer's Representative Management System
CPAC	Civilian Personnel Advisory Center
CPARS	Contractor Performance Assessment Reporting System
CPM	Critical Path Method
CQC	Contractor Quality Control
CQCR	Contractor's Quality Control Report
CWE	Current Working Estimate
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
D-B	Design-Build
D-B-B	Design-Bid-Build
DCAA	Defense Contracting Audit Agency
DDC	Design During Construction
DFARS	Department of Defense FAR Supplement
DoC	Directorate of Contracting
DOR	Designer of Record
DPAS	Defense Priorities and Allocation Systems

DPM	Deputy for Programs and Project Management
DPW	Directorate of Public Works
ECB	Engineering and Construction Bulletin
EDRMS	Electronic Documents Record Management System
EFARS	Engineers FAR Supplement
EP	Engineering Pamphlet
EPA	Environmental Protection Agency
ER	Engineering Regulation
FAR	Federal Acquisition Regulation
FOIA	Freedom of Information Act
FOUO	For Official Use Only
FP	Focal Point
GAO	General Accounting Office
GDA	Government Designated Authority
GPC	Government Purchase Card
GTCC	Government Travel Credit Card
GSA	General Services Administration
HTRW	Hazardous, Toxic, Radiological Waste
HQUSACE	Headquarters, U.S. Army Corps of Engineers
HVAC	Heating, Ventilating and Air Conditioning
IDP	Individual Development Plan
IFB	Invitation for Bid
ITR	Independent Technical Review
JOC	Job Order Contracting
KO	Contracting Officer
NAS	Network Analysis Schedule
NAVFAC	Naval Facilities Engineers
NFPA	National Fire Protection Association
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OPORD	Operations Order
OSHA	Occupational Safety and Health Administration
OTS	Over-the-Shoulder
P&D	Planning and Design
PA	Programmed Amount
PAN	Preliminary Accident Notification
PARC	Principle Assistant Responsible for Contracting
PCF	Paperless Contract File
PCS	Permanent Change of Station
PDT	Project Delivery Team
PD2	Procurement Desktop Defense
PIL	Procurement Instruction Letter
PM	Project Manager

PMP	Project Management Plan
PNM	Price Negotiation Memorandum
PPIRS	Past Performance Information Retrieval System
PPMD	Programs and Project Management Division
PR&C	Purchase Request and Commitment
QA	Quality Assurance
QAR	Quality Assurance Report
QCR	Quality Control Report
QCS	Quality Control System
QMS	Quality Management System
RE	Resident Engineer
RFP	Request for Proposal
RMS	Resident Management System
RO	Resident Office
S&A	Supervision and Administration
SBA	Small Business Administration
SHARP	Sexual Harassment / Assault Response & Prevention
SOF	Summary of Findings
SOP	Standard Operating Procedure
SPS	Standard Procurement System
SRM	Sustainment, Restoration and Modernization
TAPES	Total Army Performance Evaluation System
TDY	Temporary Duty
UAI	USACE Acquisition Instructions
UCA	Undefinitized Contract Action
UCO	Unpriced Change Order
UFC	Unified Facilities Criteria
USACE	U.S. Army Corps of Engineers
VCE	Virtual Contracting Enterprise
VECP	Value Engineering Change Proposal
WBDG	Whole Building Design Guide

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