

Chapter 2 Project Development Guidance

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Chapter 2

2-1

General

a. INTRODUCTION This chapter describes general procedures to be followed by local using service and engineering personnel in developing programming planning and design guidance for individual projects. That guidance will be used by planners and designers to determine a wide range of physical and functional requirements for primary and support facilities.

b. INTENT The intent of the guidance in this chapter is to provide the local provost marshal, the using service's project personnel, and other participants in the project development process with a basis for:

(1) Broadening the scope of facilities planning and design concerns to include a careful consideration of the organizational, operational, functional, physical, environmental, aesthetic and human factors that affect the requirements of individual activities.

(2) Enhancing local potentials for identifying new opportunities for physical development.

(3) Assuring the accomplishment of projects that maintain or improve the functional effectiveness and operating efficiency of existing facilities.

(4) Focusing project development efforts on identifying facility and equipment needs which are more closely coordinated with the primary functional objectives of current military police programs.

(5) Achieving a more coordinated and interdependent relationship between organizational and physical development goals.

c. BASIC APPROACH In order to coordinate physical and organizational development, local provost marshals must institute a comprehensive approach both to the development of functional requirements and to the planning and design of facilities. This requires that the using service apply detailed project development procedures in identifying the functional programming and planning and design requirements of individual activities. Local constraints and opportunities will determine the specific character and sophistication of these procedures. Taking these local conditions into consideration, the using service (local installation) and the local provost marshal should establish basic project development procedures that meet the following:

(1) **Integrate Organizational and Physical Development Needs** Organizational development needs must be integrated with such elements of physical

development as operational, functional, environmental and aesthetic requirements. In reviewing the programming and planning procedures and building and site design guidance contained in this document, local provost marshals must give careful attention to the relationship between organizational needs and physical development requirements.

(2) **Provide Opportunities for Increased Organizational Effectiveness** In order to increase and reinforce organizational effectiveness, local provost marshals should continually evaluate the development potential of new or modified facilities and equipment requirements, review project data and design criteria developed during the planning, design and construction of similar facilities, and take part in or review the post-construction and occupancy evaluations of similar MP Facilities.

(3) **Expand the Basis for Identifying Long-Range Functional Requirements.** Most military police administrative and operational type activities can benefit from a more coordinated and long-range approach to identify functional requirements, especially if it leads to the identification of physical and functional requirements compatible to related activities or to supporting or cooperating services such as CID and SJA. In the case of strictly MP facilities, this may lead to authorization to consolidate a wide range of separate but related activities. Such consolidations may enhance operational efficiency and functional effectiveness and gain substantial cost savings from a larger scale construction program.

d. LOCAL ENGINEER ASSISTANCE Local provost marshals may require local engineer assistance in establishing project need and in the preparation of detailed project requirements. Current regulations (AR 415-20) require the using service to seek the cooperation, assistance and guidance of local Facilities Engineer professional consultants when there is a need to identify complex or detailed functional, physical, mechanical and technical requirements. Local installation and MP personnel should follow this guidance particularly during the stages of a project when detailed requirements must be properly and accurately identified and in the later stages that require the review of site planning, building design, interior design, and general construction and equipment specifications.

2-2 Project Development Process

a. GENERAL A comprehensive approach to project development will require the use of a step-by-step process for identifying requirements. The complexities of this process require that standard procedures be set-up to identify programming and planning and design requirements. Requirements that are identified by the using service must, in turn, be communicated to the various participants in the project development process in stages. Those stages should correspond to generally accepted requirements for project-related planning and design information. Refer to Figure 2-1 which indicates the stages of the project development process and the information required to execute the design development stage for MP facilities. Figure 2-1 is, however, only a schematic outline and may require adjustment to meet local conditions and using service requirements. In all cases, specific procedures for identifying the requirements of individual projects should be established in accordance with AR 415-20, Project and Development Design Approval. The following provides general guidance for establishing those procedures.

b. PROJECT DEVELOPMENT TASKS Generally, individual projects will require that using service divide its responsibilities into project development tasks. These tasks have three principal phases of activity: Problem Identification; Problem Analysis; and Problem Solving. The checklist below will assist the using service in identifying the tasks required to accomplish the objectives of individual projects:

(1) Problem Identification

- (a) Systematically review personnel, equipment and facilities performance
- (b) Identify problem areas
- (c) Identify project need
- (d) Determine project emphasis
- (e) Select project coordinator
- (f) Initiate project liaison
- (g) Determine the need for special studies
- (h) Establish time/work schedule for accomplishing tasks

(2) Problem Analysis

- (i) Establish comprehensive development goals
- (j) Identify organizational and physical development factors
- (k) Determine the actual scope of the project in terms of size and cost
- (l) Estimate requirements for project accomplishment

(3) Problem Solving

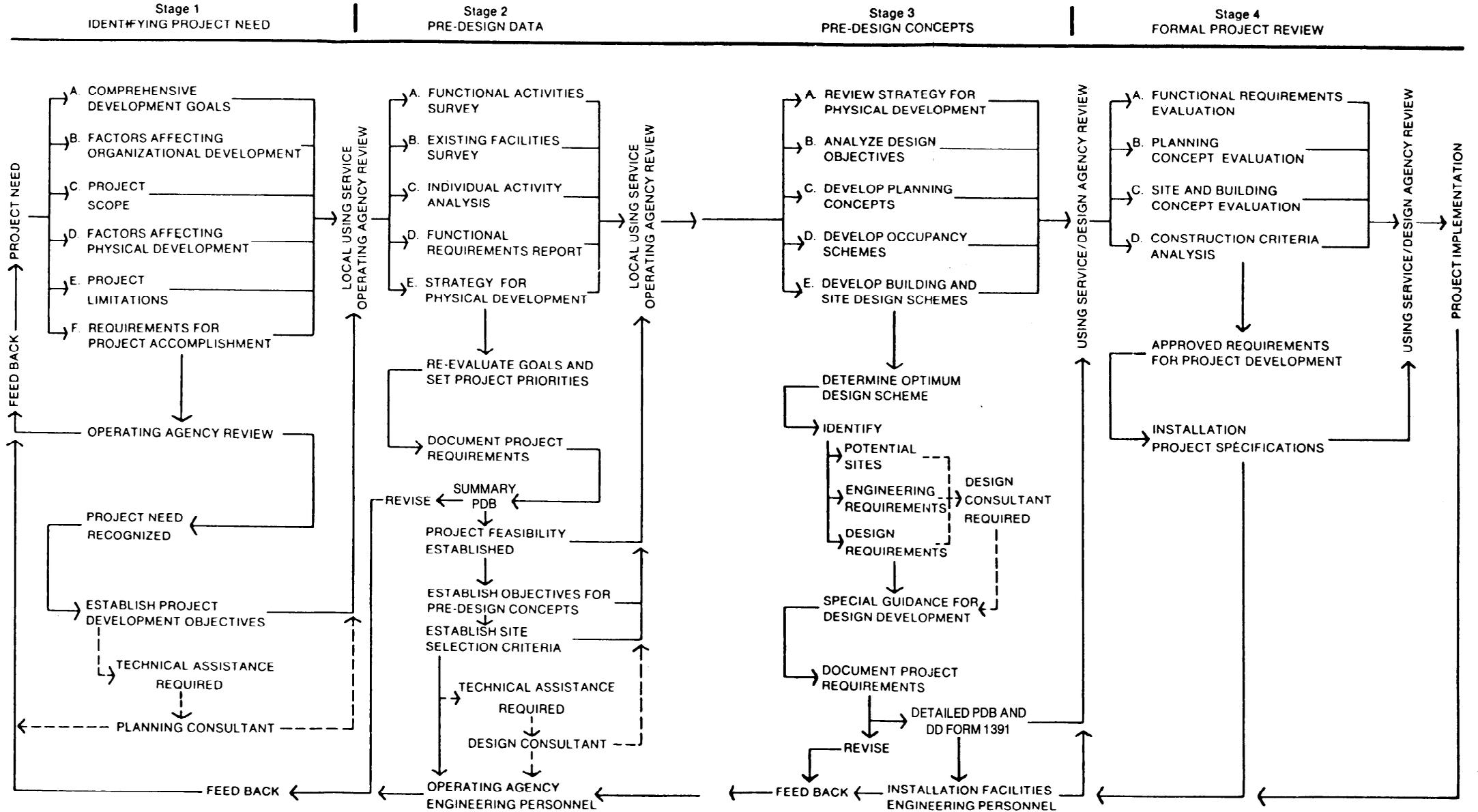
- (m) Re-evaluate development goals
- (n) Establish site selection criteria and identify potential sites
- (o) Establish physical development (DD form 1391) and planning and design (Project Development Brochure) requirements
- (p) Finalize time/work schedule for accomplishing the principal elements of the project, including mandatory reviews

c. TASK REQUIREMENTS Each task in the project development process has a set of requirements that must be met before proceeding to a subsequent task. The prerequisite elements of each project development task are outlined in Figure 2-1 under the particular stage of the process in which they occur. In general, the reviews which preceded each stage are also prerequisites. Those reviews may be either formal or informal depending on the nature and scope of the project. Approvals described in Figure 2-1 are only advisory, not mandatory. AR 415-17 identifies mandatory approvals for technical information involving size and cost of facilities. AR 415-20 indicates the typical flow of decision-making for Army projects.

d. PROJECT DATA REVIEW AND FEEDBACK The using service should assign project development responsibilities to individuals with particular capabilities for managing complex situations. At each juncture in the locally-adopted process, the results of the previous stage of project development should be reviewed by the using service then recycled back to individual facility users, to other project participants, and to the various project development decision-makers for comment. Also, new requirements and additional information should be continually reviewed to determine what impact they might have on the initial identification of project need. The overall review and feedback process will require the scheduling of formal reviews by local military police and installation personnel as well as by higher level administrative, engineering and design, and HQDA (DAPE) and OCE personnel when necessary.

e. DETAILED REQUIREMENTS The using service must prepare detailed functional requirements during the various stages of project development. Local provost marshals may require assistance in stating the development goals and pre-planning decision of Stages 1 and 2. They may also require technical assistance from local engineer personnel or professional planning and design consultants. Technical assistance also may be required in identifying mechanical and operational equipment needs. For example, data processing, communications, security, lighting, HVAC and power requirements must be carefully evaluated in determining electrical and energy conservation needs.

Figure 2-1 Stages of Project Development



f. DETAILED PROJECT DATA Detailed project data must be prepared by the using service in accordance with the Army's project development procedures. This information will be used to support the summary data on the completed DD Form 1391 and will be contained in the Project Development Brochure as required by AR 415-20, Project Development and Design Approval. In developing detailed project data, the using service must identify project need, establish project requirements and provide essential project development guidance. An outline of the procedures involved in identifying project need is provided in Section 2-3. Section 2-4 describes the procedures for establishing project requirements at the local installation level. Pre-planning decisions that provide essential project development guidance are discussed in Section 2-5. These are only generalized considerations. Careful consideration should be given to the criteria and guidance in Chapters 3 and 4. In developing the specific planning and design requirements for new facilities, Chapter 5 should be referred to in developing requirements for existing facilities. Examples of detailed project guidance are presented in Chapter 6.

2-3 Determining Project Need

a. GENERAL Project need is usually determined at the lower levels of a military police organization. There are several instances where the need for new construction or modernization projects might be identified. These usually occur during the course of routine reviews of the performance of functional activities. However, it is not unusual for section supervisors or branch chiefs to directly identify deficiencies in facilities, equipment or staffing, and to bring these deficiencies to the attention of the local provost marshal. Also, local provost marshals and their operations supervisors or administrative support personnel may require subordinates to prepare special reports on functional and physical deficiencies. As a matter of routine review, performance levels are noted in the IG surveys of operations (Schedule X Reports). It is possible that the magnitude of deficiencies indicated in these reports will suggest the need for a physical remedy or a major reorganization in the way facilities, equipment and personnel interrelate. When this need is recognized, the local military police (provost marshal) or using service (installation commander) should determine whether or not there is a need for a specific planning, design or construction project and begin the project development process. The step-by-step procedures that follow should be completed before formally establishing project requirements.

b. STEP 1: IDENTIFY PROJECT NEED In order to identify project need, a clear statement of existing conditions must be provided as part of the formal statement of project need. The first step is to establish the physical and functional needs of individual activities. Generally, the statement of project need should include a simple description of the existing and desired level of functional performance for each activity included in the project, as well as a brief indication of the type and condition of physical and functional support (facilities, equipment, and personnel) required by each activity. It should indicate importance and adequacy of such factors as past present, and future personnel and equipment allocations (refer to existing TDA and MTOE) and the workload, work-flow and space utilization factors of both individual functions and the entire organization. It should also indicate general facilities limitations. These limitations might already be identified by a recent mission/function study or by the Army manpower management surveys for a particular activity. This information will provide the necessary background for making a preliminary estimate of personnel, equipment and facilities requirements.

c. STEP 2: DETERMINE PROJECT EMPHASIS The next step is to determine whether a project is facilities-, equipment-, or personnel-oriented. Planning, design or construction projects must be developed according to their emphasis. Facilities-oriented projects may require some technical assistance in the early stages of project development. Projects in which personnel and equipment needs are the most important planning and design factors may emphasize the need for adequate planning only and require a different approach altogether. Emphasis will be determined by simply weighing the separate factors (facilities, equipment, personnel) and aggregating them according to an estimate of the percentage of the total project effort. Large scale or involved projects may require an update of project emphasis once more detailed information is available.

d. STEP 3: ESTABLISH PROJECT COORDINATION Once the need and emphasis of a project have been determined, the local provost marshal should designate a project coordinator (or project team). A member of the local MP operations or administrative support staff should be assigned to the project according to the preliminary estimate of project emphasis. Personnel-oriented projects will require manpower planning and utilization expertise; facilities-oriented projects will require some knowledge of construction, etc. The project coordinator will be given the responsibility of developing a more detailed identification of project need and coordinating project requirements. Use of this approach will be one of the principal means of assuring the accomplishment of the using service's project objectives which are discussed in more detail in Section 2-4. Where the needs of an individual activity or entire organization are extensive or require immediate and timely attention,

and outside assistance will not be provided, the project coordinator should be assisted by additional administrative support personnel. The project coordinator and assistants will constitute a project team. This team will be chiefly responsible for identifying, analyzing and reviewing all project-related data. The coordination of project needs will usually involve the following:

(1) Project Liaison The local provost marshal, through the project coordinator, must establish a means for liaison with supporting personnel and services on projects that require professional engineering and design services. This is so that project needs can be both routinely reviewed by the provost marshal and coordinated with local engineering, design and construction personnel. Liaison should be established between the provost marshal and technical and engineering personnel when large scale projects have a balanced emphasis between facilities, equipment and personnel. Personnel-oriented projects principally concerned with a reorganization of existing functional activities and operations within current authorization levels and available facilities may not require engineering personnel to be involved in early project planning efforts.

(2) Special Studies Special studies to determine actual physical requirements may be needed for projects requiring new construction or extensive modernization and improvement, especially those requiring sophisticated communications and electronics equipment or security systems. Technical reports stating specific requirements may be required. Where they are, they should be reviewed by higher level military police personnel using technical assistance from installation C-E personnel. Projects involving major construction or improvement of mechanical, utility or environmental services may also require special studies and the application of professional engineering expertise. Depending on the availability of qualified personnel, the project coordinator may require special assistance from a planning consultant to conduct complex functional programming tasks and to organize and coordinate extensive facilities-planning and design requirements. Often the need for assistance is not apparent until more detailed information is available after the first assessments of project need are completed. The provost marshal will usually be in a position to identify the need for special studies or outside consultants. However, most requests for special studies should be made before the project has been fully organized.

(3) Task Scheduling Project emphasis, liaison requirements and the need for special studies influence the scheduling of tasks to be accomplished during the various stages of individual projects. The project coordinator should refer to Section 2-2, Project Development Process as a guide in determining the appropriate tasks for a particular project. Once the

required tasks have been determined, time allowances indicating desired dates for project accomplishment and specific staff responsibilities should be established and documented in a time/work schedule. This schedule should be included in the summary report on project need.

e. STEP 4: DATA COLLECTION The principal objective of this step is to identify current and future needs for facilities, equipment and personnel. Refer to Chapters 3 and 4 for guidance in identifying preliminary requirements. Depending on the complexity of the project, the collection of adequate data may require meetings with key personnel, a detailed inventory of equipment, or comprehensive reviews, surveys and inspections of functional activities and facilities. Initial data collection must identify.

(1) Gross functional and physical needs of individual activities.

(2) Internal physical and functional relationships of organizational components included in the project.

(3) Relationships of project areas to separate MP activities and to related functional activities (e.g CID, SJA, etc.).

f. STEP 5: PREPARE SUMMARY REPORT A summary report describing each aspect of the statement of project need should be prepared by the project coordinator. This report should include a brief description of the needs of each activity requiring organizational or physical development. When complete, this summary should be attached to the statement of project need and should be submitted to the local provost marshal for approval. Informal review by local engineering personnel may also be advisable where new construction projects might involve installation master planning approval. The summary report and statement of project need may also be formally reviewed by the installation commander once a preliminary review of project need has been made by local military police and installation engineering personnel. Once the need for a project is accepted and approved by a higher echelon using service, more comprehensive project data, including location, site and building requirements (size and cost), and a preliminary indication of planning and design requirements, will then be developed.

2-4 Establishing Project Requirements

a. GENERAL Once the Summary Report and Statement of Project Need have been accepted and approved, the first phase of project development ends and the next phase, Problem Analysis, begins. This phase

requires the development of more detailed project data. The first step in this phase involves the identification of comprehensive development goals. These goals should state organizational and physical development objectives. Development goals and other project requirements are usually established by the provost marshal in conjunction with installation engineering and manpower personnel. The detailed information developed in accomplishing the tasks in the Problem Analysis phase will be used in the subsequent Problem Solving phase. That phase will specify actual planning and design requirements. Outlined below are the tasks that must be accomplished by the provost marshal's project personnel in order to establish project requirements.

b. STEP 1: ESTABLISHING COMPREHENSIVE DEVELOPMENT GOALS Comprehensive development goals for individual activities must be established by local military police organizations. To ensure the development of functionally effective facilities this task should be assisted by installation engineer and manpower personnel. A statement of comprehensive development goals must be included in the documentation of project requirements (Project Development Brochure) as supporting information. The statement of individual goals should be limited to concerns involving organizational and physical development (facilities, equipment, personnel) and the requirements for planning and designing military police-type facilities. Clearly identified development goals will be of primary importance to facilities programming, planning and design decision-making. Such factors as the purpose of development goals, their functional objectives, principal aspects, relative importance and orientation to project requirements should be considered in establishing comprehensive development goals. These factors are discussed in more detail below.

(1) Purpose and Need The primary purpose of development goals is to provide an effective basis for the programming, planning and design of building and site facilities: the development of organizational components, and the satisfaction of individual functional requirements. The need for this approach is based on required improvements in the general quality and effectiveness of law enforcement programs and facilities. These improvements are chiefly directed toward achieving the following organizational objectives.

(a) To improve the local military police organization's performance of their community service role.

(b) To uniformly apply a management information systems capability at the local level for various types of military police organizations world-wide.

(c) To increase the level of sophistication and rate of effectiveness for procedures used in routine military police operations, general operations administration, information development, communications, and police data processing.

(d) To facilitate the maintenance of physically and functionally adequate facilities, equipment and staffing capable of responding to the demands of growing organizational and operational complexity.

(2) Functional Objectives It is essential that comprehensive development goals identify the functional objectives of individual military police activities. The relationship of these objectives to the overall functional, community service and troop support requirements of the installation should also be identified. Performance criteria for individual functional activities and specific physical and organizational requirements of those activities must be considered. Once overall project requirements have been established at the local installation level, a re-evaluation and final approval of development goals will take place. After this reassessment the approved functional objectives will be used to determine an integrated set of physical development and planning and design objectives.

(3) The Principal Aspects of Goals In general, comprehensive development goals are composed of two principal aspects: the organizational needs and the physical needs. There may also be secondary aspects which could be of equal importance. such as the timing, cost and urgency of satisfying these needs, or the sequence in which goals are to be achieved. Also, the requirements of mandatory planning and design criteria or the need to conform to health, safety and operations regulations may be important factors. Another consideration is that each aspect may have sub-aspects. For example, a functional objective to develop an advanced word processing center might actually involve the identification of a number of related goals, e.g., shared-use of facility, reduction in clerical personnel allocations, an increase in office skills training, the provision of more human comfort and productivity features.

(4) The Relative Importance of Goals The using service must identify the importance of individual goals within each aspect classification (physical and organizational). Two or three goals may be more important than all the remaining goals combined. Thus, it will be helpful to assign a relative value of Importance to each goal within a classification and to each entire classification. Relative importance might be measured simply by a priority system, using a hypothetical scale of 1 to 10 where the most important is No. 10. Another system that can be used is a weighting system which rates goals according to a corresponding percentage of a one hundred percent (100%) aggregate value for the entire classification, the greatest portion of the whole being the most Important.

(5) Orientation to Project Requirements The last but most important factor which should be considered in establishing comprehensive development

goals is project orientation. To identify and orient each goal the initial determination of project emphases should be considered. After all the factors that affect a project's development goals have been considered and a specific set of goals established, it may be necessary to adjust or redefine the statement of project emphasis referred to in paragraph 2-3. The goals that are identified must be organized in terms of the following project development and planning and design concerns:

- (a) *Mission Requirements*
- (b) *Organizational Requirements*
- (c) *Planning Requirements*
- (d) *Occupancy Requirements*
- (e) *Special Support Requirements*
- (f) *Detailed Activity Requirements*

c. STEP 2: IDENTIFYING ORGANIZATIONAL AND PHYSICAL DEVELOPMENT FACTORS The statement of project requirements must include sufficient background information to ultimately justify the proposal to construct, modernize, or improve facilities and/or equipment. This justification must be based on a determination that a particular project will be beneficial to the development of an organization's operational capabilities and the maintenance of its functional effectiveness. In justifying project requirements, the specific factors affecting organizational and physical development must be identified. This usually requires a description of project requirements in terms of the physical problems that constrain organizational development. Detailed and comprehensive descriptions are required since this data will be a major factor in determining the scope of physical development. Local provost marshals and installation commanders, therefore, should carefully consider:

(1) The Need for Improvement of Facilities Because of the special operational requirements of military police organizations, the need for physical improvement of facilities must be viewed in terms of the needs of other military criminal justice, law enforcement and security activities at a particular military installation as well as those of cooperating personnel services and community activities. Such a comprehensive view usually requires an evaluation of the physical and organizational benefits that could be achieved in combining or coordinating the need for facilities, equipment or personnel with the physical development of separate but related activities (CID, SJA, Community Centers, Health and Social Services, etc.). Current and projected trends in facilities planning, such as joint occupancy or the shared use of facilities by major supporting or cooperating organizations, must continually be evaluated in order to bring together the goals of related activities. This constant review of options may identify more beneficial development goals and lead to the establishment of requirements that will minimize

either the need for extensive physical development, the duplication of similar functions or the construction of new facilities with obsolete physical relationships. Similarly, a re-assessment of established development goals will be critical to determining the proper needs and organizational relationships of activities whose overall mission accomplishment and broad operational effectiveness depends to a significant degree on the cooperation, interaction or support of other organizations. Also, careful consideration should be given to development alternatives such as, new construction, modernization and improvement of existing facilities, etc. This is particularly important where the perpetuation of extended physical relationships would contribute to organizational and functional fragmentation.

(2) The Requirements for Organizational and Physical Development The actual requirements for a project will ultimately be determined by a careful analysis of existing operations, projected operational and administrative support requirements, current trends in mission accomplishment and the specific requirements for personnel and equipment. These problem areas must be studied in terms of how they relate first to the long-term military police support requirements of installation and tenant organizations, and second to the immediate and projected operational capabilities of a particular military police activity or facility. Technical assistance may be needed when the project under consideration is large scale or involves the achievement of organizational or physical development goals which are particularly important to an installation's overall mission effectiveness. It may be necessary for the local military police organization (provost marshal) or using service (installation commander) to seek technical or professional assistance in identifying the following specific requirements:

(a) Development Potentials The potential benefits of projects that provide for the shared-use, joint occupancy, or colocation of primary and support facilities by related activities must be assessed before development requirements can be determined. In most cases development requirements must concur with the DA-approved installation master plan. Local approvals will be required where it is possible that they will not be in accordance with the master plan. Approval will be based on the detailed functional requirements developed in accordance with criteria contained in this guide. In all cases, the development potential of various locations must be evaluated prior to setting specific locational constraints and facility and site development limitations. This is especially important where the comprehensive development goals of the using service indicate the need to reorganize or consolidate major elements of military police activities at one or more installations. Con-

sideration of potentially acceptable locations other than those provided for by the installation master plan is also important for projects related to maintaining the tactical strength and unit integrity of military police battalions assigned to major Army elements. Principal and subordinate elements of tactical military police units require training and administration activities to be in reasonable proximity to the location of the primary military police installation support function. This may require the consolidation of military police support operations and tactical unit facilities (barracks and administrative areas). Such considerations apply primarily to Type A, B and C installations. There are exceptions: Type D installations, which integrate training and administrative staff responsibilities will require special attention in identifying alternative locations for the purpose of accomplishing desired physical development.

(b) Personnel and Vehicle Accessibility The adequacy of access to primary and support facilities will be an important physical development consideration. It must be possible to satisfy vehicle and pedestrian access requirements and on-site utility and building service access needs as well as properly locate MP operations equipment (routine patrol and specific operations vehicles, radio equipment, electronic devices, security sensors, (CCTV, IDD's, etc.). Provisions for adequate personnel and vehicle accessibility should conform to generally accepted safety, security and habitability standards.

(c) Site Development Consider such factors as the shared-use of joint occupancy or support-type facilities. These factors may enhance mission-effectiveness, increase operational flexibility and influence subsequent site selection by providing desirable economic and functional features. Such features might include increased opportunities for cooperation between separate but related law enforcement activities, more effective supervision of major subordinate MP activities (investigations, registrations, etc.) or improved command control. Also, consolidation of separate MP activities or the grouping together of a wide range of related law enforcement, criminal justice and community service activities may provide the built-in potential for future growth. The identification of desirable site development features will depend on budget considerations and on the long-range projections for change or stability in the internal structure, functions and requirements of present military police organizations.

(d) Facility Development Factors adversely affecting facility development should be identified in terms of their impact on functional and operational needs. Existing installation mechanical and utility supply, existing buildings and site facilities and site boundaries should be studied to determine their suitability and long-range capacity for satisfying future require-

ments. In order to ensure that individual project needs are met in the most efficient and cost-effective way, at least three alternative approaches to physical development must be identified and carefully studied. Special attention should be given to identifying options which do not require major new construction, such as the rehabilitation of existing MP facilities. Also, consider the possibilities of converting non-operational administrative or service-type facilities in terms of the physical and functional advantages and disadvantages of each potential location.

(3) The Potential for Incremental Development

In establishing project requirements, the potential for and benefits of an incremental or phased approach to physical development should be assessed. The possibility of major changes in the scale and intensity of operations, coupled with budget limitations, may require that new or improved facilities be developed on an incremental or phased construction basis. In such cases, incremental development may involve the need to procure modular or pre-engineered-type equipment packages or to construct temporary facilities to house activities in need of immediate improvement. It may also involve the need to temporarily relocate operations or to totally replace existing facilities or equipment in a step-by-step fashion. Incremental development may be necessary where a review of mission requirements indicates there will be either substantial periodic increases in the demand for military police support or a dramatic rise in the level of complexity of on-duty operations.

d. STEP 3: ESTIMATING PROJECT SCOPE In order to properly establish project requirements, local provost marshals must estimate the scope of each project in terms of the size and cost of primary and support facilities. Reference should be made to criteria and guidance contained in DOD Construction Criteria Manual 4270.1-M and AR 415-17. Comprehensive development goals and the factors affecting organizational and physical development must be carefully evaluated. In estimating project scope. Refer to paragraphs 2-4b and 2-4c above. The actual estimate of project scope may be influenced by a military installation's general program for development and the approved scope of installation wide facilities planning and construction. In view of this basic limitation, the identification of detailed requirements should be coordinated with local installation. Facilities Engineering personnel. The estimate of project scope should be prepared in accordance with procedures described in Table 2-1. The following guidance should also be considered.

(1) Project Development Procedures The first step in estimating project scope is to identify current and projected organizational and operational requirements of individual functional activities. The sec-

Table 2-1 Procedures for Estimating Project Scope

RESPONSIBILITIES	PROCEDURES	REQUIREMENTS	REFERENCES
LOCAL USING SERVICE			
1. Identify Current and Projected Organizational and Operational Requirements	<ol style="list-style-type: none"> 1. Indicate factors affecting organizational development <ol style="list-style-type: none"> a. Identify factors that may immediately indicate an appropriate strategy for physical development 2. Establish operational characteristics <ol style="list-style-type: none"> a. Consider the capacity for immediate and future physical development and review local using service and operating agency analysis of existing operations (Inspector General's and Schedule X reports) b. Indicate potential for satisfying future organizational and operational needs related to the principal operating activity c. Consider existing or projected functional relationships of related or cooperating activities 3. Establish physical characteristics <ol style="list-style-type: none"> a. Determine the potential of existing site, building, mechanical, structural and environmental systems b. Consider long-term operating cost, life cycle cost, usefulness and utility requirements of current and projected functional activities 4. Tabulate personnel, functional, physical, environmental, and technical needs for: <ol style="list-style-type: none"> a. Individual activities b. General functional areas 	<ol style="list-style-type: none"> 1. Individual military police organizations shall collect, evaluate, organize project-specific data pertaining to functional, operational, physical and environmental requirements 2. Local using services shall identify organizational considerations 3. Local using services shall identify operational characteristics 4. The local using service and the operating agency must review personnel and equipment requirements and approve preliminary scope of activities to be included in each project 	<p>Chap. 2: Procedures for establishing individual organizational requirements</p> <p>Chapter 3: Procedures for establishing individual physical requirements</p> <p>Chapter 4: Procedures for identifying organizational, operational requirements of functional activity zones and individual functional activities</p> <p>Chapter 5: Survey of existing facilities will establish the basis for rehabilitation/conversion projects</p>
2. Establish Primary Facility Requirements	<p>To determine the size and space requirements of principal and supporting functional areas, organize requirements according to the following categories of space:</p> <ol style="list-style-type: none"> 1. Staff space: Includes occupied space required by principal functional activity <ol style="list-style-type: none"> a. Tabulate personnel requirements by individual functional activity b. Tabulate future total personnel and equipment requirements c. Identify number of staff positions allocated for administrative support and command staff d. For net staff space, multiply total number of staff for given functional activity by the approved space allocation standard 2. Functional support space: Includes special space, common-use space, unoccupied and occupied support space and essential support facilities required by a particular functional activity. Consider operational support factors in developing special space requirements. 3. Access and circulation space: Space added to estimate of staff and support space to provide for the proper internal relationship of functional activities. Apply operational facilities planning factor to sub-total of net staff and support space requirements 4. Mechanical equipment space: 5% of a, b, and c totals. Apply mechanical equipment space factor (5%) to primary facility requirements in establishing total space requirements 	<ol style="list-style-type: none"> 1. The local using service must identify the proportion of the project allocated to: <ol style="list-style-type: none"> a. Staff space b. Functional support space c. Access and circulation space d. Mechanical equipment space 2. Relate functional support space requirements to workload and mission effectiveness 	<p>Chap. 3: Procedures for establishing individual physical requirements</p> <p>Chap. 3: Environmental services design considerations</p> <p>Chap. 4: Procedures for developing special space, common-use space and support facility requirements</p>
3. Establish Support Facility Requirements	<p>To determine physical, mechanical and technical requirements for support facilities and building and site utilities, establish the following:</p> <ol style="list-style-type: none"> 1. Requirements for parking: <ol style="list-style-type: none"> a. Operational Parking <ul style="list-style-type: none"> • Determine on basis of number of specially assigned support operations personnel. • Determine site area by multiplying number of required spaces by prescribed number of square feet; add open space factor for landscape planting, screening, and security fencing for operational vehicles b. Staff/POV Parking <ul style="list-style-type: none"> • Determine required site area and landscape screening by multiplying half of building occupants allowable space allocation • Make provisions for physically handicapped c. Visitor Parking <ul style="list-style-type: none"> • Make provisions for physically handicapped • Make provisions for unusual visitor traffic • Determine site area by multiplying number of required spaces by allowable space allocations; add landscape factor 	<ol style="list-style-type: none"> 1. Determine requirements in accordance with the site planning and project development guidance contained in TM 5-803-3 and TM 5-800-3 2. Determine site area requirements for: <ol style="list-style-type: none"> a. Site utilities supporting primary facilities b. Parking space (handicapped) c. Open space d. Site access and circulation space 3. Use primary facility data (staff totals, access, etc.) to determine any additional parking, open space, site access and circulation requirements 4. Open space requirements must consider need for: <ol style="list-style-type: none"> a. expansion of primary and supporting facilities b. site landscaping c. development of buffer zones d. set-back and site development constraints of security, confidentiality, restrictions of installation Master Plan 5. Site area requirements depend on availability of direct access from major and secondary vehicular transportation routes 	<p>Chap. 3: Building and site design considerations</p>

ond step is to have local installation and military police personnel analyze and evaluate this preliminary data. Higher echelon installation command or HQDA (DAPE) approvals may also be required at this point. It is recommended that before higher echelon review and approval is sought, the preliminary requirements for physical development be coordinated with the local installation engineering planning and design personnel to ensure that no essential building or site development consideration has been overlooked. The installation's physical development policies and HQDA approved Master Plan requirements as well as procedures relating to exceptions to master plan and site selection requirements must be reviewed. Any required action must be coordinated with established project requirements.

(2) Local Reviews The primary purpose of local project review and approval procedures is to establish as early as possible those pre-planning decisions and project objectives that will eventually determine:

- (a) *actual physical and functional requirements*
- (b) *relevant planning and design criteria*
- (c) *appropriate strategies for project development*

(3) Higher Echelon Guidance

Large scale projects may require higher echelon military police guidance in the preparation of actual project requirements. When provided, this guidance will govern local planning and design. This guidance should indicate to the local provost marshal the need to consider such factors as possible or probable changes in organizational development requirements, current staff relationships to related functional activities, current and projected military, civilian and male/female personnel requirements. Special space and equipment requirements, operational support activities (CID, SJA, etc.), and other special functional, mechanical or technical requirements should be given careful consideration by higher echelon personnel in preparing guidance for project accomplishment. Higher echelon guidance should be as specific as possible in order to enhance and extend the accuracy and consistency of final project size and cost estimates.

(4) Project Size and Space Requirements When organizational and physical development factors indicate the need for totally new construction, follow the procedures outlined in Table 2-1 to estimate project size and space requirements. In general, the requirements for new construction should identify the physical and environmental needs of individual functional activities and general functional activity zones. Refer to Chapter 3 for detailed site and building design criteria and to Chapter 4 for appropriate space organization principles.

(a) *Staff Space* Staff space is determined by tabulating the aggregate of full-time personnel allocations for individual functional activities and listing them according to general functional activity zones. The total will combine full and part-time positions. Table 2-2 indicates possible staff and space requirements for typical small, medium and large military police facilities. In estimating each project's actual staff space requirements the using service must identify the projected personnel requirements for short, middle and long term organizational and physical development. This involves identifying the current requirements for the target year in which building occupancy will occur. Target year requirements constitute short term needs. Middle term requirements are set at the end of a three to five year period following the projected date of occupancy. Long term requirements are set at the end of a five to ten year period following the projected date of occupancy. The span of years will depend on the degree of change that can be expected in staff space requirements of each activity area. Total requirements for each period should indicate the relative importance of flexibility and change with respect to the anticipated increase or decrease in staff positions and the functional support space they require. To arrive at net staff space requirements, simply multiply total staff for a given functional activity by the space allocation standard for that particular functional activity.

(b) *Functional Support Space* Functional support space usually includes unoccupied space directly related to and essential for the accomplishment of a particular functional activity. For example, the need for interview rooms might depend on the level of privacy and confidentiality required by either MP investigators or on-duty personnel. This particular need depends on mission-effective requirements to maintain the security and integrity of investigative operations. In general, the requirements for functional support space depend on the number and sophistication of the staff supported. Ratios between staff space and interview rooms are useful guides to determining the specific need for this type of space. In order to adjust general space allocation criteria to reflect functional support space requirements, a functional support factor should be used. As Table 2-2 indicates, the application of this adjustment factor should be related to the number of staff positions required for a given military police operation.

(c) *Access and Circulation Space* Access and circulation space is that space which is added to the estimate of staff and functional support space in order to provide the proper physical relationship between functional activities. The space required for access and circulation will be determined by applying a 43 percent operational facilities planning factor to

Table 2-2 Primary Facility Requirements*

		SMALL		MEDIUM		LARGE	
		Staff	Space	Staff	Space	Staff	Space
Zone 1	Provost Marshal Activities	8	1,618	10	1,980	13	2,594
	1—Provost Marshal Office 2—Community Relations 3—PM Administrative Support						
Total		8	1,618	10	1,980	13	2,594
Zone 2	Military Police Services (Administration Related)						
	1—Public Assistance		600		700		750
	2—Community Activities		1,230		1,484		1,650
Total		(1)**	1,830	(1)**	2,184	(1)**	2,400
Zone 3	Military Police Services (Operational Related)						
	1—Registration Services Section	2	912	3	1,524	5	2,572
	2—Traffic Section	6	1,171	8	1,321	13	1,936
Total		8	2,083	11	2,845	18	3,508
Zone 4	Military Police Operations (Operations Support Related)						
	1—Operations Office	3	718	4	913	5	1,030
	2—Operations Administration	13	2,784	19	3,567	25	4,668
	3—Operations Support Services						
	(a) Liaison Section	1	275	3	455	5	870
	(b) Community Service Section	2	582	3	858	5	1,188
(c) Absentee Control Section	3	448	5	780	9	1,232	
Total		22	4,807	34	6,473	49	8,988
Zone 5	Military Police Operations (Routine On-Duty Related)						
	4—Investigations	6	1,650	12	2,425	16	3,076
	5—Physical Security	2	416	6	1,002	8	1,340
	6—On-Duty Operations	3	1,890	5	2,360	6	2,750
	7—Operations Support Facilities	1	1,760	2	2,900	4	4,800
	(a) Briefing/Training						
	(b) Lockers and Showers (Male & Female)						
(c) Operations Equipment Storage (Interior)							
Total		12	5,716	25	8,777	34	11,966
Net Functional Area		50	16,054	80	22,359	114	30,456
Net Area Planning Factor			1,605		2,236		3,046
Mechanical Equipment Area			801		1,125		1,523
Primary Facility Requirements		50	18,460	80	25,720	114	35,025

*Primary Facility Requirements include unoccupied space used to support primary functional activities. The staff/space ratio for each zone reflects this additional space.

**Part-time Occupancy, position not included in staff totals.

the sub-total of net staff and functional support space. This factor is considered minimal in comparison to the typical building planning factor of 33 percent of the net functional area. The increase occurs when appropriate consideration is given to the special access and circulation requirements of MP facilities.

(d) *Mechanical Equipment* The use of a factor of 5 percent of the space required to satisfy primary facility needs (Staff Space, Functional Support Space, and Access and Circulation Space) is suggested as a way of estimating the space required for mechanical equipment. The actual space allocation will depend on the level of sophistication of the mechanical systems required and the existing or available utility services. In some instances this space may include accessible rooftop mechanical equipment. Refer to Section 3-6 "Environmental Services Design", for general criteria and guidance.

(e) *Support Facility Requirements* Staff requirements and primary facility size will be used to determine support facility requirements. These requirements include site utilities, operational, administrative and visitor parking: open space and the site access and circulation space required by a particular scale of operation. Table 2-3 describes typical requirements and provides an example of the site area required by support facilities.

(f) *Parking* Military police parking requirements are divided into three categories: operational parking, administrative parking, which includes the requirements for staff/POV parking; and visitor parking:

- *Operational Parking* – These requirements are determined on the basis of the actual shift size and patrol compliment assigned to a particular military police facility and the number of uniformed police personnel (operations and administrative support) required to conduct primary operations. To provide adequate operational parking space, use a ratio of 2 operational vehicle parking spaces to every 3 staff positions allocated for military police operations activities. Where site area is less than adequate or parking space is limited by expansion needs, the parking space for individuals assigned to routine on-duty activities (MP Desk, MPI, etc.) may be deducted from operational parking totals in order to provide adequate operational parking facilities. The site area required for operational parking including provisions for impound lot, guard mount and security enclosure (high fencing, walls, etc.) is determined by multiplying the number of required spaces by 600 sq. ft. and then adding an open space factor of 15 percent of the net area to accommodate required landscape planting, screening and security provisions (night lighting, closed circuit surveillance, etc.). Refer to Table 2-3 for guidance.

- *Staff/POV Parking* – These requirements are determined on the basis of standard parking allocations which provide one parking space for every two building occupants. Provisions for the physically handicapped are required for staff/POV Parking. The site area required for staff/POV parking including landscape planting areas for screening is determined by multiplying one-half of the building's occupants by 450 sq. ft. This will provide adequate spacing, pass-through and turn-around provisions to avoid deadend parking and allow accessibility of essential building services. Refer to Table 2-3 for guidance.

- *Visitor Parking* – Visitor parking requirements are determined on basis of the volume of community service type activities (registrations workload, community services caseload, requests for MP information, accident and investigations workload, intensity of the community relations program etc.) As a preliminary guideline, one visitor parking space is usually provided for every full time staff position in Zones 4, 5. Also the classification of Zone 1, Zone 2 and Zone 3 visitor traffic as heavy, medium, or light influences the need for additional visitor parking requirements (Zone 1 visitor traffic is generally light). However, to identify requirements that reflect specific conditions, apply the following formula: Provide two additional visitor parking spaces for light visitor traffic, three additional visitor parking spaces for medium visitor traffic and four additional visitor parking spaces for heavy visitor traffic. In all cases, one additional handicapped visitor parking space must be provided when visitor parking space requirements exceed ten (10) spaces and two (2) additional spaces when normal requirements exceed twenty (20) spaces. The site area required for able-bodied visitor parking is determined by multiplying the number of spaces required by 450 sq. ft. The area required for handicapped parking is determined by multiplying the number of handicapped visitor parking spaces by 525 sq. ft. A factor of 15 percent of the total net area required should be added in order to accommodate the landscape planting requirements directly related to visitor parking. Refer to Table 2-3 for guidance.

(g) *Open Space Requirements* The site area required for open space will be determined by multiplying the total land area required for primary facilities and operational, staff/POV and visitor parking, including future expansion area, by an open space factor of 60 percent. Where structures are of more than one-story, occupancy requirements would not be directly reflected in the land area used for buildings. To allow for such locational constraints open space requirements should be increased by using the total floor area for expanded primary facilities instead of land area requirements. The application of

Table 2-3 Support Facility Requirements

Required Areas	Items Included
Parking	Parking, Turning & Pass-Thru Space, Landscaping, Fencing, Lighting & Signage
Operational Staff/POV Visitor	Guardmount/Secure Parking, Impound Lot, Operations Equip. Stor. Drop-off Zone, Handicapped Parking, Staff & Reserved Spaces Drop-off Zone, Handicapped Parking, Service Access, Reg. Sec. Parking
Open Space	Set-back, Buffer & Expansion Areas, Site Utilities: Communications, Water, Sewer, Gas & Electric, Site Work: Grading, Paving (sidewalks) Fencing, Walls, Lighting, Landscaping & Signage
Access Space	Approach, Entry, Drives, Walks, Landscaping, Lighting & Signage
Small Size MP Facility (Staff Size: 50)	
	Sq. Ft. Area
Primary Facility Requirements	18,960
Functional Support Facilities	
Parking	
Operational	11,100
Staff/POV	9,600
Visitor	4,100
Open Space	25,956
Access & Circulation Space	12,978
Support Facility Requirements	63,739
Minimum Site Area Requirements	82,194
Medium Size MP Facility (Staff Size: 80)	
	Sq. Ft. Area
Primary Facility Requirements	25,720
Functional Support Facilities	
Parking	
Operational	19,000
Staff/POV	12,600
Visitor	6,200
Open Space	38,112
Access & Circulation Space	19,056
Support Facility Requirements	94,968
Minimum Site Area Requirements	120,688
Large Size MP Facility (Staff Size: 114)	
	Sq. Ft. Area
Primary Facility Requirements	35,025
Functional Support Facilities	
Parking	
Operational	31,700
Staff/POV	21,500
Visitor	8,400
Open Space	57,975
Access & Circulation	28,988
Support Facility Requirements	148,563
Minimum Site Area Requirements	183,588

total floor area as a way of calculating open space requirements will depend on the land use and site density requirements and on limitations of the installation master plan. Examples of open space requirements are provided in Table 2-3 for guidance. In evaluating open space requirements, take into consideration the need for:

- *Expansion of primary and support facilities*
- *Site landscaping*
- *The development of buffer zones, and*
- *The set-back and site development constraints that pertain to security, confidentiality and the restrictions of the installation Master Plan.*

(h) Site Access and Circulation The area required for adequate site access and circulation must be calculated in order to determine minimum site area requirements. These requirements typically depend on the availability of direct access from major and secondary vehicular transportation routes. Generally, 30 percent of the total land area required for fully expanded primary facilities and parking exclusive of other site elements will be adequate to provide the essential access and circulation. However, specific area requirements may be increased or decreased by location and site constraints that limit or allow easy site access, use of existing adjacent parking facilities or the shared-use of supporting facilities (drives, secure parking, staff parking, etc.) by related functional activities. On average, the typical preliminary estimate of access and circulation area can be reduced by efficient and functional planning of actual site traffic and parking requirements. Estimates that use the 30 percent factor usually provide the flexibility and opportunity to achieve the most operationally effective relationships between essential site elements and functional requirements.

(5) Project Cost Estimates Local provost marshals with the assistance of engineer personnel are responsible for estimating the cost of individual projects. These costs will be based on current trends in military construction and on mission-peculiar constraints and opportunities that may influence the establishment of project-specific requirements. The following guidance will assist local using service and engineer personnel in determining individual project cost estimates:

- (a)* Empirical cost estimates should be prepared in accordance with AR 415-17, which provides unit cost figures for all types of facilities.
- (b)* Military police facilities are categorized as operational facilities. They have a category code number (700 series) which should be used in determining empirical cost estimates for military construction.

- (c)* The unit cost figures shown in AR 415-17 include equipment and furniture which is permanently built into or attached to the structure or the confines of the site.
- (d)* Tables 2-2 and 2-3 contain the items which will normally be included in the initial estimate of project cost. Detailed requirements may be established by referring to the functional and physical characteristics and individual criteria contained in Chapter 3.

(6) Local Requirements Local requirements peculiar to an individual functional activity or to the installation's military police mission must be identified by the local using service. In identifying local requirements, the following factors should be considered:

(a) Organizational Requirements At the outset, the local identification of individual organizational requirements, as discussed in Section 2-3, may indicate whether a particular approach to physical development is appropriate (new construction, modernization and improvement, relocation, consolidation, etc.). In general, the organizational and operational requirements of functional activity zones and individual functional activities, as discussed in Chapters 3 and 4, will establish the appropriate project requirements for planning and design of new construction.

(b) Operational Characteristics Local provost marshals should identify the specific operational characteristics that will satisfy future organizational and operational needs. The relationship between existing or proposed military police facilities and related activities (CID, SJA, etc.) should be considered in determining requirements for support facilities, building location and orientation and the scope and quantity of site elements for a particular scale of operation. Where opportunities for shared operational use of facilities such as access roads, operational parking, or utility and security services exist or are planned, such opportunities should not interfere with the provisions of essential project requirements but should be considered as one of the determining factors in establishing site development and site building size requirements.

(c) Physical Characteristics Existing requirements for immediate and future physical development must be considered by both local using service, engineer and design agency personnel in analyzing functional requirements. Site, building, mechanical, structural and environmental systems will be planned and designed to provide the physical characteristics and potential to accommodate efficiency, economy, utility and maintenance requirements, and reflect the long-term operating and life cycle costs of current and projected functional activities. The organizational, operational, and functional requirements which gen-

erally shape the physical environment for new construction will not have as strong an impact on establishing the project requirements for the rehabilitation/conversion of existing facilities. This is primarily due to the fact that the form, content, quality and dimension of what already exists has the strongest influence on overall project planning and design, and particularly on the provision of functional requirements for rehabilitation/conversion projects. Refer to Chapter 5 for the criteria governing the establishment of requirements for rehabilitation/conversion projects.

(d) *Site Development* Generally, site boundaries and the extent of site development are determined in response to the need for projected increases or changes in functional and operational requirements. These requirements can best be accomplished where initial site development and support facilities provide potential for future development. This potential should not exceed a 50 percent growth factor in the near and middle term. However, if essential requirements of future operations should mandate a greater increase, this should be considered in determining either the long-term functional requirements for new construction or the ultimate feasibility of rehabilitation/conversion projects.

e. STEP 4: FUNCTIONAL REQUIREMENTS REPORT After all the relevant organizational, operational, physical and site development data have been reviewed and approved at the local level, they should be summarized as the introduction to a functional requirements report. This report, used to prepare the Project Development Brochure, presents project development data and requirements for new construction in a form comprehensible to the authorizing agency and later to the design agency and to project evaluation personnel (District Engineer or AE). Normally, this will be accomplished in accordance with procedures established in AR 415-20, Project Development and Design Approval. The project size and cost estimates established on the basis of the functional requirements report provide a means for determining an appropriate project development strategy. Individual project requirements result from a logical progression of facilities-programming steps which must be reflected in subsequent and equally logical and carefully organized pre-design concepts. In terms of documentation, the functional requirements report serves several project development purposes.

(1) To state the programming, planning and design method used to develop the space program and determine project size and cost.

(2) To state the project-specific requirements, planning and design criteria and actions necessary to achieve physical development in accordance with established project-development procedures.

(3) To guide the supporting services and engineering and design personnel in the development of pre-design concepts which implement the program, and to provide design development criteria against which final project accomplishment can be measured.

(4) To serve as a permanent record and consistent format, which can be updated if and when conditions change during the project development process.

(5) To act as the principal project reference document for project programming, planning, design and evaluation personnel.

f. STEP 5: STRATEGY FOR PHYSICAL DEVELOPMENT The provision of functional requirements can be achieved in a number of ways. To maintain control over the way in which a project is accomplished, each project will require a strategy for physical development. Physical development strategies act as the foundation for subsequent decision-making. The using service must consider all the preceding project requirements in establishing an individual strategy for physical development. The organization and contents of specific strategies will depend on the nature and scale of MP operations and the specific project objectives determined by pre-planning decisions.

(1) **Current Development Concepts** Each strategy for physical development must be based on currently accepted and approved concepts for organizational development. A conceptual framework for each strategy can be constructed by relating the concepts for organizational development to the current standards for effective operation of a particular military police activity. This conceptual framework, when applied to the planning and design of military police facilities, must be specifically related to the functional and physical requirements of individual activities.

(2) **Practical Planning and Design Applications** Strategies for physical development will be used by the design agency to evaluate planning and design requirements and to develop pre-design concepts. Thus, there must be practical application to the planning and design process. Examples of the application of comprehensive physical development strategies are presented in the illustrative examples contained in Chapter 6. To assure that adequate consideration is given to the principal factors affecting project development, the using service should develop strategies only after carefully reviewing planning and design guidance contained in Chapters 3 and 4.