

CEMP-CI

Pamphlet  
No. 420-1-1

31 January 1992

Construction  
**INSTALLATION SUPPORT HANDBOOK**

TABLE OF CONTENTS

	Paragraph	Page
<u>CHAPTER 1 - INTRODUCTION</u>		
Purpose.....	1-1	1-1
Applicability.....	1-2	1-1
References.....	1-3	1-2
Use of This Pamphlet and How to Obtain Services.....	1-4	1-2
USACE Major Subordinate Command and District Boundaries.....	1-5	1-3
District Organizational Structure.....	1-6	1-3
Installation Support Organizational Structure.....	1-7	1-5
<u>CHAPTER 2 - GENERAL PROGRAM OVERVIEW</u>		
Execution Sources/Options.....	2-1	2-1
Execution Methods.....	2-2	2-2
Communications.....	2-3	2-3
<u>CHAPTER 3 - PLANNING AND PROGRAMMING SUPPORT SERVICES</u>		
Types of Services.....	3-1	3-1
Regulatory and Statutory Guidelines.....	3-2	3-4
Who Provides These Services.....	3-3	3-5
How to Obtain These Services.....	3-4	3-5
Typical Funding and Time to Accomplish the Service.....	3-5	3-5
Examples of Planning and Programming Services.....	3-6	3-6
<u>CHAPTER 4 - ENVIRONMENTAL SUPPORT SERVICES</u>		
Types of Services.....	4-1	4-1
Regulatory and Statutory Guidelines.....	4-2	4-5
Who Provides These Services.....	4-3	4-5
How to Obtain These Services.....	4-4	4-6
Typical Funding and Time to Accomplish the Service.....	4-5	4-6
Examples of Environmental Services.....	4-6	4-7

---

This Engineer Pamphlet EP 420-1-1, 31 January 1992, with Appendix - USACE Activities Directory, May 1994, supersedes Engineer Pamphlet EP 420-1-1, 31 January 1992, with Appendix J - USACE Activities Directory, October 1991.

TABLE OF CONTENTS (Continued)

	Paragraph	Page
<u>CHAPTER 5 - REAL ESTATE SUPPORT SERVICES</u>		
Types of Services.....	5-1	5-1
Regulatory and Statutory Guidelines.....	5-2	5-3
Who Provides These Services.....	5-3	5-4
How to Obtain These Services.....	5-4	5-4
Typical Funding and Time to Accomplish the Service.....	5-5	5-4
Examples of Real Estate Support Services.....	5-6	5-5
<u>CHAPTER 6 - ARCHITECT-ENGINEER SUPPORT SERVICES</u>		
Types of Services.....	6-1	6-1
Regulatory and Statutory Guidelines.....	6-2	6-5
Who Provides These Services.....	6-3	6-6
How to Obtain These Services.....	6-4	6-6
Typical Funding and Time to Accomplish the Service.....	6-5	6-7
Examples of Architect-Engineer Support Services.....	6-6	6-7
<u>CHAPTER 7 - ENGINEERING SUPPORT SERVICES</u>		
Types of Services.....	7-1	7-1
Regulatory and Statutory Guidelines.....	7-2	7-6
Who Provides These Services.....	7-3	7-7
How to Obtain These Services.....	7-4	7-7
Typical Funding and Time to Accomplish the Service.....	7-5	7-7
Examples of Engineering Support Services.....	7-6	7-10
<u>CHAPTER 8 - CONSTRUCTION MANAGEMENT SUPPORT SERVICES</u>		
Types of Services.....	8-1	8-1
Regulatory and Statutory Guidelines.....	8-2	8-5
Who Provides These Services.....	8-3	8-5
How to Obtain These Services.....	8-4	8-5
Typical Funding and Time to Accomplish the Service.....	8-5	8-6
Examples of Construction Management Services.....	8-6	8-9
<u>CHAPTER 9 - SPECIAL SUPPORT SERVICES</u>		
Contracting.....	9-1	9-1
Legal.....	9-2	9-6
Public Affairs.....	9-3	9-6
Safety and Occupational Health.....	9-4	9-9
Training.....	9-5	9-12
Information Management Services.....	9-6	9-13

TABLE OF CONTENTS (Continued)

	Paragraph	Page
<u>CHAPTER 10 - LOCAL USACE MSC SUPPLEMENT</u>		
( For future insertion by local MSC office )		10-1
<u>CHAPTER 11 - LOCAL USACE DISTRICT SUPPLEMENT</u>		
( For future insertion by local district office )		11-1
<u>CHAPTER 12 - INSTALLATION SUPPORT NEWSLETTERS</u>		
( For future insertion of newsletters )		12-1
<u>APPENDICES :</u>		
A. References.....	A-1	
B. Glossary - Definition of Terms.....	B-1	
C. Information Management Systems.....	C-1	
D. Major Program Definitions.....	D-1	
E. Financial Management.....	E-1	
F. Centers of Expertise and Laboratories.....	F-1	
G. Air Force Project Management Guidelines.....	G-1	
H. Forms for Installation Support Management.....	H-1	
I. DOD Directive 4000.1.1, Installation Management....	I-1	
J. USACE Activities - USACE Subordinate Command Directory and Geographic Boundaries.....	J-1	
K. AR 420-10, Facilities Engineering, Management of Installation Directorates of Engineering and Housing.....	K-1	

**FOREWORD**

This pamphlet provides information for U.S. Army Corps of Engineers (USACE) field personnel to assist in organizing and operating a typical Installation Support Program. The pamphlet also serves as a handbook for Army Directorates of Engineering and Housing (DEH) and Air Force Base Civil Engineers (BCE) by providing an overview of typical support services available at their local Corps District, explanations on how to obtain them, and time and cost associated with such services. This pamphlet is issued in various chapters to provide a living reference document in looseleaf format, so that particular portions can be updated at frequent intervals. Also, in this format, the Installation Support Handbook can be easily supplemented by USACE Subordinate Command implementing procedures with direct reference to the applicable sections of this pamphlet. Inquiries concerning the Installation Support Handbook should be addressed to HQUSACE, Attn: CEMP-CI, Construction Division, Installation Support Branch, Washington, D.C. 20314-1000.



H. J. HATCH  
Lieutenant General, USA  
Chief of Engineers

## CHAPTER 1

### INTRODUCTION

#### 1-1. Purpose.

The purpose of this pamphlet is to provide U.S. Army Corps of Engineer, Army Directorate of Engineering and Housing (DEH), and Air Force Base Civil Engineer (BCE) personnel with information that will assist them in providing or receiving installation support services. It describes the interface between the installation and USACE activities, and more importantly, the handbook helps installation managers supplement their capabilities by making the complete range of talents, skills and services of USACE easily accessible through the Installation Support Program. This pamphlet is a guide and does not supersede any regulations or contract requirements, or abridge command authority or responsibility.

#### 1-2. Applicability.

This pamphlet applies to HQUSACE/OCE elements, major subordinate commands, districts, laboratories, and field operating activities. The level of expertise or extent to which a service will be accomplished by the local USACE District may vary. However, the networking system and ability to share resources and expertise throughout USACE allows access to any of these support services through the local district Installation Support coordinator.

a. A key management objective is to make it easy for an installation to access the many services available from the district. A district not only offers support in a wide variety of engineering disciplines, but also in construction management, real estate, and numerous other disciplines and support areas.

b. The chapters within this pamphlet have detailed explanations of available support services, to include information on typical costs, schedules and policy guidelines pertaining to each service. Sample request forms are included as examples of how an installation obtains support.

**1-3. References.** The references and regulatory publications which govern the Installation Support Program are categorized and included within this pamphlet in two groups: required references and related references. Required references are those included in each chapter; they are mandatory readings to understand the service being described. Related references are included in Appendix A and are recommended readings which will further enhance the reader's knowledge and provide a full understanding of the subject matter.

**1-4. Use of This Pamphlet and How to Obtain Services.**

a. This pamphlet is organized for easy reference. The first chapter gives basic information about USACE, Division/ District boundaries, points of contact, the organizational structure of a typical district, and the Installation Support organizational structure.

b. The second chapter of the pamphlet is a general overview of the Installation Support Program and how a typical district operates the program. Optional ways of getting projects accomplished are presented. It also describes some of the many ways to keep installations informed as to the progress of their work.

c. The third through the ninth chapters are the centerpiece of the pamphlet. These chapters describe the various support services, who provides these services, work request forms to initiate a support request, when to request the service, how long it takes to provide the service, and, perhaps most importantly, how much the service costs and what funding sources/alternatives are available.

d. The pamphlet concludes with a series of appendices that will help an installation understand USACE capabilities, obtain support from a USACE activity, and provide feedback to districts on their performance. Key terms relating to installation support are contained in Appendix B. Information management systems are described in Appendix C. Major programs encountered by the installation are at Appendix D. Financial management requirements and relationships are in Appendix E. USACE centers of expertise and laboratories, and their assigned mission areas, are listed and defined in Appendix F. Guidelines for supporting U. S. Air Force projects are in Appendix G. Guidance on how to obtain USACE support and provide feedback to a district on their performance is contained in Appendix H. Overall installation management philosophy is summarized in DoD Directive 4000.1.1, which appears in Appendix I.

e. Update procedure. Comments and suggestions regarding improvements to this manual are welcomed at any time. Normally, the pamphlet will be updated every two years, with revised pages being prepared more often when needed. Districts and installations will be provided with copies of all revised pages and will be offered the opportunity to make comments when revisions are accomplished.

**1-5. USACE Major Subordinate Command and District Boundaries.**

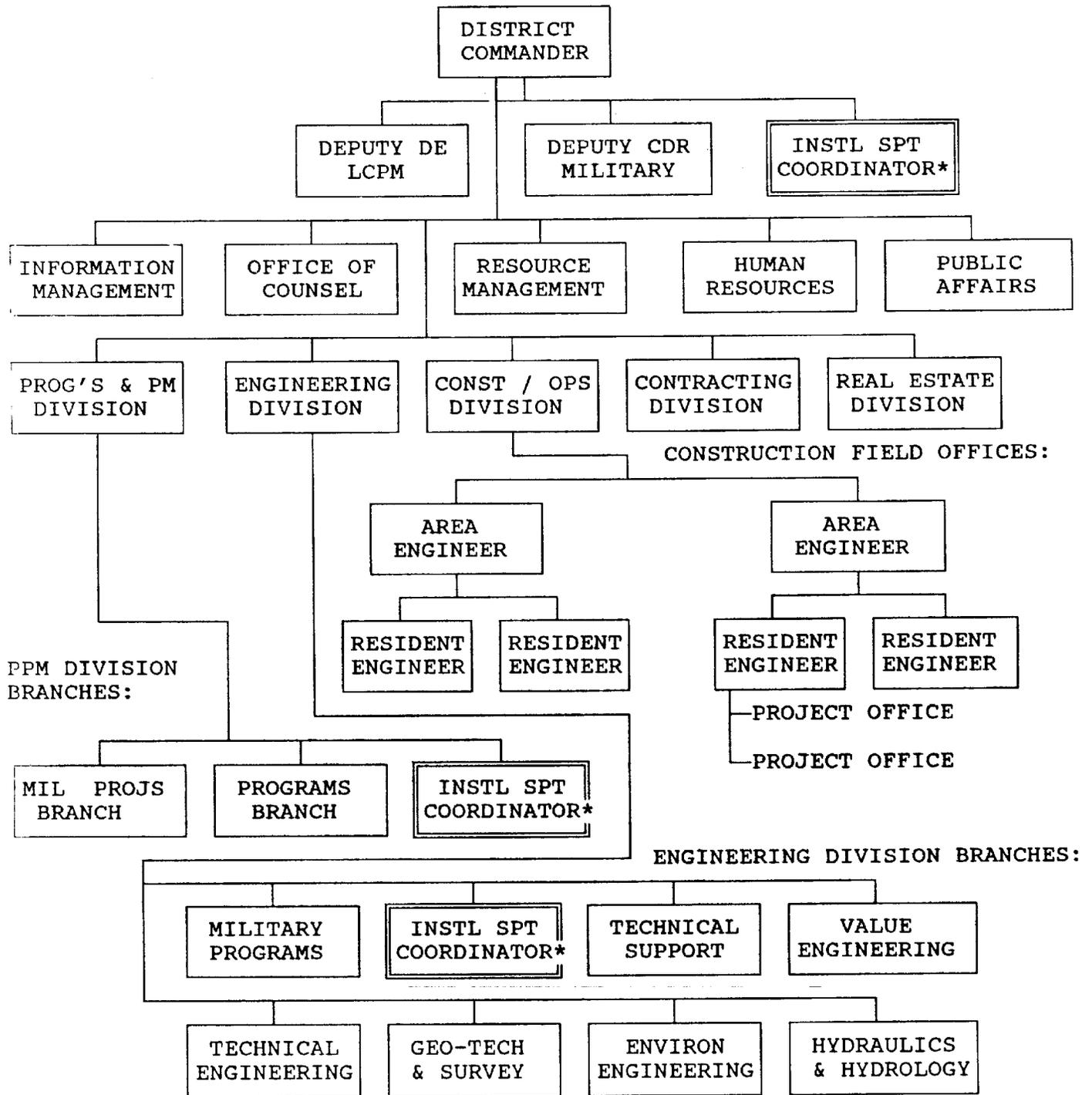
a. With nearly 44,000 employees, the U.S. Army Corps of Engineers is the worlds largest engineering organization. Under the command of the Chief of Engineers in Washington, D.C., the U.S. Army Corps of Engineers has 13 Divisions/Major Subordinate Commands (MSC) subdivided into 39 districts that manage Military and Civil Works engineering and construction programs worldwide. Each USACE military district has a major responsibility in managing design and construction programs for the Army and Air Force in their geographical area. Many civil works districts have a mobilization support mission for Army installations.

b. Maps of MSC and district civil works and military support operational boundaries are provided at Appendix J.

c. USACE MSC's and districts which have an assigned mission to provide direct support to installations through the USACE Installation Support Program are identified in AR 420-10 (see Appendix K).

**1-6. District Organizational Structure.**

Districts are the Corps of Engineers basic operational level organization. USACE districts typically have four line divisions; engineering, construction-operations, project management, and real estate (see Figure 1-1). The construction function has a field structure consisting typically of area, resident, and project engineer offices. This construction field structure expands, contracts, and relocates dependent upon the construction workload. USACE districts are usually led by a cadre of military officers, but the vast majority of the staff are civilian members of the USACE team. USACE military districts provide direct support to installations and USACE civil works districts.



\* Typical locations for Installation Support Coordinator  
 Figure 1-1. A Typical District Organizational structure.

**1-7. Installation Support Organizational Structure.** The organizational element directly responsible for the Installation Support program varies from district to district depending upon workload and staffing levels. The supporting element ranges from one individual serving as the Installation Support Coordinator, to a fully staffed Installation Support Section/Branch.

a. Installation Support Coordinator. A single individual within the district who:

(1) Serves as a single point of contact to receive all Installation Support requests.

(2) Directs incoming requests to the appropriate in-house resource or other USACE capability.

(3) Coordinates customer requests within the district to ensure timely execution, efficient and effective project management and procurement, cost control and quality of construction.

(4) Monitors installation/customer satisfaction.

b. Project Managers accomplishing Installation Support. Districts that accomplish a consistent, yet minimal volume of Installation Support/reimbursable funded projects have a number of project managers who are responsible for accomplishing installation support work. These project managers are located within the Military/Project Management Branch and may assume the role of Installation Support Coordinator or work in conjunction with that individual.

c. Installation Support Section/Branch. In a district with a large reimbursable funded military workload, a dedicated section or branch has been formed to accomplish the Installation Support mission. This is the optimum scenario in that it provides the most efficient, effective and focused support to installations. In this case standard military construction project management procedures can be most effectively streamlined or tailored in order to simplify, expedite and reduce the costs of accomplishing a project. In addition, each major installation will normally have one or more project managers dedicated to their needs. An example of this organization is depicted in Figure 1-2 on the following page.

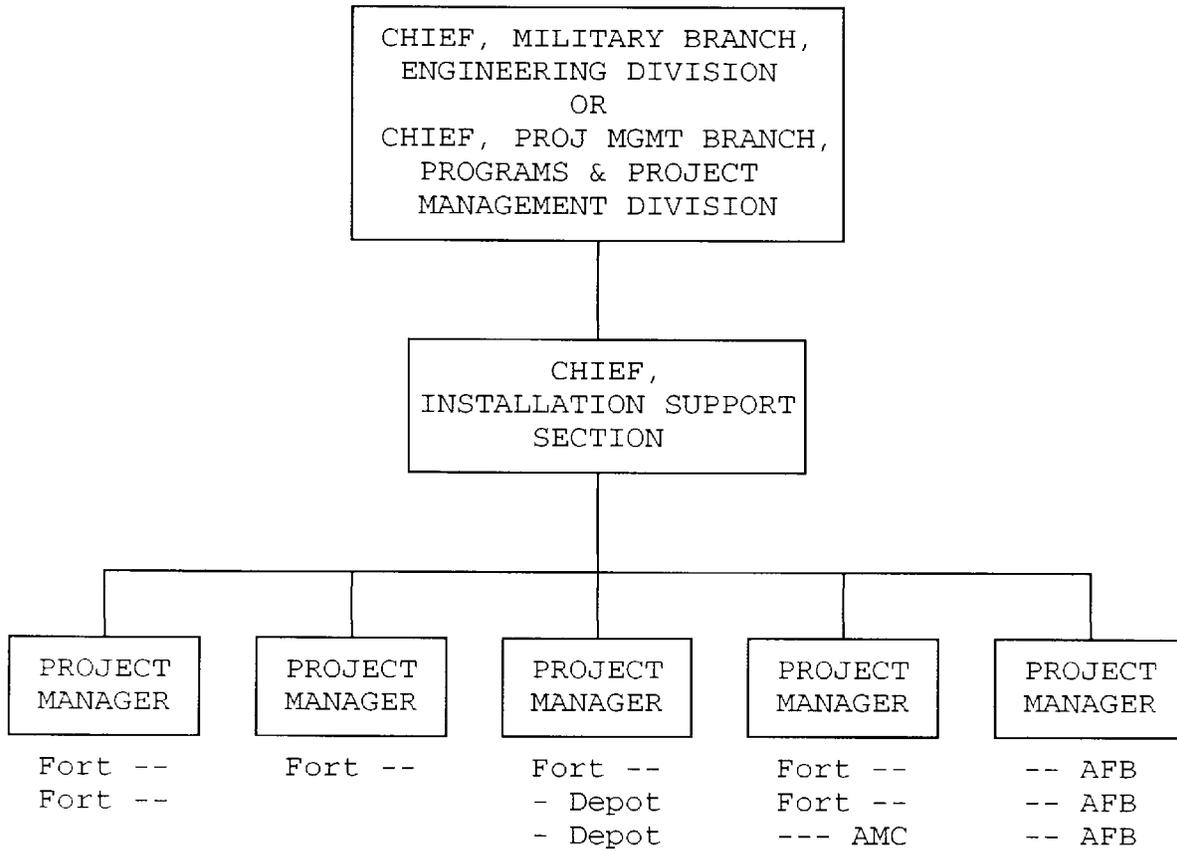


Figure 1-2. Typical Organizational Structure of Installation Support Section or Branch



**2-2. Execution Methods.**

The following diagram (Table 2-1) outlines seven execution methods available to the installation engineer (I) and the supporting district (D) for accomplishing actions during the life cycle of a project:

Table 2-1. Typical Project Execution Methods

SERVICE / ACTION	TYPICAL METHODS						
	1	2	3	4	5	6	7
PLANNING / SCOPING	I	I	D	D	D	I	I
DESIGN	I	D	D	D	I	I	I
CONTRACTING	I	D	D	I	I	D	D
CONSTRUCTION	I	D	D	I	I	D	I

Notes:  
 1. Method 4 requires a biddability, constructability, and operability review by district forces prior to contracting.  
 2. Method 6 & 7 are rare and usually occur in an expedited year-end situation. Both methods require coordination with the installation Directorate of Contracting.  
 3. Method 6 requires district input on project specifications during the design phase.  
 4. Method 7 is considered a pass through and the district is not responsible for design/construction problems because successor Contracting Officer authority is transferred to the appropriate installation contracting officer.

b. Any special studies or post-construction activities necessary to accomplish a project could also be incorporated into the process and accomplished by either the installation or the district.

**2-3. Communications.** Effective communications are the key to successful project completion and the maintenance of harmonious working relationships between the installation and district. In addition to routine telephonic coordination and written correspondence between the district and the installation, communications between the installation staff and the district will be maintained by the following means:

a. Staff Visits.

(1) District commander visits to the installation. The district commander will schedule a personal visit with the installation engineer at least once every six months, or more often if needed. Also, it is the Chief of Engineer's policy that new district commanders will visit all of the installations supported by their district within 45 days of taking command. Incumbent district commanders will visit new installation engineers within 45 days of their assumption of duties. The district commander is also available upon request to discuss or present information regarding special problems, complex projects or issues.

(2) Installation Support Coordinator's visit to Installation Engineer. Each large project, group of operation and maintenance-funded projects, or request for technical engineering or study support will normally result in a visit by the district Installation Support Coordinator. The purpose of these visits is to meet the installation personnel who will be coordinating the work, to acquaint them with the project design or study team and/or with consultants who will provide the service, and to solicit concerns and preferences that may affect the service being provided.

(3) District Chief, Construction Division visit. The chief of the district construction division will visit the installation at least once annually to discuss concerns over completed and on-going construction, coordinate major construction projects scheduled during the year, and introduce members of the district office construction division staff.

(4) Joint site visits during design and construction. Installations are encouraged to appoint DEH/BCE coordinators/managers for each design and construction project being accomplished by the district. These coordinators will be regularly invited to visit the job sites with the area or resident engineer staff, and encouraged to bring representatives of the using organization along with them.

b. Meetings.

(1) Monthly/quarterly. Project planning and status meetings may be conducted at the installation engineer's office, or at the area/resident engineer office on a monthly or quarterly basis. The frequency and location of these meetings may be at the installation engineer's choosing.

(2) Recurring and special. The district office staff and the local area/resident engineer office are available at all times to conduct briefings to installation command groups or to meet with the installation engineer's staff.

(3) Status review. There is almost no such thing as "too much information" when considering matters of project status. The Installation Support coordinator is always available to meet with the installation to discuss ongoing and new projects. Normally, these meetings are combined with the construction status meetings that are held monthly at the area/resident engineer office. Installation project coordinators are encouraged to attend all of these meetings, and minutes of each session will be provided within one week after the date of the last meeting.

(4) Area Engineer/Resident Engineer. As mentioned in the preceding paragraph, status meetings are often held at the area/resident engineer office and include not only the status of ongoing contracts, but the status of planned and ongoing design efforts. Additionally, the area/resident engineer is available to brief status of any ongoing construction contracts, and can assist the installation staff with training, construction scheduling and reporting techniques, as well as other construction management issues.

(5) Design and design review. For Army reimbursable funded projects there are typically three meetings during the design phase with the installation engineer. The first meeting is a pre-design/pre-negotiation/scope development conference which is held at the project site. The second meeting is a concept design review, held when the project is approximately 35% complete. At this stage installation review comments are discussed for incorporation into the project. The third meeting is a final design review, held when the project is approximately 95% complete to solicit detailed technical comments and determine the final course of action for the project. For the Air Force an additional meeting is held between the pre-design and concept review. This meeting occurs at the Project Definition completion phase so the designer can present conclusions and recommendations to the installation engineer/user.

(6) Installation planning board. The USACE MSC commander has delegated authority to the district to represent the Corps of Engineers at Installation Planning Board meetings. The district will send a member from their Military Planning Section staff to each of these meetings as a technical advisor to the installation master planning staff.

(7) Six and nine-month warranty enforcement meetings. The installation engineer's project inspection staff is encouraged to attend the six and nine month warranty enforcement meetings on all construction projects supervised and administered by the supporting Corps area/resident engineer office. Warranty related concerns are the primary focus of each of these meetings.

c. Recurring Reports.

(1) Status report. A district will furnish each installation a monthly status report of all projects and services being provided to their installation. Appendix H of this handbook has a sample project status reporting format.

(2) Automated Management and Progress Reporting System (AMPRS). This automated design and construction execution report is used throughout the Corps of Engineers to track the progress of each MILCON or reimbursable/installation support action. Information from this report is used to monitor design and construction execution at all levels within the Corps of Engineers.

(3) Reimbursable project data base. There are data fields within AMPRS for tracking projects that are reimbursable funded, i.e., Installation Support Projects.

d. Annual DEH/BCE Conference / Workshop. Each district typically hosts an annual conference/workshop for DEH/BCE partners. Normally the conference is held on or near one of the supported installations and tours of installation facilities are a part of the agenda. During the conference the district should not dominate the agenda. Typically the district portion will equal that of the Army and Air Force installation participants. The last thing a district wants to do is "preach" district support. Rather, the conference/workshop should provide an open forum: to share ideas among customers, to meet and get to know each other, and to hear expert speakers discuss new programs and directions in the facilities engineering, housing and environmental business.

EP 420-1-1  
31 Jan 92

(1) Guest and Installation Speakers. Conference speakers should come from the Corps of Engineers community, the Army and Air Force community, from private industry and from other Government agencies. The focus should be on the "where we have been" and "what's new" in the facilities engineering, housing and environmental arena. One of the primary speakers at each annual conference/workshop should be a DEH or BCE from a supported installation.

(2) Survey DEH/BCE for Agenda Items. Before the yearly conference/workshop is put together, the Installation Support coordinator will contact installations to determine preferences for agenda items. Any special or recurrent problems are excellent topics for presentation or workshop discussion. Controversial items should not be avoided. Discussion of even the most sensitive Installation Support problems or issues, with the objective of obtaining resolution or expert advice, is encouraged.

(3) Schedule. A typical annual conference/workshop is held from noon on a Tuesday to noon on a Thursday and consists of four four-hour sessions with frequent breaks. With this scheduling, the conference/workshop will take only three working days, including travel. The last four hour session is an "open forum" during which all participants are given an opportunity to express opinions and share concerns regarding what has been presented during the previous three sessions.

e. Customer Feedback System. Each district is required to monitor installation/customer satisfaction. Examples of formats which may be utilized to accomplish this are included in Appendix H. Installations should be asked to complete a customer survey form for each job, or group of related jobs that a district completes for them. Completion of such evaluations provides a road map of how support can be improved in the future.

f. Solicitation of Annual Program from DEH/BCE. The district should visit each installation engineer during the development of the "fixed workload" and "variable workload" portions of the Annual Work Plan for the installation. This provides a "heads up" notice of work that the district may be asked to perform, or areas where the district may be able to offer specific expertise or support. Normally, the deputy district commander or the installation support coordinator will schedule an annual visit with the installation engineer or deputy for this purpose during the spring of the year, or when the installation Annual Work Plan is being assembled.

## CHAPTER 3

### PLANNING AND PROGRAMMING SUPPORT SERVICES

#### 3-1. Types of Services.

##### a. Economic and Social Analysis.

(1) Housing Studies. Housing projects for new facilities require a three-phase justification procedure. The three phases include: Segmented Housing Market Analysis (SHMA), the Army Housing Justification Process (AHJP), and the Economic Analysis (EA). All new construction and major renovation projects must be supported by an economic analysis of various public and private sector alternatives which provide housing facilities. The EA must accompany the initial project DD Form 1391.

(2) Efficiency Studies. Efficiency studies analyze costs of equipment or facilities over their economic, physical, or mission life and evaluate various alternatives to achieve a specific objective. Examples include commissary expansion and installation laundry services.

(3) Finance Studies. These studies, which are generally an appendix to an EA or feasibility study, identify methods of financing project needs that are outside traditional funding mechanisms. (Example: in one study, land and facilities were identified that could be excessed in order to provide funding for new warehouses on the installation as part of the DoD Sale and Replace Program.)

(4) Mission Changes. These studies assess the economic impact a mission change will have on the economy of the local community. They are generally an appendix to an Environmental Impact Statement (EIS). (Example: USACE personnel are working on the socioeconomic portion of Base Realignment Studies to establish a method to be used for all candidate installations in the United States.)

(5) Long-Range Stationing Plans. We can provide your installation assistance in site selection and estimating economic impacts on the local community that will arise from various stationing scenarios. Input/output modeling is one of the tools used to accomplish this task.

EP 420-1-1  
31 Jan 92

(6) Installation Compatible Use Zone (ICUZ). The goal of an ICUZ study is to influence development around military installations so that it is compatible with blast and noise-generating Army activities. The district can coordinate planning activities between agencies, counties, planning commissions, and private-interest groups.

(7) Emergency Preparedness/Mobilization Planning. To prepare for mobilization, each district has analyzed the capabilities of the Corps of Engineers as well as the construction industry in their local geographic area to quickly provide support for a range of mobilization construction projects. Working with local installation staffs, districts have identified a range of problems, needs and opportunities and addressed alternative solutions. Districts have also prepared, and are continuously updating, Mobilization Master Plans and Mobilization Installation Support Books for the Army installations that they support.

b. Project Development and Advance Planning. The scope development and programming phases of each project are extremely important. The completeness of an installations request for services reduces the time required to start pre-design and design procurement procedures, and reduces delays during design and design administration for scope revision modifications. The critical components for the request for service are shown on the sample installation support request on the final page of each support services chapter in this pamphlet. The timing of the request for services is critical to accomplishing high-quality design in a timely manner at minimum cost.

c. Real Property Master Plan and Mobilization Component for Army Installations/Base Comprehensive Planning for Air Force Installations. Commanders use the installation master plan/base comprehensive plan for the orderly management and development of their installations, and as a source of project development information. The real property master plan/base comprehensive plan depicts current composition of an installation and the plans for its future development. Once approved, the real property master plan/base comprehensive plan is the primary building block for installation development and is not changed, except for revisions by the Installation Real Property Planning Board/Facility Board, unless major mission or strength alterations occur. The mobilization component is a similar set of documents prepared at Army installations in the Continental United States, Hawaii, Alaska and Puerto Rico, based on the assigned "full" mobilization mission.

Each district has a military planning staff of professionals who are capable of aiding the installation in completely updating their master plan or accomplishing revisions, either by in-house district staff or by A-E contract.

d. Installation Design Guide. The installation design guide is a portion of the installation real property master plan. It also is a specific part of the Army Communities of Excellence Program. The guide establishes the architectural theme for each portion of the installation, sets standards for interior and exterior design including site furnishings and landscaping, and develops design guidelines for form, massing, color, texture, scale and spacing amongst the buildings in each area. The district can prepare this document for the installation, or work with the installation staff to jointly develop the document.

e. Mapping and Surveying. The district has the capability of providing aerial surveys and photogrammetric mapping, cadastral surveys, and resources mapping using satellite technology. Complete field surveys of any type can be provided either through use of in-house survey crews or by contract. Each district can perform topographic, cartographic, hydrographic, demarkation of wetlands, geodetic, land, control, engineering and construction surveying. In most cases, surveys can be worked into schedules within three to four weeks time. In addition, districts have horizontal and vertical control available for use at most military installations. Districts can prepare master planning maps by means of the controlled aerial mosaic method. The majority of the mapping work is currently recorded on the computer-aided design and drafting system at the district office.

f. Computer-Aided Design and Drafting Systems (CADD). With the Corps-wide purchase of CADD systems in late 1987, USACE obtained the capability to support the DEH/BCE with state-of-the-art drafting equipment. The Corps-wide purchase provided Districts with Integraph equipment, which allows them to place real property master planning drawings, as-builts, archival site plans as well as design and as-built drawings in computer files which may be reproduced at virtually any scale, showing many different combinations of selected information. Districts also have the technical capability to advise installations regarding the purchase of CADD equipment for the DEH/BCE staff. This equipment would be completely compatible with mainframe equipment at the district and would permit installation designers and master planner to prepare original drawings and other (nongraphic) data bases, or to revise those on file at the district. (Note: automation approval and funding of CADD equipment for installation use are the responsibilities of the installation and its parent command.

EP 420-1-1  
31 Jan 92

g. Feasibility Studies. USACE districts have the capability to perform virtually any engineering technical feasibility study, including evaluation of master planning alternatives, feasibility analyses during programming and design, and feasibility of alternative operation and maintenance practices.

h. Space Utilization Planning. AR 405-70, Utilization of Real Estate; AR 405-45, Inventory of Army Military Real Property; and AR 210-20, Master Planning, emphasize the maximum use of existing facilities before new facilities are programmed. Districts stand ready to assist an installation office in developing space utilization databases and analyses. Many Districts have performed this service for the installations they support. The results have proven successful in terms of usable, responsive systems for facilities and land use assignment.

### **3-2. Regulatory and Statutory Guidelines.**

#### **a. For Army projects.**

- (1) AR 210-20, Installation Master Planning.
- (2) AR 415-15, Military Construction, Army (MCA) Program Development.
- (3) AR 405-45, Inventory of Army Military Real Property.
- (4) TM 5-803-5, Installation Design.
- (5) DA Pam 600-45, Army Communities of Excellence.

#### **b. For Air Force projects.**

- (1) AFR 19-9, Air Installation Compatible Use Zone.
- (2) AFR 86-1, Programming Civil Engineer Resources.
- (3) AFR 86-4, Base Comprehension Planning.

**3-3. Who Provides These Services.**

For planning and project development services, the districts Installation Support coordinator will forward the installation's request to either the Planning Division or to the Master Planning and Site Development Section of the Engineering or Programs and Project Management Division. Mobilization component service requests will follow the same procedure, or be assigned to the Emergency Operations Branch of the Construction and Operations Division. In all cases, the Installation Support Coordinator will receive, coordinate and monitor the installations request.

**3-4. How To Obtain These Services.**

Use an Installation Support Request Form, or call or write to the local Installation Support Coordinator to initiate a request for service. The installation should be prepared to supply the following:

- a. An Installation Support Request Form prepared in general accordance with the sample format (Figure 3-1) at the last page of this chapter which gives a narrative summary of work or services required. After the support request is evaluated:
- b. Copies of installation records needed by the district to provide the service.
- c. Applicable documents, correspondence, or regulations.
- d. Document transmitting funds to the district office.

**3-5. Typical Funding and Time to Accomplish the Service.**

Costs and time required for planning services, and sources/alternatives for funds. The time period and cost for the preparation of planning projects vary depending on the complexity of the document or study.

- a. Costs. Normally, installation furnished Operation and Maintenance (O&M) funds are required to finance planning services. However, some nonreimbursable Army funds are available on a limited basis for peacetime master planning. Headquarters, U.S. Army Corps of Engineers funds all mobilization master plans. The following are examples of the average time and cost range for various projects:

EP 420-1-1  
31 Jan 92

(1) Project Development Brochure (PDB) - 6 to 8 weeks (\$8,000-\$12,000).

(2) Individual utility studies - 9 to 15 months (\$75,000-\$125,000).

(3) Real Property Master Plan update - 9 to 12 months (\$80,000-\$125,000).

(4) Mobilization component update - 9 to 12 months (\$80,000-\$120,000 - funded by HQUSACE).

If the required support exceeds the capability of in-house personnel or current indefinite delivery contracts, additional lead time (of approximately 3 to 4 months) will be required to advertise and select an A-E firm. Accordingly, early district involvement in an installations advance/annual work planning will help the district provide better support.

b. The annual military construction programming cycle dictates when the installation needs to submit such documents as DD Forms 1391 and Project Development Brochures.

c. Army master planning services are augmented by a limited amount of HQUSACE-distributed, nonreimbursable funds. Mobilization components are entirely funded by HQUSACE. Therefore, the district must request that the installation identify requirements for these services by each February preceding each fiscal year. This allows the district to identify master planning and mobilization master planning requirements through Corps of Engineers channels.

d. Other planning services are not as time sensitive, and can be provided at any time during the year whenever the requirement is identified and funded.

### **3-6. Examples.**

a. Preparation of base line planning studies in support of base realignment and closure actions at installations.

b. Housing studies prepared by districts have contributed to high success rates in housing programming at various Army and Air Force Installations.

c. Space utilization surveys at supported installations as they prepare to incorporate the Army Real Property Planning System (RPLANS) at their installations.

INSTALLATION SUPPORT REQUEST								
INSTALLATION: Fort Alamo	PROJECT NUMBER: SRB-0312							
PROJECT TITLE: Update TAB and Master Plan Report								
TYPE OF WORK: <input checked="" type="checkbox"/> PLANNING <input type="checkbox"/> ENVIRONMENTAL <input type="checkbox"/> STUDY <input type="checkbox"/> DESIGN <input type="checkbox"/> CONSTR MGMT <input type="checkbox"/> REAL ESTATE <input type="checkbox"/> A-E CONTRACT SELECTION <input type="checkbox"/> OTHER								
CURRENT WORKING ESTIMATE: \$ 130,000.00								
BASIS OF ESTIMATE: Desk Estimate    DATE PREPARED: 12 Mar 91								
<b>DESCRIPTION OF WORK/SERVICE REQUIRED: PLEASE BE SPECIFIC !</b> Update Tabulation of Existing and Required Facilities (TAB) and Long Range Analysis, last updated in 1986. Work will involve using the Facilities Planning System, Real Property Planning System, and space criteria references to develop or verify facility allowances; interview users-battalion level and above to determine facilities requirements, entering revised data in automated TAB. TAB data and other findings will be used to update the Capital Investment Strategy.								
<b>SPECIAL CRITERIA/DESIGN REQUIREMENTS:</b> All reports must be accomplished in WordPerfect 5.1 format. Upon completion provide 75 copies plus diskettes to the DEH.								
PROJECT AUTHORIZATION:    DD FORM 1391 <input checked="" type="checkbox"/> DA FORM 4283								
CONSTRUCTION AGENT:    n/a    DISTRICT    n/a    INSTALLATION								
CRITICAL NEED DATES: SERVICE COMPLETE: 1 May 92 DESIGN            START:            COMPLETE: _____ CONSTRUCTION CONTRACT AWARD:            n/a CONSTRUCTION START:            n/a            COMPLETE:            n/a								
AVAILABILITY OF AS-BUILT DRAWINGS: Contact Installation PM								
AMOUNT OF START-UP DESIGN FUNDS ATTACHED: \$ 15,000.00								
INSTALLATION PROJECT MANAGER: DAVY CROCKETT								
TELEPHONE: (COM'L) (020) 405-5084    (AV) 582-5084								
FACSIMILE: (020) 405-3874    OFFICE SYMBOL: AZRX-DEH-MP								
<b>INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE</b> <table border="0"> <tr> <td>SIGNATURE</td> <td>TITLE</td> <td>DATE</td> </tr> <tr> <td>COL Jim Bowie</td> <td>Ch, EPSD</td> <td>17 Jul 91</td> </tr> </table>			SIGNATURE	TITLE	DATE	COL Jim Bowie	Ch, EPSD	17 Jul 91
SIGNATURE	TITLE	DATE						
COL Jim Bowie	Ch, EPSD	17 Jul 91						

Figure 3-1. SAMPLE FORMAT-INSTALLATION SUPPORT REQUEST INVOLVING PLANNING

## CHAPTER 4

### ENVIRONMENTAL SUPPORT SERVICES

#### 4-1. Types of Services.

a. Environmental and Cultural Resources. The district can provide a wide range of services to support compliance with environmental and cultural resources laws and regulations, including:

(1) Environmental Assessment. An Environmental Assessment (EA) describes the impacts of a proposed action on the environment. The elements evaluated include wetlands, cultural resources, ecology, threatened and endangered species, socio-economic factors, air, water and noise pollution, fisheries, navigation, flood plains, and energy needs. An EA is prepared in accordance with the implementing regulation of the National Environmental Policy Act of 1969 and AR 200-1 and AR 200-2. It is coordinated via Section 309 of the Clean Air Act with the U.S. Environmental Protection Agency.

(2) Environmental Impact Statement. The Environmental Impact Statement (EIS) is normally a large, complex document that incorporates aspects of the Environmental Assessment, and usually includes more detail, time, funds and coordination. It is also prepared according to the implementing regulations of the National Environmental Policy Act of 1969 and AR 200-1 and AR 200-2. It involves notification via the Federal Register as well as wide coordination with various federal and state agencies and the public.

(3) Biological Assessment of Threatened and Endangered Species (BATES). The Endangered Species Act requires all Federal agencies to consult with the Secretaries of Interior and Commerce to ensure that their actions will not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitats of such species. A BATES evaluates, via the Endangered Species Act of 1973, the potential impacts a proposed action may have on various threatened and endangered species. Following its completion, the draft document is coordinated with the U.S. Fish and Wildlife Service for either the "no jeopardy" or "jeopardy" determination.

(4) Evaluation of Dredge and Fill Material. Section 404(b)(1) of the Clean Water Act requires the evaluation of the environmental impacts a proposed dredge or fill action may have on biological and chemical integrity of a wetland area.

EP 420-1-1  
31 Jan 92

The evaluation, usually part of an Environmental Impact Statement (EIS) or Environmental Assessment (EA), is coordinated with the U.S. Environmental Protection Agency (EPA) in accordance with the Clean Water Act.

(5) Hazardous and Toxic Wastes (HTW). Districts can assist installations with cleanup of hazardous or toxic waste sites in order to comply with provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The district can assist in developing a comprehensive plan for hazardous/toxic waste remediation. The HTW plans also involve personnel requirements, contracting, health and safety, chemical data quality management, as well as program coordination. The District can also provide advice on how best to reduce wastes so as to minimize future environmental impacts and assure compliance with the Resource, Conservation and Recovery Act (RCRA). Preliminary HTW assessments and detailed HTW testing and sampling can also be performed to support site selections and NEPA documentation requirements.

(6) Environmental Audits. The district can assist installations in conducting internal and external Environmental Audits. This assistance can include preparation of the entire document or just certain facets. These audits, which are an environmental compliance review of facility operations, practices, and records to verify compliance with environmental laws and regulations, are important in developing annual RCS 1383 reports for reporting environmental funding requirements.

(7) Asbestos Surveys and Removal. Asbestos identification services for installations are performed by districts, usually through the use of indefinite delivery type A-E contracts. Districts can also effectively contract for asbestos removal.

(8) Cultural Resources Surveys and Evaluation. Cultural resources must be identified and evaluated as required by the Archeological and Historic Preservation Act of 1974 and the National Historic Preservation Act of 1966, as amended. Districts can assist an installation with investigations of any size: from a small plot to large multi-acre areas identified for new construction or training.

(9) Design Services for Air and Noise Abatement Projects. The district can perform design services for air and noise abatement projects, such as corrective actions for an incinerator not meeting state requirements/standards.

(10) Wetland Surveys. Districts can assist installations with project site selections and NEPA documentation by identifying, delineating and mapping wetland critical habitat areas.

b. Permitting. Regulatory authorities and responsibilities of USACE are based on Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). Section 10 requires a Department of Army permit for all work proposed within a navigable water of the United States. Section 404 requires a Department of Army permit for the discharge of dredged or fill material into waters of the United States, including wetlands. The district can provide this service to an installation, if needed, for such activities as river crossing sites, waterborne troop training exercises, etc.

c. Underground Storage Tank Program. This environmental program requires the inventory, survey, reporting and correction of underground chemical, petroleum, oil and lubricant storage tanks. The district can provide assistance in meeting survey and reporting requirements, and can help you develop and execute projects for correction of those identified as leaking. Cathodic protection system testing and evaluation, design and technical assistance are available for underground storage tanks. Such information is required for the installation, replacement or upgrade of steel or nonmetallic underground storage tanks and/or piping components. In addition, testing and technical assistance on maintenance contracts is available for existing cathodic protection systems. This program is also supported by standardized drawings and specifications which may expedite corrective actions, tank upgrade, replacement or installation projects.

d. Environmental Base Line Surveys/Preliminary Assessment Screening. These surveys are required for proposed real estate transactions. The surveys identify the current status of the installation, or portion thereof, regarding major or significant environmental impacts, hazardous and toxic wastes, asbestos, radon, flood plain management, wetland considerations, and biological resources.

e. Spill Prevention, Control Countermeasure Plan. This environmental program requires that a plan be developed to prevent chemical, petroleum, oil and lubricant spills on military installations. This plan or a separate plan should address actions required to immediately put into effect operations to contain and clean-up spills that do occur.

EP 420-1-1  
31 Jan 92

f. Landfill Closure Plan. The district can help prepare plans for closure of landfills at installations. A request to prepare this type of plan should be submitted two to three years in advance of the anticipated closure in order that all study and regulatory requirements can be met. Assistance with site selection for proposed landfills can also be provided.

g. Flood Plain Management. The objective of the Flood Plain Management Services Program is to support comprehensive flood plain management planning at all appropriate governmental levels and, thereby, to encourage prudent use of the nation's flood plains. Executive Order 11988 requires each federal agency, and its installations, to evaluate the effects of its actions on flood plains, and to avoid financing or issuing permits for construction in such flood prone areas unless no practicable alternatives are available. Information provided through this program includes flood hazard information as well as a full range of technical services and planning guidance on techniques for reducing flood damage and damage potential. Some of the technical services available at the district are:

(1) Flood Hazard Evaluation. Upon request, a district will evaluate the potential for flood damage at specific sites. This evaluation can range from simply providing an expected base flood elevation to the determination and analysis of possible protection improvements. This analysis would include the expected results of the improvement. Although this does not result in a detailed, designed project, it does provide information upon which to base funding needs.

(2) Floodway Determination. In the development of flood plain zoning, it is sometimes necessary to determine the area of the flood plain that is required to remain free of development in order to safely pass the base flood. Districts can determine these floodway requirements for an installation.

(3) Flood Plain Regulations. Districts can provide advice on proper use of an existing flood plain. This could include zoning regulations and development standards.

(4) Flood-Proofing. Providing guidance on flood-proofing methods and procedures is another service available. This action usually results in a modification to a structure to prevent or minimize potential flood damage.

(5) Emergency Flood Hazard Evacuation Studies. Special studies can be conducted to develop guidelines for flood emergency warning and evacuation at an installation. These studies would include plans for temporary shelter procedures and provide a base for development of a post-flood recovery plan.

#### **4-2. Regulatory and Statutory Guidelines.**

a. The National Historic Preservation Act of 1966, as amended (NHPA). This Act requires agencies to consider the effects that an undertaking will have on any resource eligible for inclusion on the National Register of Historic Places. The findings must be coordinated with the state Historic Preservation Officer and provided to the Advisory Council on Historic Preservation.

b. Archeological Resources Protection Act of 1979 (ARPA). This requires a federal land manager to issue a permit to any qualified archeological investigators working on public lands. This act prescribes criminal and civil penalties, along with forfeiture provisions for any person who uses any cultural resources without correct authorization.

c. The Clean Water Act, Section 404 (b)(1) Evaluation of Dredge and Fill Material.

d. National Environmental Policy Act of 1969.

e. The Endangered Species Act of 1973.

f. AR 200-1, Environmental Protection and Enhancement.

g. AR 200-2, Environmental Effects of Army Actions.

h. AR 420-40, Facilities Engineering, Historic Preservation.

i. Executive Order 11988, Flood Plain Management, 1977.

#### **4-3. Who Provides These Services.**

Within USACE, the environmental program has experienced rapid growth and is still evolving in many districts. For any requested environmental services, the Installation Support Coordinator will forward the installation's request to either the Planning Division, the Environmental Resources Branch, the Regulatory Program Branch or other appropriate office.

EP 420-1-1  
31 Jan 92

Additionally, USACE has designated a number of districts to specialize in hazardous, toxic, radiological waste (HTRW) and general environmental support work. Generally, one district per division is designated as the HTRW center of expertise and Environmental Support District. These districts will have specialized personnel who are extensively trained in environmental matters. If an installation's normal direct support district is not an HTRW center of expertise or an Environmental Support District, the installation can access the specialized services through their direct support district. In any case, an Installation Support Coordinator is available to assist in processing installation requests. The Installation Support Coordinator can also arrange for specialized environmental support from USACE laboratories, USACE Civil Works districts, or the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA).

#### **4-4. How To Obtain These Services.**

Use an Installation Support Request Form, call or write to the district Installation Support Coordinator to initiate a request for service. The installation should be prepared to supply the following:

- a. An Installation Support Request Form prepared in general accordance with the sample format (Figure 4-1) at the last page of this chapter. This form gives a narrative summary of work or services required. After the support request is evaluated:
- b. Copies of installation records needed to provide the service.
- c. Applicable documents, correspondence, or regulations.
- d. Document transmitting funds to the district office.

#### **4-5. Typical Funding and Time to Accomplish the Service.**

a. Costs and time required for environmental services, and sources for funds. When a request for service is received by the district, a time and cost estimate will be prepared and negotiated with the installation. The time and cost for accomplishing the various requests can range from routine requests requiring a few hours, costing several hundreds of dollars, to the more complex evaluations, including field surveys, requiring several man-months of effort and thousands of dollars.

No two environmental support requests are exactly alike, and time and costs must be tailored to specific requirements. However, some examples of the average time and cost for typical services are as follows:

- (1) Historic Preservation Plan (HPP)  
- 6 to 12 months (\$25,000 to \$100,000).
- (2) Environmental Assessment (EA)  
- 3 to 12 months (\$10,000 to \$100,000).
- (3) Environmental Impact Statement (EIS)  
- 18 to 36 months (\$75,000 to \$250,000).
- (4) Asbestos Identification  
- varying time (four to six cents per square foot of floor area inspected, with identification services comparable to those of a typical design contract).
- (5) Environmental Baseline Study (EBS)  
- 3 to 6 months (\$10,000 to \$50,000)

b. Current Army funding policies normally require that environmental services, except wetlands determination, from the district be funded by the installation on a cost-reimbursable basis. Usually, installation Operation and Maintenance funds are used for this purpose. In exceptional cases, such as the base realignment and closure initiative, limited funds are available from Headquarters, Department of the Army to support these environmental studies. In each case the funding must be furnished to the district prior to starting the project.

#### **4-6. Examples of Environmental Services.**

a. Districts have prepared numerous EAs that often incorporate many of the other documents highlighted in this pamphlet.

b. Environmental Impact Statements have been prepared ranging in complexity from the development of additional family housing at an installation to the construction of a harbor complex for TRIDENT missile submarines.

c. Some entire installations are designated as historic, while others have limited or no historic structures. Districts have assisted installations in entering many facilities on the National Register of Historic Places, or in coordinating actions for facilities eligible to be on the Register.

EP 420-1-1  
31 Jan 92

d. District assistance was provided to an installation in preparing a flood contour map of the entire 140,000 acre installation, including identification of several flood ways. This map has become a part of the installation master plan. In a broader sense, districts have used their technical expertise in flood plain management to help other federal agencies and installations deal with floods and flood-related matters. Flood plain management services have been provided in support of land disposal actions associated with the base realignment and closure initiative.

e. An ICUZ study was performed for an Air Force Base and real estate noise easements were purchased as a result of the study. A noise buffer, based on measurements taken as a part of the study, virtually eliminates noise complaints from aircraft operations in the vicinity. In another instance, at an Army installation, district environmental personnel, along with an environmental attorney, were able to react to the efforts of a nearby community to limit the Army's use of installation firing ranges.

INSTALLATION SUPPORT REQUEST		
INSTALLATION: Ryan Air Force Base	PROJECT NUMBER: RAFB-1234	
PROJECT TITLE: Perform Asbestos Removal, 10 WWII Buildings		
TYPE OF WORK: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> ENVIRONMENTAL <input type="checkbox"/> STUDY <input type="checkbox"/> DESIGN <input checked="" type="checkbox"/> CONSTR MGMT <input type="checkbox"/> REAL ESTATE <input type="checkbox"/> A-E CONTRACT SELECTION <input type="checkbox"/> OTHER		
CURRENT WORKING ESTIMATE: \$40,000		
BASIS OF ESTIMATE: _____ DATE PREPARED: 18 Sep 90		
DESCRIPTION OF WORK/SERVICE REQUIRED: <b>PLEASE BE SPECIFIC !</b> Perform asbestos survey and removal on 10 WWII dormitory buildings in the north portion of Ryan AFB. These buildings are planned for disposal, but must be cleared of asbestos prior to any action being taken. Dormitories have been vacant since Sep 89. Building numbers are 3381 through 3390 and are shown on the attached site plan. No prior survey work has been done on these buildings.		
SPECIAL CRITERIA/DESIGN REQUIREMENTS: Disposal must occur prior to Jul 93 in order to clear the site for an approved new dormitory construction project.		
PROJECT AUTHORIZATION: _____ DD 1391 _____ DA 4283 <input checked="" type="checkbox"/> OTHER		
CONSTRUCTION AGENT: <input checked="" type="checkbox"/> DISTRICT _____ INSTALLATION		
CRITICAL NEED DATES: DESIGN START: _____ COMPLETE: _____ CONSTRUCTION CONTRACT AWARD: 30 Sep 92 CONSTRUCTION START: Oct 92 COMPLETE: Jul 93		
AVAILABILITY OF AS-BUILT DRAWINGS: Attached		
AMOUNT OF START-UP DESIGN FUNDS ATTACHED: \$40,000		
INSTALLATION PROJECT MANAGER: I. M. Topgun		
TELEPHONE: (COM'L) (123) 456-6789 (AV) 987-6777		
FACSIMILE: (123) 456-9000 OFFICE SYMBOL: DEEE-V		
INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE		
SIGNATURE	TITLE	DATE
Thomas Magnum	Ch, DEEE-V	15 Jan 91

Figure 4-1. SAMPLE FORMAT-INSTALLATION SUPPORT REQUEST INVOLVING ENVIRONMENTAL SUPPORT

## CHAPTER 5

### REAL ESTATE SUPPORT SERVICES

**5-1. Types of Services.** The Chief of Engineers is responsible for management of the Army real estate program. He also has a major real estate support role for the U.S. Air Force. As a member of the Army Staff, the Chief of Engineers, advises the Army on real property planning, acquisition, construction, maintenance, repair, and disposal. In this dual function, both the DEH and the district engineer, have active roles to play in the arena of Army real property. Certain actions are a DEH responsibility, while others are a direct responsibility of the supporting USACE district. Regardless of the assignment of responsibilities, the district addresses each real estate action as direct support of the DEH or BCE. Specific services provided by a district real estate division are described as follows:

a. Research and prepare required real estate reports for the expansion, modification or disposal of existing installations, and for the acquisition of new installations. Obtain title evidence. Prepare real estate instruments and execute those documents within delegated authority.

b. Acquire real property by purchase, lease or condemnation. Handle other acquisitions involving donation, exchange, transfers, withdrawals from public domain, and recapture for national security leasehold. Generally, major land items, those costing more than \$200,000, are programmed and authorized through the annual Military Construction appropriation. Minor land acquisition, not exceeding \$200,000, is authorized and accomplished outside military construction authorization channels. An exception to the \$200,000 threshold for real property acquisitions for the reserve components exists under 10 U.S.C. 2233. However, all acquisitions for active and reserve components which exceed \$200,000 are reported to the Armed Services Committees of Congress in accordance with 10 U.S.C. 2662.

c. Negotiate Army leases, including identification of both the lessor and the premises to be leased, detailed lease provisions, establishment of terms, and appraisal for fair and reasonable payment.

d. Conduct appraisals and establish rental schedules for Government-owned land and housing.

EP 420-1-1  
31 Jan 92

e. Participate in site selections for U.S. Army Reserve Centers.

f. Negotiate temporary easements, permits, rights of entry, maneuver rights and grazing rights for the Army.

g. Provide assistance in handling annexations by municipalities.

h. Provide assistance during mobilization periods, including acquisition of nonindustrial facilities, leasing, condemnations, annexations, and exercise of recapture rights.

i. Administer the outgranting program, including leases, easements, licenses and permits granted by the Government for private purposes.

j. Research and duplicate legal documents and prepare maps depicting Federal ownership and other rights.

k. Provide relocation assistance to displaced persons affected by Army land acquisition.

l. Provide assistance in preparing the Real Property Survey Report and accomplishing compliance and utilization inspections.

m. Dispose of land, buildings, timber, gravel, etc., at the request of the installation to include disposal reporting, pre-disposal investigations of land and buildings for contamination, hazardous and toxic wastes, explosive hazards, coastal zone management program, flood plain management program, historic and cultural resources, asbestos and PCBs.

n. Provide assistance in the disposal of excess foreign real estate.

o. Assist in preparation of reports of excess land for submittal to the General Services Administration.

p. Terminate inleases and outgrants for off-installation facilities and housing.

q. Arrange for provision of homeowners' assistance for persons displaced through base realignments and closures.

r. Process and administer damage claims against the Government arising from use of land under an expressed or implied real estate instrument, as well as required restorations of real estate.

s. Administer the provisions of the McKinney Act regarding housing facilities for the homeless.

t. Provide assistance with curative matters regarding encroachment.

u. Prepare and execute of build-to-lease and lease-purchase arrangements.

v. Provide assistance in determining proper legislative and legal jurisdiction issues for Army used real property.

w. Execute the disposal of real property assets under Public Law 100-526, Base Realignment and Closure.

x. Assists installation in determining water rights that the installation possesses, attempts to secure, or intends to transfer.

**5-2. Regulatory and Statutory Guidelines.** The significant guidelines governing real estate support to military installations are listed as follows:

a. AR 140-485, Space Allowances: U.S. Army Reserve Facilities.

b. AR 210-12, Establishment of Rental Rates for Quarters Furnished Federal Employees.

c. AR 210-17, Inactivation of Installations.

d. AR 210-20, Master Planning for Army Installations.

e. AR 405-10, Acquisition of Real Property and Interests Therein.

f. AR 405-20, Federal Legislative Jurisdiction.

g. AR 405-25, Annexation.

h. AR 405-45, Inventory of Army Real Property.

i. AR 405-70, Utilization of Real Estate.

EP 420-1-1  
31 Jan 92

- j. AR 405-80, Granting Use of Real Estate.
- k. AR 405-90, Disposal of Real Estate.

**5-3. Who Provides These Services.**

For real estate support services, the Installation Support Coordinator will forward the installations request to the districts real estate division. However, there are many established working relationships between DEH/BCE real estate personnel and those in the district or real estate field office. It is not necessary to go through our Installation Support coordinator where these relationships are concerned, but for new actions not involving established relationships, a work request form to the Installation Support Coordinator is appropriate.

**5-4. How To Obtain These Services.**

Use an Installation Support Request Form, call or write to the local Installation Support Coordinator to initiate a request for service. The installation should be prepared to supply the following:

- a. An Installation Support Request Form prepared in general accordance with the sample format (Figure 5-1) at the last page of this chapter. The form gives a narrative summary of work or services required. After the support request is evaluated:
- b. Copies of installation records needed to provide the service.
- c. Applicable documents, correspondence, or regulations.
- d. Document transmitting funds to the district office.

**5-5. Typical Funding and Time to Accomplish the Service.**

a. Some districts real estate services are provided on a nonreimbursable basis using centrally distributed Real Estate Operations (REO) funds. With current budgetary reductions, more of this work will require reimbursable funding. In all cases, real estate support is provided based on an estimated cost that includes district charges plus administrative overhead. Costs for a significant real estate action can be large due to the time required by the real estate staff to complete the necessary planning, perform possibly complex appraisals, coordinate with all involved personnel and organizations, etc.

More routine, smaller actions may cost anywhere from a man-day or two of effort to a visit to the location for which the installation has requested support.

b. Real estate support requests will be quickly answered during any time of the year. Within a typical real estate division, it is standard for a representative of the office to telephonically contact the installation within 48 hours of receipt of a request for support. Often, a site visit to the installation will occur within that same period of time. Naturally, major acquisitions, disposals, or changes in utilization require substantial lead time to plan, coordinate, approve and execute.

#### **5-6. Examples of Real Estate Support Services.**

Many district real estate divisions began their military support functions before our entry into World War II. Some of their first actions involved the acquisition of land for U.S. Army Air Corps installations. Later, the mission shifted to support Army land-based forces and acquisition of land for Army division-sized installations. At the end of World War II actions focused on the disposal of installations, some acres of which are still in the public domain and are recapturable in the event of mobilization. Currently, real estate actions cover a broad range of support capabilities, such as:

- a. Assisting installations in leasing and outgranting programs.
- b. Management of an installations timber harvesting program.
- c. Preparation of site selection studies for U.S. Army and U.S. Air Force Reserve Centers.
- d. Assisting installations in negotiating mineral activities with private interests.
- e. Identification of wetland and flood-plain areas for communities located adjacent to Army installations.
- f. Negotiation of Air Compatibility Use Zone (ACUZ) for Air Force bases to maintain noise buffers in takeoff and landing zones.
- g. Disposal certification for installations planned for disposal as part of the present base closure initiative.

INSTALLATION SUPPORT REQUEST											
INSTALLATION: Fort Aggie	PROJECT NUMBER: TAMU-1979										
PROJECT TITLE: Outgrant, Kyle Field Training Area											
TYPE OF WORK: <input type="checkbox"/> PLANNING <input type="checkbox"/> ENVIRONMENTAL <input type="checkbox"/> STUDY <input type="checkbox"/> DESIGN <input type="checkbox"/> CONSTR MGMT <input checked="" type="checkbox"/> REAL ESTATE <input type="checkbox"/> A-E CONTRACT SELECTION <input type="checkbox"/> OTHER											
CURRENT WORKING ESTIMATE: _____ N / A											
BASIS OF ESTIMATE: _____ DATE PREPARED: _____											
DESCRIPTION OF WORK/SERVICE REQUIRED: <b>PLEASE BE SPECIFIC !</b>  Develop an outgrant of land in the Kyle Field training area for timber harvesting. Mr. Bonfire, Chief, Forestry Section is the point of contact for details regarding this action, which will involve approximately 3,280 acres in the southern portion of the training area.											
<b>SPECIAL CRITERIA/DESIGN REQUIREMENTS:</b> The outgrant should be prepared to permit selective cutting, at the installations discretion, of mature mixed pine and oak forest.											
PROJECT AUTHORIZATION: _____ DD 1391 <input checked="" type="checkbox"/> DA 4283 _____ OTHER											
CONSTRUCTION AGENT: <u>N/A</u> DISTRICT <u>N/A</u> INSTALLATION											
CRITICAL NEED DATES: SERVICE COMPLETE: _____ 26 Nov 91 DESIGN                    START: _____ COMPLETE: _____ CONSTRUCTION CONTRACT AWARD: _____ CONSTRUCTION START: _____ COMPLETE: _____											
AVAILABILITY OF AS-BUILT DRAWINGS:                    N / A											
AMOUNT OF START-UP DESIGN FUNDS ATTACHED:                    \$3,500.00											
INSTALLATION PROJECT MANAGER: _____ Rock Thegoodag											
TELEPHONE: (COM'L) _____ (409) 845-2217 _____ (AV) _____ 567-2217											
FACSIMILE: _____ (409) 845-1979 _____ OFFICE SYMBOL: _____ GIG-EM											
<table border="0" style="width: 100%;"> <tr> <td colspan="3" style="text-align: center;"><b>INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE</b></td> </tr> <tr> <td style="text-align: center;">SIGNATURE</td> <td style="text-align: center;">TITLE</td> <td style="text-align: center;">DATE</td> </tr> <tr> <td>Lawrence S. Ross</td> <td>DEH</td> <td>2 Jul 1991</td> </tr> </table>			<b>INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE</b>			SIGNATURE	TITLE	DATE	Lawrence S. Ross	DEH	2 Jul 1991
<b>INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE</b>											
SIGNATURE	TITLE	DATE									
Lawrence S. Ross	DEH	2 Jul 1991									

Figure 5-1. SAMPLE FORMAT-INSTALLATION SUPPORT REQUEST INVOLVING REAL ESTATE SUPPORT

## CHAPTER 6

### ARCHITECT-ENGINEER SUPPORT SERVICES

#### 6-1. Types of Services.

a. Types of Architect-Engineer Contracts. A district can provide a variety of architect-engineer (A-E) support services to an installation. Title 10 U.S.C. 4540 provides the authority for utilization of A-E services by the Secretary of the Army. 10 U.S.C. 2304 (a)(4) authorizes negotiation for professional services. A statutory limit of six percent for architectural- engineering services (primary services only) relating to public works or utility projects was established by 10 U.S.C. 2306d, as implemented by DoD FAR Supplement 36-606. Some of the various types of A-E contracts are described as follows:

(1) Fixed-Price Type Contract (FAR 16.201). A firm-fixed-price contract provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This type of contract places upon the contractor maximum risk and full responsibility for all costs and resulting profit or loss. It provides maximum incentive for the contractor to control costs and perform effectively and imposes a minimum administrative burden upon the contracting parties.

(2) Cost-Reimbursement Type Contract (FAR 16.301-1 & 2). This type of contract provides for payment of allowable incurred costs to the extent prescribed in the contract. These contracts establish an estimate of total cost for the purpose of obligating funds and establishing a ceiling that the contractor may not exceed (except at its own risk) without the approval of the contracting officer. Cost-reimbursable contracts are suitable for use only when uncertainties involved in contract performance do not permit costs to be established with sufficient accuracy to use any type of fixed-price contract.

(3) Letter Contracts (FAR 16.603). A letter contract is a written preliminary contractual instrument that authorizes an A-E to begin work immediately. Final terms of the contract must ordinarily be definitized within 180 calendar days after contract award. The negotiated agreement is then awarded as a modification to the letter contract, and is referred to as contract definitization.

EP 420-1-1  
31 Jan 92

The letter contract stipulates a not-to-exceed amount, and limits the amount that may be expended before definitization to no more than 40% of this amount. The not-to-exceed amount is determined by developing a Government cost estimate. The terms of the letter contract also limit the maximum liability of the Government in case of termination to 50% of the not-to-exceed amount. A letter contract may only be used when both of the following conditions are met:

(a) the negotiation of a definitive or defined scope of work and price is not possible in sufficient time to meet the Governments requirements, and

(b) the Governments interests demand that the A-E be given a binding commitment so contract performance can begin immediately.

Advance authority to utilize a letter contract must be obtained from HQUSACE. A request for authority to award a letter contract, in any amount, must include complete justification (except certain emergency/disaster situations), and shall be staffed through technical and legal elements, and submitted to HQUSACE through contracting channels. It is also important to note that the scope of work of a letter contract may not be modified after work has begun, without HQUSACE approval.

(4) Indefinite Delivery Contracts (AFARS 36.602). This type of contract is the primary means through which a district can support an installation. This type of contract is used when there is recurring demand for an item, but the timing and/or extent of the demand are not certain. The contract establishes all terms that are sure; however, orders are not placed until the need arises. Since this type of contract is such an important asset to an installation support program, an explanation of the selection, award and administration process is included in this section. And, since the contract can be administered by either the district or the installation, procedures for each method are addressed.

b. The Selection and Award of an Indefinite Delivery Contract ( with contract administration by the installation).

(1) The installation engineer formally requests that the district obtain an indefinite delivery contract for accomplishing architect-engineer services. The requesting letter details the type of service required: civil, electrical, mechanical, structural, architectural, environmental, life safety, sanitary, or a combination thereof.

The letter must also state who the proposed COR/ACOR will be. Funds to cover district costs for preparation, negotiation and award of the basic contract must also be provided with the initial request. In most cases the district has established a flat rate fee for this acquisition service.

(2) Upon receipt of an installations request, the district develops a synopsis for publication in the Commerce Business Daily (CBD). The synopsis appears in the CBD for one day and must allow at least 30 calendar days for interested A-E firms to submit a Standard Form 255 depicting their qualifications, experience and desire to be considered for the contract.

(3) The district will then invite the installation to nominate two individuals for appointment to the pre-selection and selection boards. Two individuals are necessary since the same person cannot serve on both boards.

(4) When the 30-day period has expired the district will convene a pre-selection board to review all SF 255's and other information available on the firms who responded to the synopsis. This board will disqualify or eliminate firms not meeting the minimum qualifications needed or contract requirements specified in the CBD.

(5) The selection board will further evaluate the firms recommended by the pre-selection board and will rank the top firms for a negotiating order.

(6) Negotiate with the A-E or A-E's in the approved order of the selection board's preference to establish direct salary rates, general and administrative (G&A) overhead and overhead on direct labor that the firm intends to utilize throughout the life of the contract.

(7) The contract includes a provision that the Government obligates itself for no less than \$2,500 during the life of the contract, therefore the installation must ensure such funds are available at the district prior to the anticipated award date.

(8) If negotiations are successful and the minimum \$2,500 is on hand the indefinite delivery contract may be awarded.

(9) Upon award, the Contracting Officer signs a letter designating the installation engineer, the Deputy or Chief, Engineering Plans and Services Division as the contracting officer's representative (COR) for the contract.

EP 420-1-1  
31 Jan 92

Contracting officer authority is retained by the district however, administrative contracting authority can be transferred to the installation Directorate of Contracting. A copy of the contract and record of negotiations is furnished the COR, and procedures are established for processing and executing delivery orders.

(10) In accordance with ER 715-1-15, steps 1 through 8 above will be accomplished in approximately 109 calendar days for a standard indefinite delivery contract without an option year.

c. Selection and Award of an Indefinite Delivery Contract (with contract administration by the district). The procedures are the same except that:

(1) The letter authorizing the selection is generated within the district based upon anticipated or known requirements which will be requested of the district.

(2) Inviting installation representatives to participate on the selecting boards may be more complex if the A-E is to be utilized at a number of installations.

(3) The \$2,500 necessary for contract award may not be available until an actual request for support is received from a supported installation.

(4) COR responsibilities are retained at the district.

d. Administration of Delivery Orders. Basic procedures are as follows:

(1) When a need arises the COR or a project manager contacts the A-E after determination is made that the service can be accomplished by delivery order. A meeting is scheduled, at the project site, to clarify or establish a statement of work. This meeting should be attended by the project manager, the using agency or units, the installation representative and someone from the area/resident engineer office.

(2) Design criteria are furnished to the A-E, including user-generated requirements. The most important thing to be provided at this time is a complete project scope of work and the description of A-E services to be performed.

(3) A detailed record is made of the pre-design conference. The A-E either prepares or signs this record indicating that the scope of the proposed contract is understood and necessary design criteria have been received.

(4) A Government cost estimate is prepared in preparation for price negotiations between the district and the A-E. The Government estimate is prepared using the detailed analysis method. A profit of between 7% and 15% is allowed the A-E as part of the estimate. Primary design costs are limited by law to 6% or less of the estimated project cost.

(5) The A-E is requested to submit a proposal and negotiations are conducted between the Government and the A-E in accordance with district procedures.

(6) Pre-negotiation and post-negotiation Business Clearance Memoranda (BCM) are required for contracts over \$100,000 and sometimes utilized for individual delivery orders. Together, they incorporate a record of the decisions, actions, and approvals that are involved in a negotiated procurement action.

(7) When negotiations have been successfully concluded and all necessary documents have been signed, a delivery order is prepared at the district and signed by the A-E and then the contracting officer. When the fully executed contract is transmitted to the A-E, a notice to proceed with the work is given.

## **6-2. Regulatory and Statutory Guidelines.**

a. Public Law 92-582, 92nd Congress, H.R. 12807, 27 Oct 72, The Brooks Bill.

b. Public Law 87-653, Truth in Negotiation Act, as modified by Public Law 98-369, The Competition in Contracting Act of 1984.

c. Federal Acquisition Regulations (FAR) 6.303-2, 14.208, 14.209, 15.804, 15.805, 15.808, 16.403-2, 16.2, 16.202, 16.603, 16.702, 16.703, 31.105, 31.2, 31.205-46, 36.605, 43.101, 43.103, 52.214, 52.236-23, 52.243, 53.246, 53.301-308, 5.3.

d. DoD Federal Acquisition Regulation Supplements (DFARS) 15.902, 16.101, 36.601, 36.602, 36.604, 36.605, 36.606.

e. Army Federal Acquisition Regulation Supplement (AFARS) 36.602-90.

f. Engineer Federal Acquisition Regulation Supplement (EFARS) 36.602-2, 36.602-90.

g. ER 715-1-10, A-E Responsibility Management Program.

h. ER 715-1-15, Time Standards for the Architect-Engineer Acquisition Process, 15 February 1991.

EP 420-1-1  
31 Jan 92

**6-3. Who Provides These Services.**

For architect-engineer services, the Installation Support Coordinator will forward the installations request to either the Contracting Division or to the A-E Contract Support or Engineer Support Section of the Engineering or Programs and Project Management Division. In all cases, the Installation Support Coordinator will receive, coordinate and monitor the installations request.

**6-4. How To Obtain These Services.**

Use an Installation Support Request Form, or formal letter to the district Installation Support Coordinator to initiate a request for service. The installation should be prepared to supply the following:

a. A letter or Installation Support Request Form prepared in general accordance with the sample format (Figure 6-1) at the last page of this chapter which gives a narrative summary of what professional services and qualifications are required. Typical or standard selection factors are as follows:

(1) Professional qualifications necessary for satisfactory performance of required services.

(2) Specialized experience and technical competence in the type of work required.

(3) Capacity to accomplish the work in the required time.

(4) Past performance on contracts with Government agencies in terms of cost control, quality of work and compliance with performance schedules.

(5) Location in the general geographic area of the project and knowledge of the locality.

(6) Volume of work previously awarded to the firm by DoD.

b. Who the installation desires to serve as COR and a statement of their qualifications, if not previously furnished.

c. Whether the installation engineer wishes to participate on the pre-selection and selection boards, and if so, who the representatives will be.

d. Document transmitting funds to the district office.

**6-5. Typical Funding and Time to Accomplish the Service.**

a. Funding. Funding is required for each of the three phases of the indefinite delivery contract cycle. The three phases are: the selection process, contract award, and processing and award of individual delivery orders. Funding required at each phase is as follows:

(1) The selection process. When an installation requests that a district select an indefinite delivery contract for exclusive use by an installation, the district charges a fee to cover all costs associated with the selection process. This fee funds all activities from receipt of the installation's request, to contract award. This fee typically ranges from \$4,000 to \$6,000.

(2) Contract award. Once the selection process is complete and approved for award, \$2,500 is required to obligate/award the basic contract. These funds cover the Government commitment that the selected A-E will receive, as a minimum, \$2,500 throughout the life of the contract. The installation normally provides these funds by a DA Form 2544 or a MIPR.

(3) Processing and award of individual delivery orders. The district also charges a fee to process/award each individual delivery order. This fee varies significantly from district to district depending upon the degree of assistance/support requested by the installation. District assistance can be simply staffing a delivery order (negotiated, packaged and funded by the installation) to the district Contracting Officer for signature. In some cases districts assist in project scope development and/or negotiations, and prepare delivery order packages for staffing and award. Therefore, this processing/award fee may range from \$200 to \$1,500 per delivery order.

b. Time. Selection time for a single year, \$400,000 maximum fee indefinite delivery order contract averages four months. Selections with unique requirements, or those requiring an audit, will take more time. Detailed timelines for indefinite delivery and other contract types are contained in ER 715-1-15.

**6-6. Examples of Architect-Engineer Support Services.**

Table 6-1 defines the activities and time standards for the A-E selection process. A sample of how an installation would request architect-engineer support/selection is depicted in Figure 6-1.

**Table 6-1. Maximum Acceptable Time Standards for Indefinite Delivery A-E Contracts.**

Activity	Contract Cost					
	\$500,000 or less			Greater than \$500,000		
	DUR (a)	ES (b)	LF (c)	DUR (a)	ES (b)	LF (c)
1. Project Initiation	0	1	1	0	1	1
2. Project Scope	0	1	1	0	1	1
3. Criteria Development	2	1	60	2	1	74
4. Acquisition Plan (d)	0	1	1	0	1	1
5. Synopsis	10	1	10	10	1	10
6. CBD Announcement	30	11	40	30	11	40
7. Pre-selection	10	41	50	10	41	50
8. Selection	10	51	60	12	51	62
9. Higher Authority Selection Approval	0	60	60	12	63	74
10. Security Clearance	0	60	60	0	74	74
11. A-E Selection Notification	5	61	65	5	75	79
12. Criteria Review by A-E	0	65	65	0	79	79
13. Pre-proposal Conference	0	65	65	0	79	79
14. Revised Scope of Work and Project Schedule	0	65	65	0	79	79
15. Government Estimate	5	66	79	10	80	89
16. A-E Proposal	14	66	79	14	80	93
17. Technical Analysis (e)	2	80	81	2	94	133
18. Audit	0	79	79	45	94	138
19. Pre-negotiation Analysis (e)	2	82	83	5	139	143
20. Pre-BCM Review & Approval (e)	4	84	87	6	144	149
21. Negotiation	7	88	94	8	150	157
22. Funds Certification	2	95	104	2	158	167
23. Negotiation Documentation	5	95	99	5	158	162
24. Post-BCM Review & Approval (e)	5	100	104	5	163	167
25. Final Contract Preparation	9	95	104	9	158	167
26. Award Authorization	0	104	104	0	167	167
27. Contract Award	5	105	109	5	168	172

Notes:

- a. Maximum activity duration (DUR) in calendar days.
- b. Early Start (ES).
- c. Late Finish (LF).
- d. An acquisition plan is required only for contracts with an estimated cost of \$5 million or more per annum, or a total contract value of \$15 million or more.
- e. This activity is required only for contracts with an estimated contractual cost exceeding \$100,000.
- f. This table was extracted from ER 715-1-15.

INSTALLATION SUPPORT REQUEST								
INSTALLATION:	Fort Vernon	PROJECT NUMBER: VHS-1975						
PROJECT TITLE: Indefinite Delivery Contract Selection								
TYPE OF WORK:	<input type="checkbox"/> PLANNING <input type="checkbox"/> ENVIRONMENTAL <input type="checkbox"/> STUDY <input type="checkbox"/> DESIGN <input type="checkbox"/> CONSTR MGMT <input type="checkbox"/> REAL ESTATE <input checked="" type="checkbox"/> A-E CONTRACT SELECTION <input type="checkbox"/> OTHER							
CURRENT WORKING ESTIMATE: n / a								
BASIS OF ESTIMATE: _____ DATE PREPARED: _____								
<b>DESCRIPTION OF WORK/SERVICE REQUIRED: PLEASE BE SPECIFIC !</b> Selection of an A-E Indefinite Delivery Contract to be administered by this DEH. A-E should have prime capabilities in Civil Engineering and Surveying since the majority of the anticipated work will be paving repair, drainage, parking and hardstand repair, and some new rigid/flexible pavement design. Mech, Elec, Arch and Environmental are also desired from the prime A-E or subcontract. Use of standard CBD qualification/selection factors is acceptable (no special requirements).								
<b>SPECIAL CRITERIA/DESIGN REQUIREMENTS:</b> Request COR authority for Mr. Maroon (Ch, EPSD) and Ms. White (Ch, ESB). COR qualification statements are attached.								
PROJECT AUTHORIZATION: _____ DD 1391 _____ DA 4283 <input checked="" type="checkbox"/> OTHER								
CONSTRUCTION AGENT: _____ DISTRICT <input checked="" type="checkbox"/> INSTALLATION								
CRITICAL NEED DATES: SERVICE COMPLETE: 1 AUG 91 DESIGN START: _____ COMPLETE: _____ CONSTRUCTION CONTRACT AWARD: _____ CONSTRUCTION START: _____ COMPLETE: _____								
AVAILABILITY OF AS-BUILT DRAWINGS: N / A								
AMOUNT OF START-UP DESIGN FUNDS ATTACHED: \$5,000.00								
INSTALLATION PROJECT MANAGER: S. R. NEDRAEB								
TELEPHONE: (COM'L) (202) 405-5084 (AV) 582-5084								
FACSIMILE: (202) 405-3672 OFFICE SYMBOL: LION-DEH-Z								
<b>INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE</b> <table> <tr> <td>SIGNATURE</td> <td>TITLE</td> <td>DATE</td> </tr> <tr> <td>COL Joe Wilbarger</td> <td>DEH</td> <td>12 Mar 91</td> </tr> </table>			SIGNATURE	TITLE	DATE	COL Joe Wilbarger	DEH	12 Mar 91
SIGNATURE	TITLE	DATE						
COL Joe Wilbarger	DEH	12 Mar 91						

Figure 6-1. SAMPLE FORMAT-INSTALLATION SUPPORT REQUEST INVOLVING A-E CONTRACT SUPPORT

## CHAPTER 7

### ENGINEERING SUPPORT SERVICES

#### 7-1. Types of Services.

a. Studies and Investigations. Districts are involved in special studies and investigations as varied as the imagination of the requestor. Examples are: seismic and structural analyses, building and land utilization studies, economic payback studies for the Energy Conservation Investment Program, various installation utilities systems studies and plans, electrical protective system studies, electric power load studies, corrosion control inspections and surveys, the Energy Engineering Analysis Program (EEAP), materials testing and evaluation, evaluation of insulation values in various facilities, soils and foundation analyses, hydraulics and hydrological studies of aquifers, airfield aircraft parking and hardstand studies, Commercial Activities Studies for certain DEH functions, component inspection for family housing, and scope of work development for any type of project.

b. Dam and Bridge Inspection. A special capability is the evaluation of dams and bridges, regardless of the age of the structure or background regarding its design or construction.

c. Design. USACE districts are known for their mission as the design and construction agent for Military Construction, Army (MCA), Military Construction, Air Force (MCAF), Military Construction, Army Reserve (MCAR), Defense Logistics Agency (DLA) and industrial projects for the installations within their geographic area of responsibility. However, in addition to these programs, Installation Support is also a USACE mission assigned by HQDA (AR 420-10 and AR 10-87). Under the Installation Support Program, districts support the installation engineer in the execution of reimbursable funded programs such as Operations and Maintenance, Nonappropriated Fund, Family Housing, Industrial appropriations, and any other project or requirement that the installation identifies to the district. The district can provide scope development, design, contracting and construction services (partial or all) for these type projects. The district must understand the importance of each installation project, their time and cost sensitivity, and respond quickly to provide the type of service requested. The programming, project initiation process, and design cycle work flow for a reimbursable project varies greatly from that utilized for MILCON projects. A comparison of Reimbursable vs. MILCON procedures is shown on the next three pages in Figure 7-1 through Figure 7-9.

PROJECT DEVELOPMENT FLOW DIAGRAMS FOR ARMY AND AIR FORCE MILCON AND REIMBURSABLE FUNDED PROJECTS

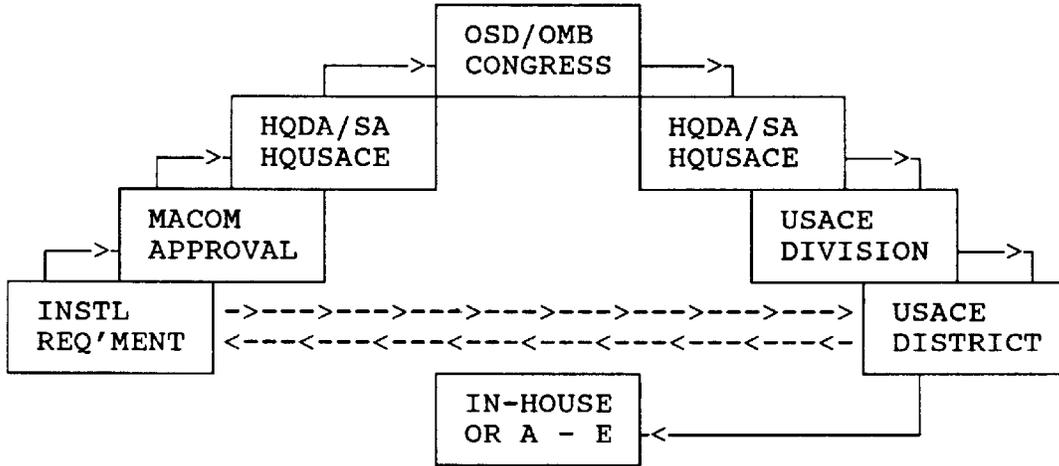


Figure 7-1. U.S. Army MILCON Project Development

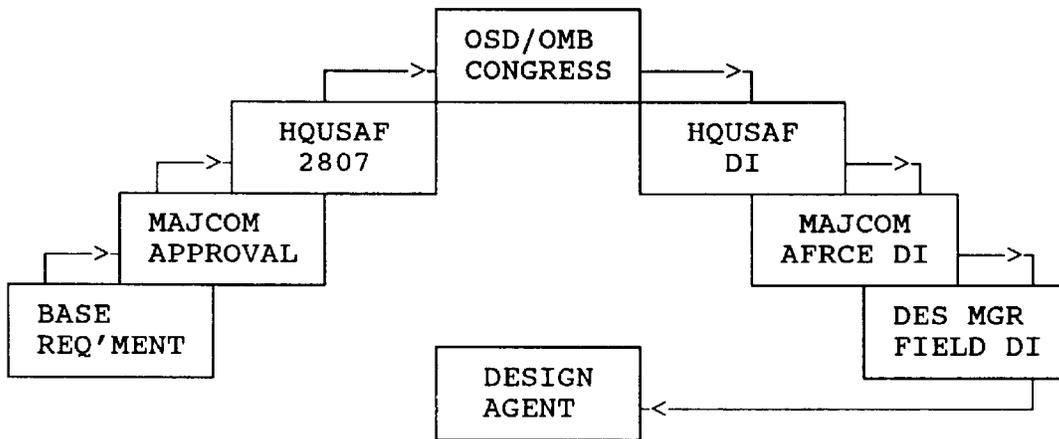


Figure 7-2. U.S. Air Force MILCON Project Development

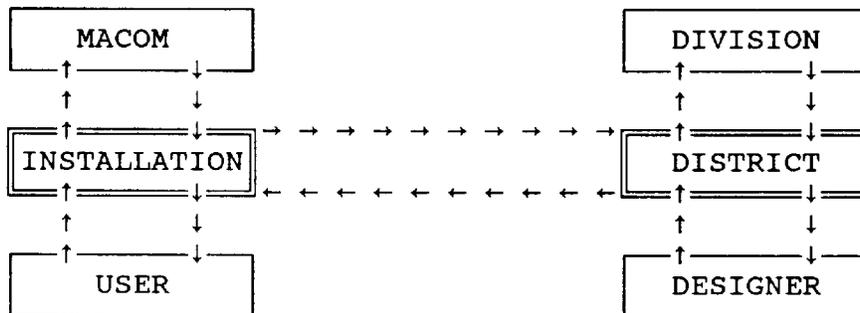
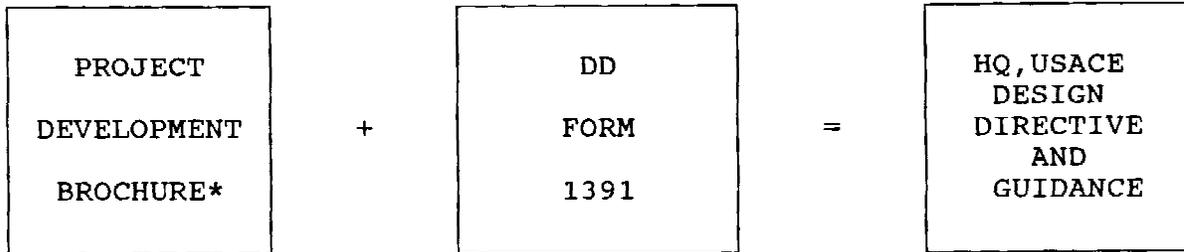


Figure 7-3. Reimbursable Funded Project Development

DESIGN INITIATION DOCUMENTATION FOR ARMY AND AIR FORCE MILCON  
AND REIMBURSABLE FUNDED PROJECTS



\* OPTIONAL IN SOME MACOM'S

Figure 7-4. U.S. Army MILCON Project Documentation

\*\*\*\*\*

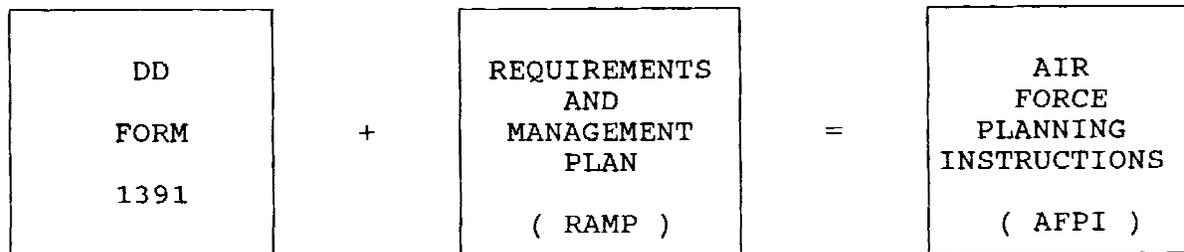


Figure 7-5. U.S. Air Force MILCON Project Documentation

\*\*\*\*\*

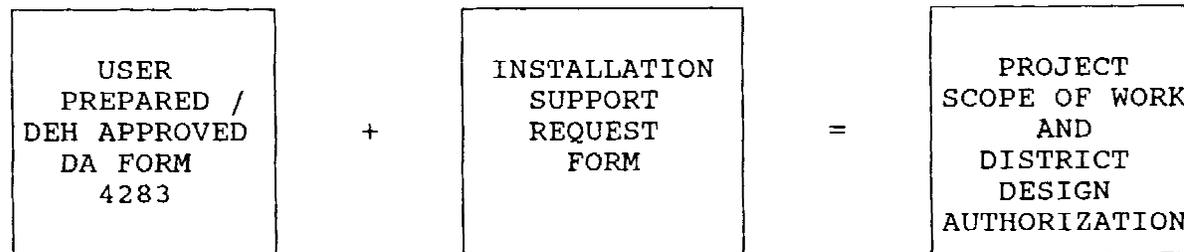
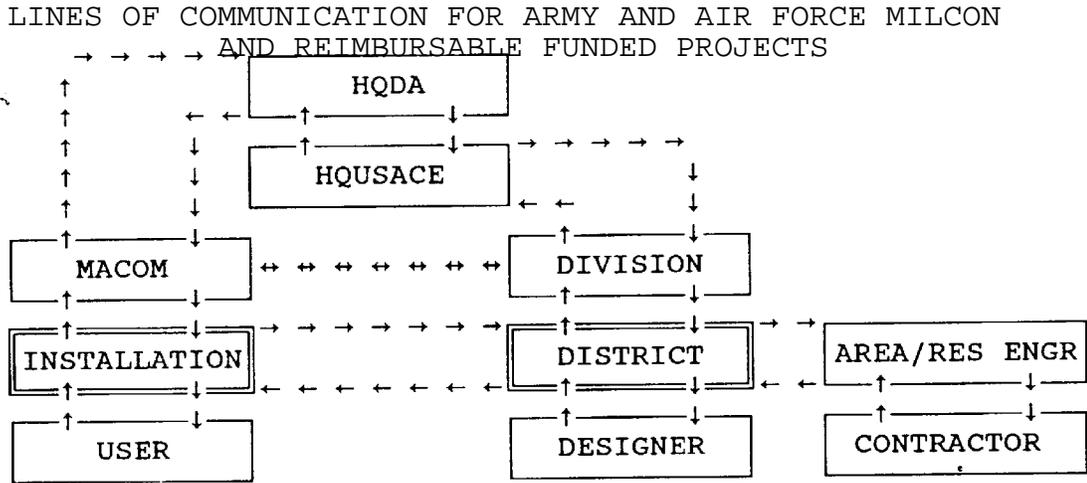
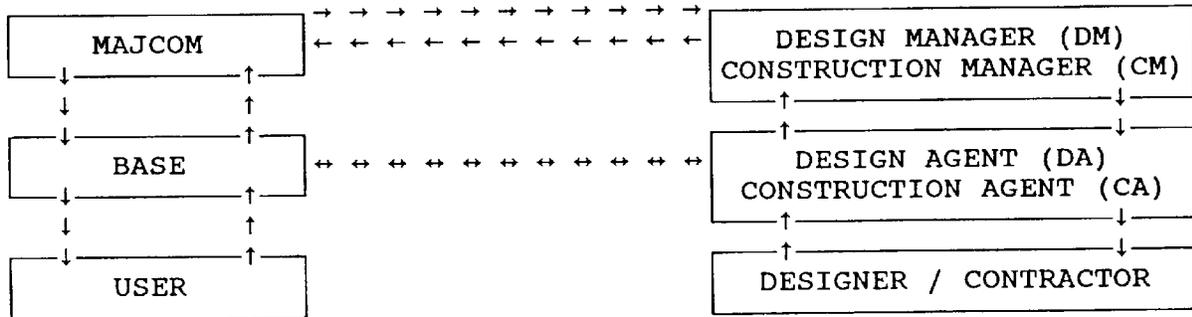


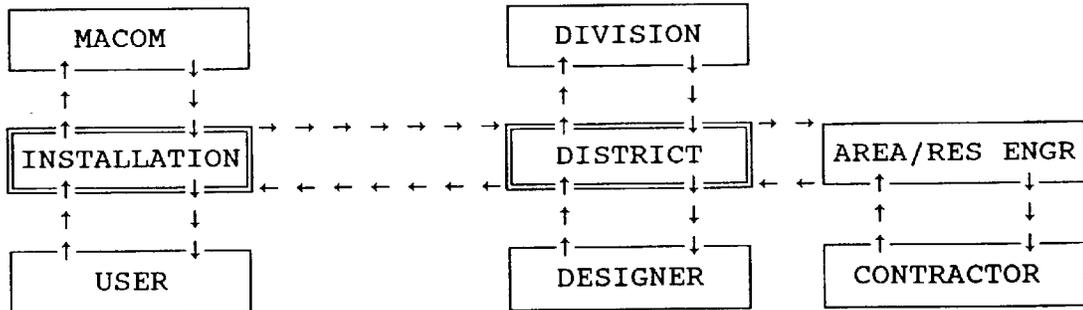
Figure 7-6. Reimbursable Funded Project Documentation



**Figure 7-7. Lines of Communication - U.S. Army MILCON Project Design and Construction**



**Figure 7-8. Lines of Communication - U.S. Air Force MILCON Project Design and Construction**



**Figure 7-9. Lines of Communication - Reimbursable Funded Project Design and Construction**

d. Reviews. In addition to the reviews normally conducted on work supervised by the district, the district can assist with the review of locally prepared components of the installation master plan/base comprehensive plan and mobilization master plan, annual work plan, land management plan, DD forms 1391, project development brochures and project definition documents, installation-prepared designs, surveys, studies to include value engineering studies, procurement actions relating to utility services, construction contracting documents and construction management activities.

e. Surveying. Districts can accomplish topographical mapping, field engineering, geodetic and plane surveys, profiles and cross sections, and cadastral surveys. Each military construction project normally requires these data to ensure the proper relationship between existing and new construction. Installations can save both time and money by using survey data obtained as part of major construction projects or Operations and Maintenance funded projects.

f. Interior Design Services. A relatively new district service is interior design. This service may be available from the direct support district, or from the center of expertise for interior design at the Omaha District. Interior design is a part of the Army Communities of Excellence Program and the district can provide the installation and its customers with innovative ideas for rehabilitating existing space and planning attractive interiors in new facilities.

g. Cost Engineering. Districts can prepare estimates for construction programming documents, pre-concept control data, various estimates as design proceeds, and current working estimates for construction projects.

h. Specifications. Districts can also prepare construction specifications for major construction projects and for reimbursable funded projects. Techniques such as Simplified Design Methods and Abridged Corps of Engineer Guide Specifications (ACEGS) were recently developed to streamline and reduce the cost for a district to prepare designs for reimbursable funded project.

i. Forensic Engineering. Many installations have one or more facilities suffering from conditions such as progressively cracking walls, abnormal foundation settlement, or expansion and contraction causing roof leaks. Installations should consider analyzing such items to properly fix the problem or avoid them in the design of alteration projects or constructing new facilities.

EP 420-1-1  
31 Jan 92

j. Value Engineering (VE). Millions of dollars are saved yearly by VE studies that result in alternative construction techniques and state of the art materials. The District has a value engineering staff that performs VE studies of projects and acts as a collection point on new and innovative means of performing construction. Some VE studies are performed by A-E firms. Mandatory VE review of military construction projects of \$2,000,000 and over is a current requirement. This service is available to your installation and should be included early in the design process, particularly if funding problems exist.

k. Technical Criteria. The District has the capability to provide information on technical criteria (commercial, local, federal, DOD, Army, Air Force, professional society/association, etc.) to you and your installation customers. A new compact disk read only-memory (CD-ROM) system for storage and retrieval of technical criteria is now available at the District office, and is also available for subscription by installation design personnel.

#### **7-2. Regulatory and Statutory Guidelines.**

An abbreviated list of guidelines applicable to engineering support services is presented as follows:

- a. AR 5-3, Installation Management and Organization.
- b. AR 210-50, Family Housing Management.
- c. AR 415-15, Military Construction, Army (MCA) Program Development.
- d. AR 420-10, Management of Installation Directorates of Engineering and Housing.
- e. DA Pam 210-3, Commander's Handbook for Installation and Activity Consolidations, Realignment, Reductions and Closures.
- f. DA Pam 420-8, Facilities Engineering Management Handbook.
- g. DA Pam 420-9, Installation Commander's Executive Guide to Directorate of Engineering and Housing Operations.

**7-3. Who Provides These Services.**

For engineering support services, the district Installation Support Coordinator will forward the installations request to either the Technical Engineering Division or to the Project Management Branch of the Engineering/Programs and Project Management Division. In all cases, the Installation Support Coordinator will receive, coordinate and monitor the installation request.

**7-4. How To Obtain These Services.**

Use an Installation Support Request Form, call or write to the district Installation Support coordinator to initiate a request for service. The installation should be prepared to supply the following:

- a. An Installation Support Request Form. This form gives a narrative summary of work or services required. After the support request is evaluated:
- b. Copies of installation records needed to provide the service.
- c. Applicable documents, correspondence, or regulations.
- d. Document transmitting funds to the district office.

**7-5. Typical Funding and Time to Accomplish the Service.**

a. The cost and time to accomplish engineering services vary significantly based upon the scope of the request. Therefore, a district is unable to publish fixed cost or timeline data that will accurately apply to each service that an installation could request. However, some typical or average costs (Figure 7-10) and timelines (Figure 7-11 through Figure 7-14) for some of the more traditional activities are presented in the figures that follow. These examples will be beneficial to the installation as guideline, or order of magnitude costs for planning or programming purposes.

SERVICE	TYPICAL PROJECT EXECUTION METHODS									
	1		2		3		4		5	
	ORG	% OF ECC	ORG	% OF ECC	ORG	% OF ECC	ORG	% OF ECC	ORG	% OF ECC
ENGINEERING/DESIGN	D	10.0	D	10.0	D	10.0	I	--	I	--
ENGINEERING MGMT	D	2.5	D	2.0	D	2.0	I	1.0	I	--
TECHNICAL REVIEW	D	3.5	D	3.0	I	--	D	2.0	I	--
PROCUREMENT	D	1.0	I	--	I	--	D	1.0	D	2.0
CONSTRUCTION MGMT	D	8.0	I	--	I	--	D	8.0	I	--
TOTAL FEE	-	25.0	-	15.0	-	12.0	-	12.0	-	2.0

**LEGEND:** ORG = ORGANIZATION EXECUTING THE SERVICE.  
% OF ECC = PERCENTAGE OF ESTIMATED CONSTRUCTION COST.  
D = DISTRICT I = INSTALLATION

**NOTES:**

1. Construction Management percentage is fixed, others are estimates that may vary from project to project.
2. Engineering/Design percentage typically reduces to 8% when estimated construction cost exceeds \$ 1,000,000.
3. For designs initiated late in the fourth quarter, provide engineering/design cost and one-half of engineering management fee with current year funds. Provide following year funds for the remaining elements.
4. Construction Management percentage includes 8.0% for Supervision & Administration (S&A) and 0.5% Engineering During Construction (EDC). The S&A is 8.5% for OCONUS.
5. Procurement fee includes reproduction cost, solicitation, surveys, evaluation and construction contract award.

Figure 7-10. Typical Reimbursable Project Execution Costs.

Other example cost guidelines for non-design related engineering services are as follows:

TASK OR ITEM OF WORK	APPROX. COST
Establish an Indefinite Delivery A-E Contract.	\$ 5,000
Processing cost per Delivery Order.	\$ 500
Payback analysis for ECIP project.	\$ 5,000
Structural analysis for one floor of permanent building.	\$10,000
Provide drainage requirements for creek.	\$ 5,000
Perform foundation analysis for building site.	\$10,000
Electrical distribution analysis and plan for an installation.	\$100,000

b. Funding for engineering services is normally reimbursable, from the installation to the district, except in the case of design for military construction projects and special programs, e.g., ECIP, Environmental Audit Baselines. If centralized, nonreimbursable program funds are available from HQUSACE, the Installation Support Coordinator will attempt to utilize these where appropriate.

c. Performance time for engineering services is, to a large extent, governed by procurement time. Time to award a contract for A-E services is approximately 120 days, if a DCAA audit is not required. Since the majority of the installation support requests involve reimbursable funded projects, with single year funding, this 120-day selection time could jeopardize successful project completion in a timely manner. Therefore, each district must ensure that adequate indefinite delivery type contracts are on-hand, at the district, to handle potential installation requests. The time to accomplish an engineering study or design after the A-E has been selected can vary from a month or less for a small project to over a year for a complex study or design. Time required for engineering studies, surveys, tests and evaluation is somewhat more flexible, depending on the scope of the requirement.

EP 420-1-1  
31 Jan 92

In any case, the installation must be assured that the district will initiate action on each request in a timely manner and that any necessary visits from those who will provide the service will occur within ten working days after a request is received at the district.

d. Time Required for Delivery of Engineering Services. Installations should be encouraged to submit requests for design services for Operation and Maintenance or reimbursable funded projects as soon as a firm requirement exists and funds are available. Ideally, design projects requiring year end construction contract award should be submitted to the district by the fourth quarter of the previous fiscal year, or the start of fiscal year when construction contract award is required. However, most districts are, as an exception to policy, able to handle previously unknown requirements on a case by case basis when received later in the fiscal year. Other requests for engineering services, such as studies and investigations, are usually not so time-critical because they have shorter acquisition lead times or do not require follow-on construction contract award at year end.

#### **7-6. Examples of Engineering Support Services.**

a. Depicting examples of typical engineering support services could be a boundless task. The type of services requested by installations should be as broad as the imagination of the requestor. Therefore, instead of presenting examples of engineer support requests at the end of this chapter, the processes associated with accomplishing such requests are presented. Knowledge of these processes will assist the installation engineers in their planning efforts and emphasize their role in the process the district takes to complete their requested support action.

b. A guide depicting when the installations should request district engineering support requests, as well as timelines for a typical study, design and the solicitation for construction contract award process, are as follows.

TYPE OF DISTRICT SUPPORT SERVICE	50% OF FFY WORKLOAD			
	75% OF FFY WORKLOAD			
	100% OF CFY WORKLOAD			
	CFY DESIGN AWARD FOR FFY CONSTRUCTION AWARD			
DISTRICT DESIGN, PROJECT MGMT, TECH REV & CONSTR CONTR AWD	15 JUN	01 AUG	15 NOV	01 AUG
DISTRICT DESIGN, PROJECT MGMT, TECH REV & INSTL CONSTR CONTR AWD	15 MAY	01 JUL	15 OCT	01 AUG
DISTRICT CONSTR CONTR AWARD OF OFF-THE-SHELF DESIGN OR INSTL PREPARED DESIGN	----	----	01 JUN	----
STUDY / REPORT	SEE	NOTE	#5	
CFY = CURRENT FISCAL YEAR      FFY = FOLLOWING FISCAL YEAR				
<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>1. APPLICABLE TO TYPICAL ACQUISITIONS, NOT A SECTION (8A) AWARD, COST CONTRACT, NEGOTIATED PROCUREMENT, REQUEST FOR PROPOSAL OR OCONUS HOST NATION ACQUISITION.</li> <li>2. ASSUMES COORDINATED, FUNDED AND APPROVED PROJECTS ARE FURNISHED TO THE DISTRICT BY THE ABOVE TARGET DATES.</li> <li>3. ASSUMES USE OF EXISTING INDEFINITE DELIVERY CONTRACT FOR DESIGN AWARDS AND INVITATION FOR BIDS FOR CONSTRUCTION AWARDS.</li> <li>4. EXCEPTIONS TO THE ABOVE TARGET DATES MAY BE MADE ON A CASE-BY-CASE BASIS.</li> <li>5. SUBMITTED AS REQUIRED TO ALLOW ADEQUATE TIME FOR COMPLETION BY DESIRED DATE ( SEE FIGURE 7-12 ).</li> </ol>				

Figure 7-11. Target Dates for Installation Submission of Engineering Support Requests.

## CHAPTER 8

### CONSTRUCTION MANAGEMENT

#### 8-1. Types of Services.

a. The primary functions of the district Construction Division are quality assurance, contract administration, funds control, and construction project management. The Chief, Construction Division supervises the district construction activities. This individual advises contracting officers on construction management matters and is directly responsible to the district commander for management of assigned construction programs (including the quality, cost and timeliness of the facilities constructed) and for the performance and operation of designated facilities until they are formally accepted by the user.

b. The area or resident engineer is charged with administering construction contracts and is in daily contact with the contractor. This individual is formally appointed by the contracting officer as the administrative contracting officer (ACO) with specific authorities and monetary limitations for each contract administered by that office.

c. The construction manager, located in the construction division at the district office, provides the interface between the district engineering division, the construction division, the life cycle project manager, and the area/resident engineer and the district office.

d. Working together, the above mentioned team members have the primary responsibility of accomplishing the following activities in support of an installation's construction requirement:

(1) Quality Assurance. This function involves enforcement of the technical provisions and quality control provisions of the contract. The Corps Quality Assurance/Quality Control system is described in ER 1180-1-6.

(2) Quality Assurance for Hazardous and Toxic Waste Program. This type of quality assurance differs technically from the provisions found in a design and construction contract. Presently, some districts obtain the assistance of Omaha District (a USACE Center of Expertise for HTW projects) to provide these services.

EP 420-1-1  
31 Jan 92

(3) Supervision and Administration During Construction. Supervision and administration are provided by the area/resident engineer and district construction project manager in accordance with the relationship described above.

(4) Warranties. ER 415-345-38, Construction Transfer and Warranties, prescribes procedures for the transfer of completed construction to the installation and for the implementation of warranties. It also requires the district to correct design defects discovered by the installation engineer after transfer by the most expedient means. Design defects discovered in this manner, or as a result of periodic joint warranty inspections performed at four months and nine months after transfer, are recorded and entered in the Construction Evaluation Reporting System (CERS).

(5) Construction Contractor Performance Evaluation. The Corps utilizes a systematic approach to evaluating, recording and reporting construction contractor performance. The objective of this process is to avoid doing business with nonresponsible contractors. The system is known as the Construction Contractor Appraisal Support System (CCASS). Both interim and final performance evaluations are entered into the system and the resultant information is used to screen bidders on current and future construction solicitations.

(6) Architect-Engineer Title II Services. An A-E contract may be structured to contain an option for "Title II" services. These services provide for assistance by the A-E to the government during construction and may include visits to the construction site for inspection of the work or other assistance, review of shop drawings, and other contract submittals, source inspection and test witnessing at a supplier's plant, or engineering and design during construction. The construction manager will usually be the design project manager's point of contact for the exercise of the contract option, funding, monitoring of A-E performance, and payment. Very early coordination is required during contract development to include the Title II option and ensure that the services needed by the construction supervisor will be provided.

(7) Architect-Engineer Responsibilities. The degree of reliance on the A-E to check their designs and assure a quality job has necessarily increased in recent years. The A-E is paid to do a job and profit is provided with due consideration for risk.

Therefore, a professional and impartial review by district engineering division personnel and the design project manager is accomplished to determine the quality of the A-E's work, the existence of any design deficiencies, and if there is any A-E liability involved. (NOTE: ER 715-1-10 establishes a systematic and formalized approach to investigating and pursuing A-E liability. This process improves future designs by causing better A-E quality assurance procedures implementation during the design process.)

(8) Change Orders. During construction, the need for a change to the project may occur. There are two principal types of change order requests. The first is called "operability" changes, which are unavoidable changes that are required to construct a complete and operable facility. Such changes originate from unforeseen factors discovered during the design and/or construction of the project. The other type of change order request is called "user originated," which is an elective or enhancement nature change, as opposed to an operability necessity, that are originated at the installation or Major Command. Changes relating to incorporation of Major Command, installation, or using organization criteria, mission changes, or facility use requirements are considered as user originated changes.

(9) Figure 8-1 depicts some of the detailed tasks involved in the life cycle of the construction contract management process.

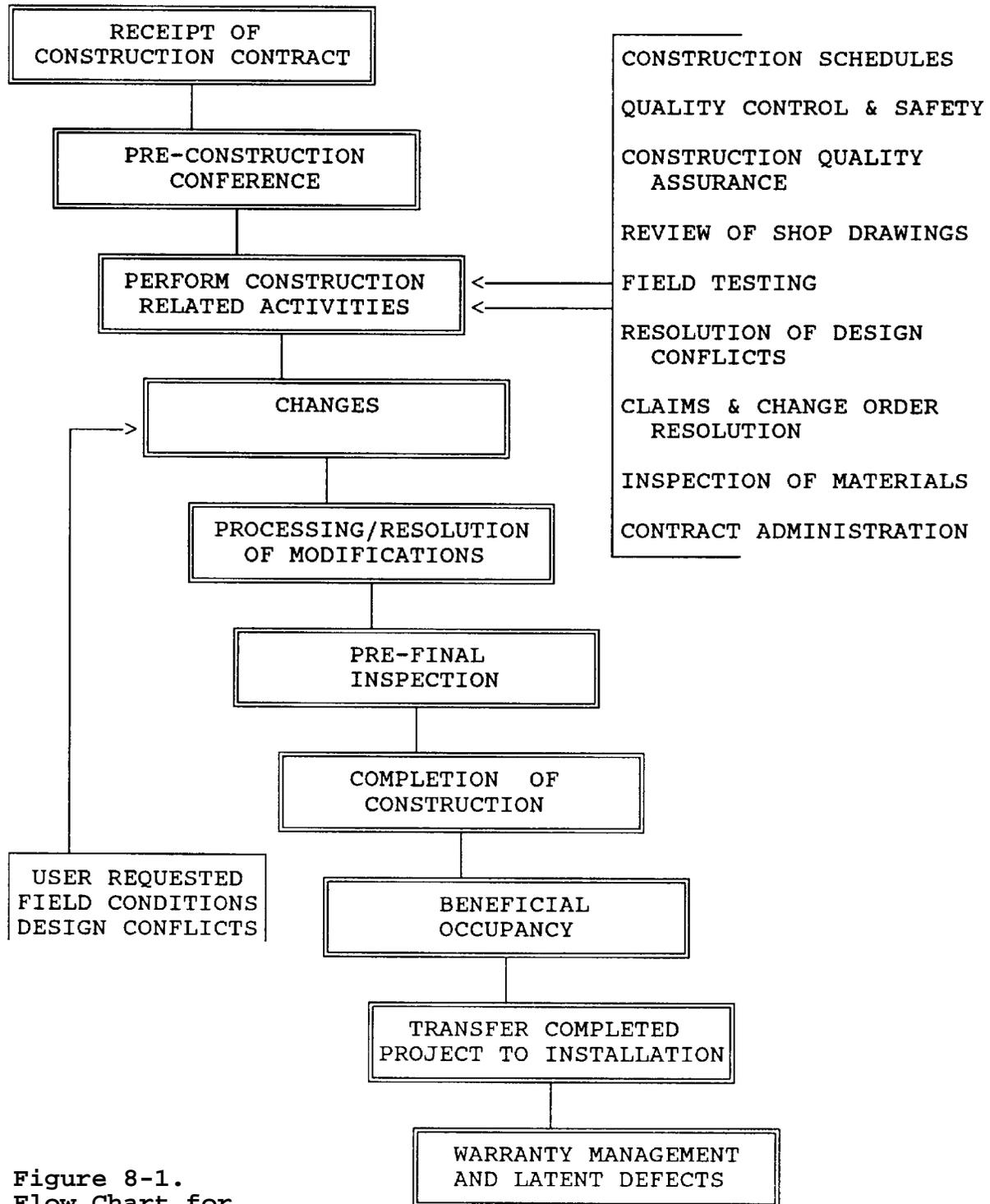


Figure 8-1.  
Flow Chart for  
Construction Management

**8-2. Regulatory and Statutory Guidelines.**

a. Federal Acquisition Regulations (FAR) 6.303-2, 14.208, 14.209, 15.804, 15.805, 15.808, 16.403-2, 16.2, 16.202, 16.603, 16.702, 16.703, 31.105, 31.2, 36.605, 43.101, 43.103, 52.214, 52.236-23, 52.243, 53.246, 53.301-308, 5.3.

b. DoD Federal Acquisition Regulation Supplements (DFARS) 15.902, 16.101, 36.601, 36.602, 36.604, 36.605, 36.606.

c. Army Federal Acquisition Regulation Supplement (AFARS) 1.691-3.

d. Engineer Federal Acquisition Regulation Supplement (EFARS) 15.808, 36.605/90, 36.606/95, part 43.

e. AR 415-20, Military Construction Program Management.

f. ER 715-1-10, A-E Responsibility Management Program.

**8-3. Who Provides These Services.**

For construction management support services, the district Installation Support Coordinator will forward the installation request either to the Construction Division or to the local area or resident engineer's office. In all cases, the Installation Support Coordinator will receive, coordinate and monitor the installation request.

**8-4. How To Obtain These Services.**

Use an Installation Support Request Form, or call or write to the district Installation Support coordinator to initiate a request for service, or contact the local area or resident engineer office. The installation should be prepared to supply the following:

a. An Installation Support Request Form prepared in general accordance with the sample format (Figure 8-3) at the last page of this chapter. This form gives a narrative summary of work or services required.

b. Copies of installation records needed to provide the service.

c. Applicable documents, correspondence, or regulations.

d. Document transmitting funds to the district office.

**8-5. Typical Funding and Time to Accomplish the Service.**

a. Corps of Engineers districts are unique as an organizational element of the Federal Government in that they do not generally receive operating funds from the Federal budget. Instead, Corps districts and operating divisions are primarily funded on a project-by-project reimbursable basis. All operating costs must be supported through "revenues" provided by its customers for services rendered. Thus, district and operating divisions operate on a cost distribution concept. Under this concept, general and/or administrative expenses associated with day-to-day operations must be equitably distributed to all direct funded and reimbursable projects.

b. Cost of construction management with the type of the construction contract (O&M or MILCON). For a MILCON construction contract, costs run at 6% of the value of the construction placed. For operations and maintenance/reimbursable funded work consisting of minor construction and maintenance and repair work which require many of the same administrative procedures as larger scale projects, costs run higher. Current rates for O&M funded work are 8% for CONUS projects and 8.5% for OCONUS. While construction management funds for MILCON are appropriated by Congress along with funds for the actual construction, funding of S&A for reimbursable funded projects is provided by the installation, major command, or nonappropriated funding source.

c. Supervision and administration (S&A) charges are levied by the districts and operating divisions on all projects executed by the Corps. The S&A charge is passed on to the installation customer in the form of a flat percentage rate and covers the costs of construction management during the construction phase of a project. Construction management costs include efforts of the construction and engineering divisions, area, resident or field offices, legal, resource management, and their associated overhead.

d. District efforts are funded by S&A money once the design has been completed and the construction contractor has been selected. All S&A monies collected during a fiscal year must reflect charges on construction work placed during that fiscal year; S&A funds for work not placed are returned to the installation and any remaining S&A fee will be charged to the installation during the following fiscal year. Figure 8-2 provides funding guidelines which may help simplify this process. With proper planning, installations and districts and eliminate excessive year-end transfers of large sums of S&A and other funds required for construction contract management.

e. Other fees that may be levied for construction projects include contract fees for providing contracting division services, fees for (constructability) design reviews by construction division, contingency amounts to meet unforeseen contract requirements, and a charge for preparation of as-built drawings.

f. When to ask for this service and normal duration. Lead times needed to initiate construction management depend upon the complexity of the construction contract itself. A general rule is to allow three months between the time the installation requests support and the time the district becomes an active participant in the management of the contract.

CONSTRUCTION FUNDING REQUIREMENT FOR REIMBURSABLE FUNDED CONSTRUCTION CONTRACT * * * * * BASED UPON FY QUARTER WHEN AWARD OCCURS	FIRST QUARTER				NOTES (1) (5)
	SECOND QUARTER			100%	
	THIRD QUARTER		50%		
	FOURTH QUARTER	50%			
	100%				
CONSTRUCTION COST (CFY)	100%	100%	100%	100%	(1) (5)
8.0% S&A FUNDS (CFY)	100%	100%	50%		(2) (6)
8.0% S&A FUNDS (FFY)			50%	100%	(2) (6)
CONTINGENCY FUNDS (CFY)	100%	100%	50%		(3) (6)
CONTINGENCY FUNDS (FFY)			50%	100%	(3) (6)
0.5% EDC FUNDS (CFY)	100%	100%	50%		(4) (6)
0.5% EDC FUNDS (FFY)			50%	100%	(4) (6)

CFY = CURRENT FISCAL YEAR      FFY = FOLLOWING FISCAL YEAR

NOTES: 1. CONSTRUCTION COST BASED UPON FINAL DESIGN GOVERNMENT COST ESTIMATE.  
2. RATE VARIES FOR OCONUS PROJECTS.  
3. 5% MINIMUM FUNDED AT CONSTRUCTION CONTRACT AWARD, WITH ADDITIONAL CONTINGENCY FUNDED ON A CASE-BY-CASE BASIS.  
4. ENGINEERING DURING CONSTRUCTION (EDC) IS REQUIRED AT CONSTRUCTION AWARD BY ER 37-345-10, EXCEPT FOR FOURTH QUARTER AWARDS.  
5. OR PROVIDE IN THE FOLLOWING YEAR FOR SAF PROJECTS.  
6. PERCENTAGES FOR CURRENT AND FOLLOWING YEAR FUNDS MAY BE ADJUSTED BASED UPON CONSTRUCTION PLACEMENT EXPECTED IN EACH YEAR.

Figure 8-2. Construction Cost Funding Guidelines.

**8-6. Examples of Construction Management Services.**

a. Examples of the construction management services available from a USACE district are typically ongoing at any installation on reimbursable and MILCON work and other types of construction support activities.

b. A sample of how to obtain construction management support services appears on the following sample Installation Support Request Format (Figure 8-3):

INSTALLATION SUPPORT REQUEST		
INSTALLATION: Fort Dakota	PROJECT NUMBER: JVL-1234	
PROJECT TITLE: Renovation of Post Headquarters Building		
TYPE OF WORK: <input type="checkbox"/> PLANNING <input type="checkbox"/> ENVIRONMENTAL <input type="checkbox"/> STUDY <input type="checkbox"/> DESIGN <input checked="" type="checkbox"/> CONSTR MGMT <input type="checkbox"/> REAL ESTATE <input type="checkbox"/> A-E CONTRACT SELECTION <input type="checkbox"/> OTHER		
CURRENT WORKING ESTIMATE: \$ 790,000.00		
BASIS OF ESTIMATE: Final Design    DATE PREPARED: 21 Apr 91		
<b>DESCRIPTION OF WORK/SERVICE REQUIRED: PLEASE BE SPECIFIC !</b> Request advertisement, award and construction contract admin services (Supervision & Inspection) be provided for the above project. This project was planned for award in FY92 however, Command influence resulted in funding this FY. The number of projects currently advertised through our DOC precludes our ability to administer this project. 100% design complete plans & specs as prepared by our EPSD are attached.		
<b>SPECIAL CRITERIA/DESIGN REQUIREMENTS:</b> This project must be awarded for construction <u>THIS FY !</u> Design funds are available for your biddability and constructability reviews. Constr Performance period: 150 days.		
PROJECT AUTHORIZATION: <input type="checkbox"/> DD 1391 <input checked="" type="checkbox"/> DA 4283 <input type="checkbox"/> OTHER		
CONSTRUCTION AGENT: <input checked="" type="checkbox"/> DISTRICT <input type="checkbox"/> INSTALLATION		
<b>CRITICAL NEED DATES: SERVICE COMPLETE:</b> DESIGN            START:            COMPLETE:            _____ CONSTRUCTION CONTRACT AWARD: <u>NLT 27 SEP 91</u> CONSTRUCTION START: <u>1 NOV 91</u> COMPLETE: <u>15 MAR 92</u>		
AVAILABILITY OF AS-BUILT DRAWINGS: Final design attached		
AMOUNT OF START-UP DESIGN FUNDS ATTACHED:    \$4,500.00		
INSTALLATION PROJECT MANAGER: <u>James V. Ovol</u>		
TELEPHONE: (COM'L) <u>(979) 987-3456</u> (AV) <u>007-3456</u>		
FACSIMILE: <u>(979) 987-6543</u> OFFICE SYMBOL: <u>DKTA-DEH-E</u>		
INSTALLATION ENGINEER OR AUTHORIZED REPRESENTATIVE		
SIGNATURE	TITLE	DATE
COL M. T. Rushmore	DEH	15 Jun 91

Figure 8-3. SAMPLE FORMAT-INSTALLATION SUPPORT REQUEST INVOLVING CONSTRUCTION MANAGEMENT SUPPORT

## CHAPTER 9

### SPECIAL SUPPORT SERVICES

#### 9-1. Contracting.

a. Definition of Contracting Services. The district contracting division performs the following functions:

(1) Is consultant and principal advisor to the district commander and other district staff members on all acquisition policy and procedural matters (except real estate). Is responsible for district acquisition activities from advance planning through completion and delivery.

(2) Plans, directs and exercises staff supervision over contracting functions of the district. Provides for full and open competition, in accordance with the Competition in Contracting Act (CICA) of 1984, through use of competitive procedures.

(3) Assists Competition Advocate to achieve compliance with CICA.

(4) Provides staff surveillance over the contract administration function for the district to assure compliance with the Federal Acquisition Regulation (FAR), DFARS, AFARS, EFARS, and other pertinent laws and regulations, and the terms and conditions of contracts and purchase orders. This function does not include management of those aspects of contract administration which involve supervision, inspection, and review of contractor performance.

(5) Interprets and implements higher authority decisions and directives that affect the contracting and purchasing functional areas and develops new or revised procedures to assure compliance.

(6) Participates in advance procurement planning of district requirements, providing expertise in such areas as the breakout of the requirements, contract type, and method of procurement. Maximizes competition. On actions other than full and open competition, prepares appropriate justification and approval (J&A) documents.

(7) Maintains liaison with industry and government agencies on contracting matters.

EP 420-1-1  
31 Jan 92

(8) Reviews qualifications and prepares nominations for appointment of Contracting Officers, Administrative Contracting Officers, Contracting Officer Representatives, and Ordering Officers.

(9) Maintains the official contract files (except those pertaining to real estate). Ensures that documentation is complete. Advises pertinent district elements of deficiencies and monitors corrective actions.

(10) Reports on volume and type of contracting actions and furnishes other data on contracting activities. Analyzes trends.

(11) Manages the districts small and small disadvantaged business programs, as well as other socioeconomic programs related to contracting.

(12) Reviews audit and other investigative reports relating to contracting.

(13) Manages the Defense Priorities and Allocation System.

(14) Manages specific operational responsibilities of the Contracting Office, in coordination with other elements in the district, including:

(a) Maintains source selection lists; prepares and issues bid invitations and requests for proposals (or, where done by others, reviews for consistency with policy and for regulatory compliance), and receives, opens, and abstracts bids and proposals.

(b) Conducts evaluation process to determine lowest responsive and responsible bidder when the sealed bid procedure is used; participates on the team when evaluating a negotiated procurement.

(c) Prepares formal contracting documents, issues notices of award and notices to proceed. Issues contracting documents related to personal property sales in support of logistics management function.

(d) Conducts pre-award surveys and evaluations thereof.

(e) Reviews mistakes in bid and protest of award cases in coordination with Office of Counsel and recommends appropriate action to contracting officer. Develops and formalizes the documentation for record file or submission to higher authority.

(f) Prepares contracting officer's report in response to protests of award when requested by HQUSACE.

(g) Ensures that the official contract documentation is complete and that an accountability trail facilitates review of contract modifications. Conducts post-award reviews of modifications.

(h) Performs or arranges for the performance of inspection and acceptance of all materials, supplies and equipment purchased or transferred by the Government, except for materials and equipment to be incorporated into construction projects. Inspections requiring technical skills will be performed by appropriate staff divisions. Assigns, furnishes detailed instructions for, and monitors inspection when it is determined that points-of-origin inspection is necessary and to be accomplished by other districts and DoD agents. Reviews contract administration actions taken or performed by other elements of the district to assure compliance with applicable law, regulations, and policies, and provides recommendations to the commander for improvements and corrections in district contract administration procedures.

b. Types of Contracts. A wide selection of contract types is available to provide the needed flexibility in acquiring the large variety and volume of supplies and services required. Contract types vary according to (1) the degree and timing of the responsibility assumed by the contractor for the cost of performance and (2) the amount and nature of the profit incentive offered to the contractor for achieving or exceeding specified standards or goals. The contract types are grouped into two broad categories: fixed-price contracts and cost-reimbursement contracts. The specific contract types range from firm-fixed-price, in which the contractor has full responsibility for the performance costs and resulting profit (or loss), to cost-plus-fixed-fee, in which the contractor has minimal responsibility for the performance costs and the negotiated fee (profit) is fixed. In between are the various incentive contracts, in which the contractor's responsibility for the performance costs and the profit or fee incentives offered are tailored to the uncertainties involved in contract performance.

EP 420-1-1  
31 Jan 92

Some of the special categories of contracts extensively used by districts in support of the installation are:

(1) Architect-Engineer (A-E) contracts.

(2) Job Order Contract (JOC). A competitively awarded firm fixed price, indefinite quantity contract which consists of a collection of detailed task specifications encompassing most aspects of facilities engineering construction work. For each of the tasks listed in the contract, a unit of measure and a corresponding unit price are included. Offerors are required to propose two coefficients or multipliers (one for normal working hours and one for other than normal working hours). During contract execution the unit price listed in the contract is multiplied by the appropriate coefficient to determine the actual price of that item. Each job order required by the DEH is broken down into these individual tasks of work, and a total price is developed based upon the government unit price and the contractor's multiplier(s). After agreement, the DEH or the supporting USACE district issues a delivery order for performance of the work. The Individual Job Order Request (IJO) (DA Form 4283) prepared by the facilities occupant at the supported installation normally serves as the basis for initiating the delivery order.

(3) Small Purchase. Small purchase procedures are used to make purchases of \$25,000 or less. Under the small purchase system, procurement is normally accomplished after oral or written solicitation.

(4) Services Contracts. The full range of service contracting support is available from the district contracting division.

(5) Basic Ordering Agreements. These are preliminary agreements, not enforceable contracts. They merely define the general provisions that will apply when a contract is awarded at a future date. Thus, they are time savers in dealing with suppliers or firms on a recurring basis. However, competition is required in accordance with FAR 13.106 and synopsis is required in accordance with FAR 5.2.

(6) Supply Contracting. The full range of supply contracting is also available from the district contracting division.

(7) Construction Contracts. The award of a construction contract can follow varied procurement procedures depending upon the scope, complexity or type of requirement. Invitation for Bids (IFB), Request for Proposals (RFP), One Step, Two Step, Design-Build/Turnkey, JOC and Small Purchase are some of the methods for obtaining a construction contract award. Time requirements for the award of a construction contract, using Invitation for Bid procedures, are presented in figure 7-14 of chapter 7.

(8) Laboratory and Testing Services. Professional laboratory and testing support is obtained by means of a service or A-E contract as described previously.

(9) Surveying. Surveying services are procured in a manner similar to the A-E contracting procedure described previously.

c. Regulatory and Statutory Guidelines for Contracting. Applicable portions of the following regulations:

- (1) Federal Acquisition Regulations (FAR).
- (2) DoD Federal Acquisition Regulation Supplements (DFARS).
- (3) Army Federal Acquisition Regulation Supplement (AFARS).
- (4) Engineer Federal Acquisition Regulation Supplement (EFARS).

d. How to Obtain These Services. District contracting support is normally provided only in conjunction with engineering or construction-related support. The district Installation Support coordinator is the first point of contact when requesting procurement-related services. Contract management for construction projects is handled by the construction division, through the construction manager at the district office and by area and resident engineer offices. The majority of other contract management functions are handled by the district contracting division. The Installation Support Coordinator will direct all requests for support to the appropriate action office.

e. When to Ask for this Service and Normal Duration. Procurement-related support should be requested when requirements are first known. Procurement is heavily regulated, so early involvement by the district is important.

f. Typical Funding and Time to Accomplish Contract Related Support Services. Some typical cost guidelines and timelines for accomplishing contracting activities associated with the A-E selection process and the construction contract advertisement process are presented in chapters 6 and 7 of this pamphlet. The cost and time for other types of contracting support are determined based upon the scope and complexity of the service requested by the installation. In general, contracting activities in conjunction with MILCON actions are funded through the MILCON action, while reimbursable actions are funded by the installation or MACOM.

**9-2. Legal.** District legal services are provided in conjunction with engineering, environmental, planning or construction services purchased from the district. Legal services are not normally provided separately from these district support services.

**9-3. Public Affairs.**

a. Definition of Services. The district Public Affairs Office (PAO) provides the following services:

(1) Publicly communicates the policies and viewpoints of the district on matters pertaining to the work of USACE and is the primary spokesperson to the news media. Other members of the staff may be called upon by the PAO to provide technical information to the media.

(2) Advises the district commander and key staff of public affairs matters.

(3) Maintains effective relations with news media and with organized groups who use information about USACE activities or who plan information programs. Responds to news media and public inquiries regarding USACE programs, activities, and associated issues.

(4) Researches, writes, edits, and disseminates news and feature stories for release to media. Arranges for Corps of Engineers speakers to interested groups, serves as liaison with speakers, and arranges for preparation and editing of manuscripts. Coordinates the Corps of Engineers Writer's Assistance Program.

(5) Arranges/coordinates media interviews for the district commander, deputy commander and key staff members.

(6) Coordinates and supervises public displays and exhibits portraying USACE activities.

(7) Plans, coordinates, and supervises production and dissemination of public and command information materials such as brochures, pamphlets, newspapers, and information bulletins; and audio-visual products, including slide, videotape, and motion picture presentations for internal and external publics.

(8) Serves as point of contact for civilian aides to the Secretary of the Army Program.

(9) Maintains liaison with other federal, state, and local agency public affairs activities and coordinates public affairs efforts among affected agencies, as appropriate.

b. Regulatory and Statutory Guidelines for Public Affairs. Public affair offices are organized and operate under the ER 10-1-3, Organizations and Functions, Divisions and Districts.

c. How to Obtain These Services. Use an Installation Support Request Form, call or write the local Installation Support Coordinator to initiate a request for service. The audiovisual and publications branches of the Office of Public Affairs will provide most of the services requested. In some instances, the district will coordinate a request through the public affairs offices at their division or at HQUSACE. The installation should first approach their own Public Affairs Office to determine if the service can be accomplished locally. After coordination with the local PAO, and determining that district support is necessary, the installation should supply the following with their request to the district:

(1) An Installation Support Request Form which gives a narrative summary of work or services required.

EP 420-1-1  
31 Jan 92

(2) Copies of installation records, documents or correspondence needed to provide the service.

(3) Document transmitting funds to the district office.

d. Typical Funding and Time to Accomplish the Service.

(1) Funding. Installation reimbursement is the normal means of funding these services. Costs vary depending upon the service requested. For example, an article for publication in a command information newspaper may cost \$1,500.00; a professional quality slide show about an installation may cost \$3,000.00 to \$5,000.00, while a professionally narrated and filmed videotape will cost an average of \$1,500.00 - \$2,000.00 per minute. Editorial or composition service costs approximately \$35 per hour., which means that editing an article written by a installation staff member may cost between \$300.00 and \$500.00, and preparing an article based simply on an installation's input may cost \$1,500.00 to \$2,000.00.

(2) Time Requirements. The district can respond immediately upon notification by the Installation Support Coordinator. Lead times for several of our services are listed as follows:

(a) Develop and publish article in the district newspaper--three months.

(b) Create and edit videotape about an installation--four to six months.

© Create and edit slide presentation about an installation--two to three months.

(d) Conduct public attitude evaluation regarding a proposed action--two to three months.

(e) Prepare and disseminate a news release about an installation (after clearance by the local public affairs officer)--one to five working days.

(f) Coordinate a speaking request for appearance by the District Commander--one to three working days.

(g) Coordinate a speaking request for a Division or HQUSACE official--five to ten working days.

(h) Develop and publish an article in the "Engineer Update" or "DEH Digest" for an installation--two to three months.

**9-4. Safety and Occupational Health.**

a. Definition of Services. The district Safety and Occupational Health Office implements policy and procedure, and provides reviewing, inspecting and consulting service regarding safety, industrial hygiene and occupational health. Listed below are some of the specific services the Safety and Occupational Health Office provides:

(1) Supervises and directs the USACE safety program within the district, in accordance with policies and objectives established in AR 385-10 and Engineer Regulations.

(2) Prescribes and coordinates a balanced program of safety activities and performs functions set forth in paragraph 5b, AR 385-10.

(3) Advises the district commander of accident potentials on programs, and requirements for control.

(4) Evaluates the application of safety policy and criteria in all plans, designs, specifications, operating and maintenance procedures, and training programs.

(5) Provides advisory safety engineering services for all district activities in support of accident prevention, including features of design, occupational health, fire prevention and protection, radiological safety, and safety in all end use items or services.

(6) Surveys all activities for compliance with the policies and objectives of the safety program.

(7) Conducts progressive research into accident problems and develops corrective controls to prevent future accidents.

(8) Acts as staff advisor on and evaluates the program for issuing permits to operate motor vehicles and equipment.

(9) Surveys facilities for fire protection, fire fighting, emergency response, and rescue to establish adequate and efficient utilization thereof.

EP 420-1-1  
31 Jan 92

(10) Supervises the accident reporting system and compiles, analyzes, and disseminates accident data and any necessary corrective action to be taken.

(11) Performs studies on special safety subjects as assigned by EM 385-1-1.

(12) Provides accident prevention and safety engineering guidance and advice to district activities concerning the use of public recreation areas under the control of USACE, particularly with respect to water safety considerations.

(13) Provides technical safety training courses, e.g., "Design Improvement for Safety."

(14) Provides input to Worker's Compensation and Continuity of Pay programs.

(15) Develops scopes of work and manages contracts for industrial hygiene services to include industrial hygiene surveys and medical advisory services.

b. Regulatory and Statutory Guidelines for Safety and Occupational Health. There are many Army Regulations and statutory standards governing safety and occupational health. The principal documents under which the office operates are AR 385-10 and EM 385-1-1, Corps of Engineers Safety and Health Requirements Manual.

c. How to Obtain These Services. The installation should first approach their Safety Office to determine if the service can be accomplished locally. After coordination with the local office, and determining that district support is necessary, the installation should supply the following to the district Installation Support Coordinator with their request to the district:

(1) An Installation Support Request Form which gives a narrative summary of work or services required.

(2) Copies of installation records, documents or correspondence needed to provide the service.

(3) Document transmitting funds to the district office.

d. Typical Funding and Time to Accomplish the Service.

(1) Funding. Installation reimbursement is the normal means of meeting the costs of these services. These costs vary depending upon the service requested. The following costs are offered only as a guide for an installation to use when budgeting for district support services:

(a) Occupational Safety and Health Act pre-inspection of a job site - \$2,000.

(b) Industrial hygiene survey, analysis and report on a DEH complex - \$75,000 to \$100,000.

(c) Development of safety plan for DEH CA contract - \$10,000.

(d) Review plans and specifications for average maintenance and repair contract - \$1,000.

(e) Conduct two-day construction safety inspection - \$1,000.

(f) Conduct two-day training course on "Design Improvements for Safety" - \$1,500 to \$3,000 (includes course materials).

(2) Time Requirement. An installation should allow one month between the time that a request for support services is forwarded to the district and the time that the service needs to be performed. If a one or two day visit to the installation will fill the request, a shorter lead time is possible. Requests for complex services, such as industrial hygiene surveys of entire activities, will involve procurement of contract services, which will take as long as six months. Likewise, the duration of service varies considerably with the type of work requested. A spot inspection, pre-inspection, or training session can take only a day or two. A complex industrial hygiene survey can take as long as 8-10 months before results are analyzed and published.

EP 420-1-1  
31 Jan 92

**9-5. Training.**

a. Definition of Services. The district Employee Development or Training Branch of the Human Resources Office is responsible for developing and maintaining programs to meet the developmental needs of its members and serviced activities. Examples of these programs include new member orientation and technical and managerial training. Formal personnel servicing agreements often enable installations to obtain services, including training, from a districts Human Resources Office. However, in the absence of such agreements, installations are still encouraged to contact the district for information about Proponent Sponsored Engineer Corps Training (PROSPECT) program courses. The PROSPECT program offers both classroom and exportable training courses.

b. Regulatory and Statutory Guidelines for Training. The Human Resources Office is organized and operates under the policy of ER 10-1-36. Guidelines for training can best be found in AR 690-400, chapter 410, and ER 350-1-414, PROSPECT Program.

c. How to Obtain These Services. Installations without their own civilian personnel servicing are encouraged to contact the district Human Resources Office and develop formal servicing agreements which include training. Installations with their own servicing may obtain USACE training by contacting the Corps Registrar, located within the Huntsville Training Division, at (205) 722-5821/5822, or DSN: 788-4377/4378.

d. Typical Funding and Time to Accomplish the Service.

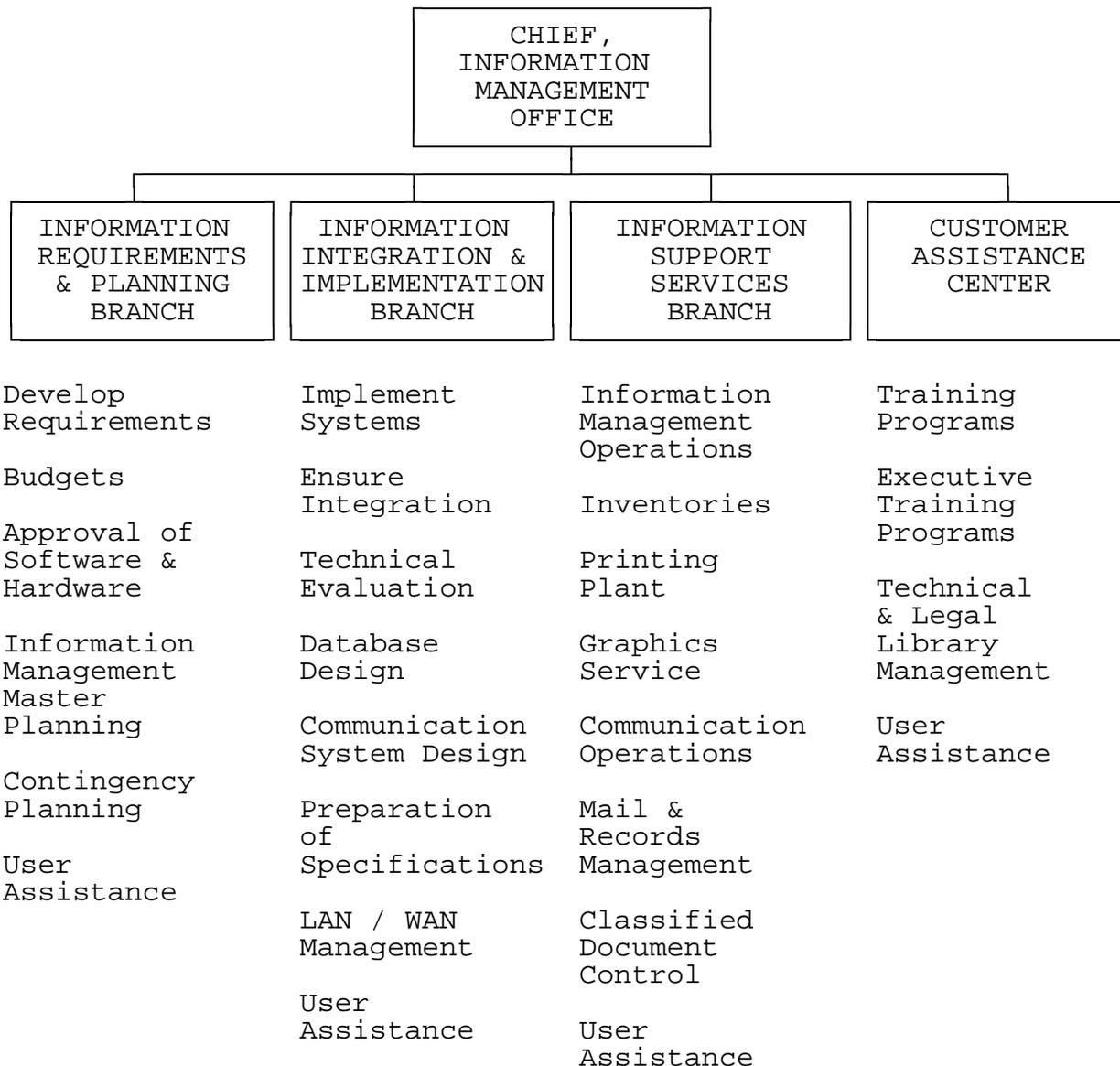
(1) Funding. A district does not charge for assisting installations with enrollment in Corps of Engineers sponsored training courses. However, there is a tuition charge for all students registering for PROSPECT classroom courses. Additional information about course objectives, tuition and availability is obtainable from the Huntsville Training Division Registrar.

NOTE: Additionally, a number of video-based exportable training courses are available for purchase by installations. These are particularly useful for reducing travel and per diem costs since the training is sent to the student or installation. Information about these exportable courses is available from the district Training Branch or the Huntsville Training Division.

(2) Time Requirement. Installations are encouraged to participate in the Corps Annual Training Survey. This survey is used to assess training requirements and allocate spaces in PROSPECT courses. Installations wishing to participate should contact the Huntsville Registrar as soon as possible. After the survey is completed, installations may request "space available" allocations throughout the year.

**9-6. Information Management Services.** Including automated data processing and graphics services.

a. Definition of Services. The Information Management Office (IMO) supports the district Information Mission Area (IMA) responsibilities. These encompasses automation (including office automation), voice and data communications, visual information, records management (including libraries), publications and printing, and the supporting personnel, equipment, services and facilities of these functions. The district IMO supports the U.S. Army Information Systems Command (USAISC) mission by performing assigned responsibilities and reporting IMA activities as required through the HQUSACE Directorate of Information Management (DIM). Figure 9-1 depicts the typical Information Management Office organization.



**Figure 9-1. Information Management Office Organization and Functions.**

b. Regulatory and Statutory Guidelines for Information Management. AR 25-1 and AR 25-3 are key regulations under which the Information Management Office operates.

c. How to Obtain These Services. Coordination with the installation or MACOM Directorate of Information Management (DOIM) must occur before requests for information management support services are sent to a district Information Management Office. The Installation Support coordinator will forward the installations request to the Information Management Office, which will actually accomplish or provide the support service. Use an Installation Support Request Form, call or write to the district Installation Support coordinator to initiate a request for service. Installations should be prepared to supply the following:

(1) An Installation Support Request Form, which gives a narrative summary of work or services required. After the support request is evaluated:

(2) Copies of installation records needed to provide the service.

(3) Applicable documents, correspondence, or regulations.

(4) Document transmitting funds to the district office.

(5) Requirement Statement approval from installation DOIM.

d. Typical Funding and Time to Accomplish the Service.

(1) Funding. Costs for services can vary significantly based on the scope of services requested. A consultative visit to the installation to discuss engineering automation requirements can cost only several hundred dollars. An automated system design can cost many thousands of dollars.

(2) Time Requirement. Requirements for information services must be identified to IMO or DOIM as early as possible. DA Pam 25-2 discusses the IMA Planning Process. Depending on the program cost of the information system, there are different organizational levels that a requirement will have to go through for approval. This approval must be obtained prior to incurring costs for the information system. If necessary, the district IMO will visit the installation within several days from receipt of a request. Provisions of more complex services, such as design of automated services, can take many months. Planning is essential.

e. Sharing Successes. Installations are encouraged to share information about successful prototypes in IMA technology (e.g., GIS or CADD Master Planning) so that good ideas are disseminated Corps-wide. This can be done through district IMO channels.

## CHAPTER 10

### LOCAL USACE MAJOR SUBORDINATE COMMAND SUPPLEMENT

#### INTRODUCTION

Many USACE Major Subordinate Commands (MSC), also referred to as division offices, take an aggressive role in monitoring the Installation Support Program accomplished by districts within their geographic area of responsibility. MSCs may already possess their own "Installation Support Handbook" with specialized procedures and capabilities applicable to their mission. If this is the case, the MSC should insert a copy of their handbook within this pamphlet prior to distributing it to their district offices. As a minimum, or if an MSC does not possess its own handbook, the MSC should insert a page explaining their Installation Support policies and procedures, and giving a "Point of Contact" list of key players responsible for their Installation Support Program.

## CHAPTER 11

### LOCAL USACE DISTRICT SUPPLEMENT

#### INTRODUCTION

Many USACE District offices take an aggressive role in the Installation Support Program accomplished within their geographic area of responsibility. Districts may already possess their own "Installation Support Handbook" with specialized procedures and capabilities applicable to their mission. If this is the case, districts should insert a copy of their handbook within this pamphlet prior to distributing it to the installations that they support. As a minimum, or if a district does not possess its own handbook, the district should insert a page explaining their Installation Support policies and procedures, and giving a "Point of Contact" list of key players responsible for their Installation Support Program.

## CHAPTER 12

### INSTALLATION SUPPORT NEWSLETTER

#### INTRODUCTION

In late spring 1992, the HQUSACE Installation Support Branch, in conjunction with the Planning Branch from the Engineering and Housing Support Center, Facilities Management and Planning Division, began publishing an Installation Support Newsletter.

The objectives of the newsletter are to keep individuals informed about important issues and to share good (and maybe not-so-good) news and ideas.

Initially a new edition will be published every other month. And, since everyone already has enough to read and keep them busy, every attempt will be made to keep the newsletter brief, as well as interesting and useful.

Since the newsletter will contain items applicable to, and which may impact the Installation Support Program, this chapter has been included in the handbook as a place to maintain and file each edition of the newsletter.

Please call, fax or write to one of the following offices about problems, ideas, concerns or successes - on all aspects of the USACE Installation Support Program. Without input and feedback from field elements, we are at a tremendous disadvantage in coming up with newsy and valuable material.

Headquarters  
U.S. Army Corps of Engineers  
Directorate of Military Programs  
Attn : CEMP-CI  
Washington D.C. 20314-1000

Telephone: (202) 540-4804/5  
Fax: (202) 504-4783

U.S. Army Engineering and Housing Support Center  
Directorate of Facilities Engineering  
Attn: CEHSC-FM-P  
Fort Belvoir, VA 22060-5516

Telephone: (703) 355-2001  
Fax: (703) 780-5935