

U.S. Department of Energy
Washington, D.C.

ORDER

DOE 4320.1B

1-7-91

SUBJECT: SITE DEVELOPMENT PLANNING

1. PURPOSE. To establish policies and assign responsibilities and authorities for the planning and development of Department of Energy (DOE) sites.
2. CANCELLATION. DOE 4300.1B, REAL PROPERTY AND SITE DEVELOPMENT PLANNING, of 7-1-87, Chapters 1 and 2.
3. SCOPE. The provisions of this Order apply to all Departmental Elements, except as otherwise provided by this Order, statute, or specific delegation of authority from the Secretary of Energy. The provisions of this Order shall be applied by Contracting Officers to management and operating contracts.
4. EXCLUSIONS.
 - a. Administrators of Power Marketing Administrations. In accordance with Sections 302 of the Department of Energy Organization Act (PL 95-91), the Secretary operates and maintains the Power Marketing Administrations' (PMA) electric power transmission systems by and through the PMA Administrations. The PMAs have in place site development processes, which are geared to the special needs of utility operations, are responsive to coordinated multi utility system requirements, and are in conformance with prudent utility practice. In view of the unique nature of the Administrators' obligations to meet their statutory and public utility responsibilities for the safety, security and reliability of electric power transmission and of their legal and contractual obligations, the Administrators shall determine the appropriate site development planning criteria for their facilities. This will include consideration of appropriate parts of the criteria set forth by this Order.

DISTRIBUTION:

All Departmental Elements

INITIATED BY:

Office of Project and
Facilities Management

- b. Director, Naval Nuclear Propulsion Program. Executive Order 12344, statutorily prescribed by PL 98-525 (42 USC 7158 note), establishes the responsibilities and authority of the Director, Naval Nuclear Propulsion Program (who is also the Deputy Assistant Secretary for Naval Reactors within the Department) over all facilities and activities, which comprise the joint Navy-DOE Program. In view of the unique nature of naval nuclear propulsion applications, and the statutorily prescribed responsibilities noted above, the Director shall determine the appropriate site development planning criteria applicable to program property and activities, which will include consideration of appropriate parts of the criteria set forth by this Order.
5. REFERENCES. The following references are useful or necessary to perform the functions of this Order:
 - a. DOE 5000.1A, INSTITUTIONAL PLANNING OF MULTIPROGRAM LABORATORIES, of 9-12-86, which establishes the institutional planning process for DOE multiprogram laboratories.
 - t). DOE/AD/06212-1, "Site Development Planning Handbook," P-1, of 1-81, which provides a suggested methodology, along with some specific techniques for preparing a Site Development and Facility Utilization Plan.
 - c. DOE/MA/06212-2, "Site Development Planning Handbook Supplement," P-2, of 11-82, which is a case study to demonstrate the principles and illustrate the process of facility planning.
 - d. DOE/MA-0129, "Site Development Planning for Energy Management," P-3, of 8-85, which identifies the relationship between site planning and energy consumption and how consumption can be reduced.
 - e. DOE/MA-0328, "Utilities Planning and Management," of 8-88, which provides guidance in the planning, acquisition and management of utility services.
 - f. Office of Management" and Budget Circular A-16, Coordination of Surveying and Mapping Activities of May 16, 1967 (as amended), which describes the responsibilities of Federal agencies with respect to coordination of Federal surveying and mapping activities financed in whole or in part by Federal funds.

- g. DOE 5440.1C, NATIONAL ENVIRONMENTAL POLICY ACT, of 4-9-85, which establishes policy and procedures to implement National Environmental Policy Act (NEPA) .
- h. SEN-15-90, NATIONAL ENVIRONMENTAL POLICY ACT, of 2-5-90, which establishes DOE policy and procedures to implement NEPA.
- i. DOE 5650.3, IDENTIFICATION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION (UCNI), of 2-29-88, which establishes policies, procedures, and responsibilities for the identification and control of UCNI .
- j. SEN-25-90, STRATEGIC PLANNING INITIATIVE, of 7-24-90, which establishes policy concerning implementation of a process for planning, programming and budgeting.

6. DEFINITIONS .

- a. Facility. A general term to describe fixed site improvements such as buildings, structures, roads. and utilities.
- b. Field Element. Any officially established Departmental organization located outside the Washington, DC, metropolitan area.
- c. Outlay Program Managers. Assistant Secretaries for Conservation and Renewable Energy; Environment, Safety and Health; Nuclear Energy; Fossil Energy; Defense Programs; and the Directors of Energy Research; Environmental Restoration and Waste Management; New Production Reactors; and Civilian Radioactive Waste Management, who manage the Headquarters organizations responsible for outlays of Federal funds other than for salaries and expenses.
- d. Program Mission Projections. Prepared by the outlay program managers and identify the level of support, product, or services required at each site.
- e. Mission Resource Requirements. Prepared by the site and describe the necessary resources, i.e., people, equipment, cubic feet of storage material, etc., required to meet program mission projections at that specific site.
- f. Facilities Requirements. Prepared by the site and quantify the size and configuration of buildings, roads, structures, lands, and other facilities/resources at a site required to satisfy the mission resource requirements.

- g. Site. A geographic entity comprising leased or owned land, buildings, and other structures required to perform program activities.
- h. Unclassified Controlled Nuclear Information. Certain unclassified Governmental information prohibited from unauthorized dissemination under section 148 of the Atomic Energy Act and DOE 5650.3.
- i. Site Development Plan (SDP). A summary level document for senior managers to use that presents site development issues that require a commitment of resources to solve.
- j. Technical Site Information. The documented result of the site planning process that contains information and data for use by staff and technical personnel.
- k. Master Plan. A document or map that shows facilities or land uses required to support future missions at some point in time, usually 20 years.

7. POLICY. It is the policy of the Department that:

- a. All sites shall have in place a process to plan for and develop real property holdings to support the missions of the site. This process shall result in two documents: (1) the "Technical Site Information" described in Chapter I for use by technical and staff personnel, and (2) the "Site Development Plan" described in Chapter II for use by senior managers.
- b. All sites are required to have the Technical Site Information (TSI) and a SDP. See Chapter 11 for specific guidance concerning Oak Ridge Reservation, Idaho National Engineering Laboratory, Hanford Site, Nevada Test Site, Strategic Petroleum Reserve, and Savannah River Site.
- c. The TSI shall be the documented result of the planning process, contain detailed information structured for technical and staff personnel use, and shall address, as a minimum, those issues outlined in Chapter I relative to the stewardship of real property at a site.

- d. Site planning is a continuing process. As such, the TSI shall be maintained consistently with the SDP, shall be updated yearly, and shall be approved by the responsible manager of the operations office.
- e. The SDP shall be sufficiently flexible to be structured for use by senior managers making decisions concerning broad programmatic issues and shall be in the format described in Chapter II. This document will be a summary and will present those site initiatives and issues that require program resource commitments or support.
- f. The Site Development Plan shall be revised as required, issued yearly, cover a period of 20 years into the future and be approved by the operations office manager.
- g. The mission resource requirements shall reflect the most recent guidance from Headquarters program offices and from current planning, programming and budgeting systems.
- h. Sites shall include in the planning process the acquisition and use of standard Geographic Information Systems (GIS), which promote coordinated development, use, sharing and dissemination of surveying, mapping, and related spatial data. Cooperation with State and local governments and the private sector is encouraged to the fullest practical extent.
- i. At the time a SDP is developed or revised, the operations office manager and/or outlay program manager shall evaluate any existing site-wide or relevant programmatic NEPA documentation, in consultation with Assistant Secretary for Environment, Safety and Health, to determine whether further NEPA documentation is required. Likewise, reviewers of the SDP and TSI shall evaluate any existing site-wide or relevant programmatic NEPA documentation for consistency.

8. RESPONSIBILITIES AND AUTHORITIES.

a. The Secretary or Designee.

- (1) Establishes principles and policies relating to site development planning.

- (2) Shall make determinations and resolve site development issues where conflicting programmatic requirements, land uses, or other issues cannot otherwise be resolved at lower organizational levels.
 - (3) Shall determine on a yearly basis those issues or matters relating to site development planning that require review and evaluation, and shall delegate review authority.
- b. Director of Administration and Human Resource Management.
- (1) Provides within DOE Headquarters the core of professional planning expertise to the Secretary or Designee, to Headquarters program offices, and to field elements.
 - (2) Provides recommendations to the Secretary or Designee to develop policies relating to site development planning criteria.
 - (3) Assesses and evaluates the planning process at the field elements on behalf of the Secretary or his Designee.
 - (4) Reviews, independently and jointly with outlay program managers, the field elements for areas and methods to improve site development planning policy, and for those issues or matters directed by the Secretary or Designee.
- c. Outlay Program Managers.
- (1) Provide the program mission projections (from Strategic Plans per SEN-25-90) upon which the SDP is based.
 - (2) Concur with the site's mission resource requirements.
 - (3) Jointly reviews annually, with the Director of Administration and Human Resource Management, the site planning process for field elements and other site planning issues or matters as directed by the Secretary or Designee.

d. Headquarters Secretarial Officer with Landlord Responsibilities.

- (1) Review SDP.
- (2) May request, as required, detailed supporting planning information from field elements such as engineering evaluations of facility support capabilities, descriptions of physical plant infrastructure units, status of regulatory compliance, near-term construction schedules, TSI documentation, and environmental, utility, and transportation plans.
- (3) Jointly reviews annually, with the Director of Administration and Human Resource Management, the site planning process at field elements and other site planning issues or matters as directed by the Secretary or Designee.

e. Operations Office Managers shall:

- (1) Oversee at each site the development, implementation, maintenance, and documentation of a planning process that will address, as a minimum, all those elements outlined in Chapter I. This shall include formal coordination between site planning and all other facility-related administrative activities such as real property management, facility maintenance planning, environmental/safety/health/security performance, energy conservation, design for new construction, and budgetary planning.
- (2) Approve SDP and TSI documents.
- (3) Formally review the planning process yearly for each site under its cognizance and maintain official documentation and records of those reviews.
- (4) Ensure the format of all SDP from sites under their cognizance is consistent with the format outlined in Chapter II.
- (5) Ensure that SDP and other related documents are reviewed for classified information and UCNI.

9. APPROVALS AND PROCEDURES.

- a. As shown on Figure 1, outlay program managers shall provide program mission projections or appropriate program guidance to the heads of field elements.
- b. Operations office managers shall provide, to the outlay program managers for concurrence, the mission resource requirements based on the most recent program guidance or mission projections.
- c. Preparation and approval of the TSI and the SDP based on the mission resource requirements will be accomplished by the responsible manager of the operations office. (For sites that report directly to a Headquarters organization, these responsibilities will be assumed by the cognizant outlay program manager.)
- d. SDP shall be forwarded to Headquarters Secretarial Offices with landlord responsibilities, one copy to the Director of Project and Facilities Management, Office of Administration and Human Resource Management, and one copy to the Assistant Secretary for Environment, Safety and Health.

BY ORDER OF THE SECRETARY OF ENERGY:



JOHN J. NETTLES, JR.
Director of Administration
and Human Resource Management

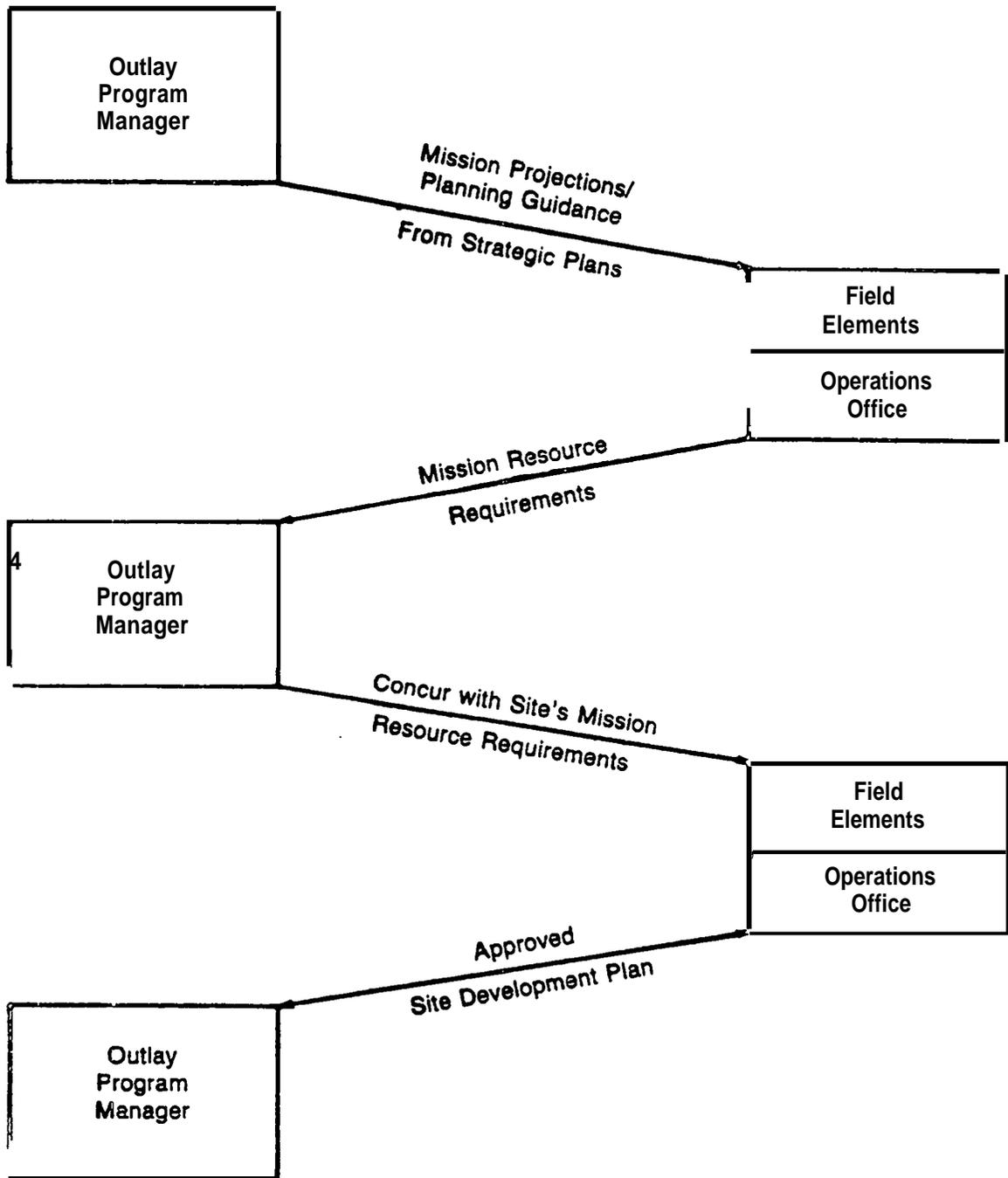


Figure 1
Site Development Plan
Sequence of Events

TABLE OF CONTENTS

CHAPTER I - SITE DEVELOPMENT PLANNING

Page

1. Planning Process	I-1
2. Technical Site Information	I-2

CHAPTER II - SITE DEVELOPMENT PLAN FORMAT

1. Concept	II-1
2. Special Requirements	II-1
3. Format	II-1
4. Contents of Pages 1 and 2	II-2
5. Contents of Pages 3 and 4	II-2
6. Contents of Pages 5, 6, 7 and 8	II-3
7. Contents of Pages 9 and 10	II-3
8. Maps	II-4

CHAPTER I

SITE DEVELOPMENT PLANNING

1. PLANNING PROCESS.

- a. The planning process, as it relates to site planning, is defined as those incremental steps used by a site planner to:
 - (1) Identify and define current and future site missions;
 - (2) Evaluate existing site conditions and regional influences;
 - (3) Determine and quantify facility requirements to accomplish the missions of the site;
 - (4) Formulate alternatives to satisfy the facility requirements;
 - (5) Evaluate and rank the alternatives based on their merits; and
 - (6) Develop a plan of actions to implement the preferred solution.
- b. Site planning should not be accomplished in a vacuum and all affected parties should have input into the process. The operations office manager shall determine the appropriate level of community involvement in the planning process. This involvement will vary with each site and may range from meetings with local planning boards or public officials to formal hearings. The operations office manager shall prepare a community relations plan that addresses the level of community involvement and a plan of action and milestones.
- c. The planning process must be documented so that others may follow the site planner's thought processes to arrive at the solutions and plan of actions. This documentation shall be called "Technical Site Information" (TSI). Listed below is a detailed outline of the minimum TSI that documents the thought processes of the site planner to satisfy the requirements of this Order. The planning process and TSI may be modified to best serve the needs of a site, but the process must be based on industry-wide accepted and recognized planning principles. There may be additional unique requirements that should be used for special situations such as:
 - (1) At production sites industrial engineering fundamentals are usually paramount and should be used extensively in the planning process to identify the flow of work product and to identify facility requirements.

- (2) At research laboratories a campus setting may be the most suitable working environment and planning should reflect that parameter.
- d. The TSI shall be comprehensive and shall be located and maintained at the site. It is not intended to reproduce in the TSI in total that information which is found in other planning documents, such as the Environmental Restoration and Waste Management Five-Year Plan. The intent is to summarize or reference those other planning documents, and to discuss the impacts on land use, siting of facilities, and mission. The documentation in the TSI shall be sufficient to permit readers to easily understand the analysis and conclusions established through the planning process. The TSI has been logically grouped into five sections with related subtopics. The subtopics may be rearranged into other sections to meet the unique requirements of a site, but all subtopics must be addressed as part of the planning process. The format of the TSI will generally be one volume containing the five sections. Each section, however, may be a stand-alone document if large amounts of material and data are required to document the planning process. In this case, the TSI may consist of two to five volumes depending on the grouping of the sections in each volume. Planners are urged to use judgement in expanding or contracting the steps outlined to fit the specific site being planned.

2. TECHNICAL SITE INFORMATION.

- a. Regional Conditions. Address the following issues:
 - (1) History. Describe the history of the site and how it has developed to the present.
 - (2) Regional Overview. Using a map and narrative, evaluate the relationship of the site with the surrounding region concerning demographic features, community attitudes and pressures, local issues or problems, labor supply, materials availability, housing; schools, and any other factors that may aid, limit, or otherwise affect the future development or operation of the site.

- (3) Specific Locale Conditions. Address and map the location of population densities, zonings, land use patterns, and other pertinent issues in the vicinity of the site and any other laws or regulations that may affect the future use of the site. Examples are wetlands protection, coastal zone management, air quality standards, historic preservation, etc.
 - (4) Public Transportation. Evaluate and map the location of transportation facilities that serve the site such as road networks, airlines service, railroad and waterborne services.
 - (5) Geology/Topography. Evaluate and map the location of features that may affect future use and development such as fault locations, earthquake potential, water table depths and aquifers, wetlands, flood plains, forested areas, ecological areas, etc.
 - (6) Meteorology. Address conditions such as prevailing winds, temperatures, probability and intensities of severe storms, tornados, and prolonged rainy or dry seasons.
 - (7) Floodplains/Wetlands. Development of a Site Development Plan is an "action" defined in 10 CFR Part 1022, Compliance with Floodplain/Wetlands Environmental Review Requirements. The development of a site plan for any site with facilities or activities in a 100 year floodplain must comply with the requirements in Part 1022 (e.g., carefully evaluating the impacts of actions proposed in those plans and providing for public review before the plan is approved). Site plans for sites that store or dispose of hazardous materials within the 500 year floodplain must also meet Part 1022 requirements.
- b. Existing Site Conditions. Define present site conditions and mission program needs to provide a base on which to define long-term goals and build short-term plans. Address the following topics relating to land use and siting of facilities as a minimum:
- (1) Existing Land Use. Identify the present uses of all lands at the site. This information shall be shown on a map along with site boundaries and owned or leased offsite land and buildings. Attendant problems and opportunities for these land uses should be addressed. Also identify the existing or potential use/storage/disposal of hazardous constituents within the 500 year floodplain.

- (2) Mission and Program. Identify past trends and present mission, programs, and workload being performed at the site and the special needs of each.
- (3) Population. Collect data on population at the site, the distribution by area and improvement, and analyze the degree and type of interaction among the various population groups.
- (4) Functions. Perform an analysis of each of the site's functions. Using narrative, maps and graphics, show material or work process flow and describe interrelationships. Evaluate the suitability of the existing functional layout.
- (5) Utilities. Identify all sources and supplies of utilities and site trends for consumption and demand of those utilities. Evaluate current and future capacity, condition, availability, and current and future costs of public utilities.
- (6) Site Improvements.
 - (a) Prepare a map or maps showing all facilities on the site including buildings, structures and transportation systems, such as roads, railroads, landing fields, pathways, parking areas, entrances and exits. Buildings or lands that are contaminated and the impact of the siting of facilities or missions should be designated and the type of contamination shown. Also show areas suspected of being contaminated for which no characterization data is available.
 - (b) Provide descriptions and appropriate maps of all utility systems such as electric, gas, water, sewer, steam, compressed air, industrial gases, and transmission lines.
 - (c) Provide a table listing each facility (buildings, structures, transportation and utility systems) and the following information:
 - 1 For buildings and structures, data should include identification number and name; present use; area or size; condition; percentage being used full time; estimated remaining economic or useful life, historical interest, unique features and possible future use, and estimated work required to cure functional or economic obsolescence.

- 2 For transportation and utility systems, data should include present conditions, capacity, percentage of time in full use, estimated remaining functional or economic life, expansion capability, and estimated work required to cure obsolescence or deterioration.
- (7) Physical Characteristics. Identify and map the location of natural factors and physical constraints of the site including topography, slopes, geology, faults, flood plains, hydrology, vegetation, ecological areas, wildlife, cultural resources, and endangered species.
 - (8) Security. Identify on a map or aerial photograph the location of buffer zones, security zones, lighting, fencing, barriers, and gates or other security features commensurate with the security classification of the document. Special effort should be taken to ensure the protection of classified information and UCNI.
 - (9) Safety. Identify on a map hazardous areas, explosive arcs, and any required separation between areas. Address any significant industrial or operational safety issues as they relate to siting of facilities or missions. Identify the location of the nearest resident to hazardous areas on a map or aerial photograph.
 - (10) Environmental Issues. Address the locations of and methods for waste disposal, waste storage, and waste treatment, as well as any other pertinent environmental issues. This information may be referenced in the TSI if already included in National Environmental Policy Act documents.
 - (11) Summary. Address in summary fashion, the capabilities, limitations, and deficiencies of the site and their impact on the site's ability to perform its missions.
- c. Planning Analysis. Perform a planning analysis using the Regional Conditions and Existing Site Conditions evaluations as a base. Define mission resource requirements from the program mission projections and state the goals that will be used to develop the Master Plan. Specifically, provide the following:

- (1) Mission Resource Requirements. Define and quantify long-range (20-year) program mission projections in terms of numbers of personnel, production units, storage needs, constant research dollars, or other pertinent measurable units.
- (2) Determine Facility and Land Requirements. Determine the types, numbers, and sizes of facilities and associated land requirements that will support the program mission projections and mission resource requirements. These requirements shall be determined on the basis of historic trends, quantitative analysis, or an actual engineering/architectural space or work flow analysis.
- (3) Goals. Establish goals or objectives to provide a framework for economically and effectively developing a site to accomplish missions and programs over a 20-year period. Specific goals required to accomplish this task will vary from site to site depending on the condition and capacity of facilities and the rate of program change or growth. Examples of specific goals or objectives would be:
 - (a) Eliminate overcrowding in administrative facilities;
 - (b) Eliminate incompatible land uses;
 - (c) Improve site transportation;
 - (d) Realign utility systems to serve proposed load centers;
 - (e) Regroup all nuclear research facilities to a specific area at the site;
 - (f) Avoid environmentally sensitive areas, e.g., wetlands, floodplains, wildlife habitats, etc.; and
 - (g) Reduce operating and maintenance costs.
- (4) Evaluation. Compare, by program and the Real Property Inventory System use codes, the facility requirements with the existing assets of the site to determine excesses and deficiencies in corresponding classes of facilities. Economic restrictions, functional life of the assets, and new regulations should be taken into account. Perceived limitations should be described as part of this evaluation.

- (5) Analyze Alternatives. Identify practical alternatives available to provide facilities and land to meet program mission projections. Identify the preferred alternative.
 - (6) Develop a Plan. Develop a plan to provide for the facility and land requirements to accomplish the site's missions. The plan should address eliminating the facility excesses and deficiencies identified in paragraph c(4) above. The methodology and any significant tools (such as "ideal site plans" or cost benefit analyses) used in developing the plan shall be documented.
 - (7) Changes in Direction. If mission projections of funding levels change significantly from the mission resource requirements, reanalyze alternatives to determine which is best.
 - (8) Consideration of Alternatives. Both major projects and major system acquisitions carry specific NEPA considerations. Under the proposed DOE rule for compliance with NEPA, major projects will normally require Environmental Analysis, and major system acquisitions, normally Environmental Impact Statement. Demonstrate that alternatives have been considered in the planning for major projects and major system acquisitions in order to satisfy the requirements of NEPA and SEN-15-90. This information may be referenced if included in other documentation.
 - (9) Floodplains. If existing or potential use/storage/disposal in a 500 year floodplain is identified, special impact assessment process must be completed before the plan shall be approved.
- d. Prepare and Document the Master Plan. Prepare a Master Plan from the Planning Analysis. Using maps and narrative, show the proposed configuration of the site 20 years into the future. The following issues shall be addressed and documented:
- (1) Future Land Uses. Identify planned dedicated uses for existing Government-owned or leased lands and all lands proposed for acquisition.
 - (2) Future Functional Locations. Identify the major operating and support uses, planned interactions, and where applicable, material and/or process flow for the entire site.

- (3) Future Facility Locations and Uses. Identify, on maps, the planned uses of existing buildings and other structures and those that are to be demolished or declared excess. Identify the use and general location of new construction showing proposed building sites and designate future development zones for various programs and support functions.
 - (4) Utilities. Identify future loads, load configuration (e.g., pulse steady, time of day peak), types of service required (interruptible, firm, high reliability), and planned utility sources (e.g., on-site generation/process or offsite purchase). Using maps and narrative, show future distribution systems, on-site plants, significant modifications to present systems, and new utilities construction.
 - (5) Future Circulation. Show transportation systems, including air, rail, roads, parking, and pathways and significant changes or additions.
 - (6) Future Security. Identify existing and proposed security zones, fences, lighting, barriers, portals, and other improvements for security, commensurate with the security classification of the document.
 - (7) Future Safety. Identify hazardous areas, arcs, buffer zones, fire protection, and other safety-related areas. Solutions to operational or industrial safety issues identified in other steps of the planning process relating to land use and siting of facilities should be addressed.
 - (8) Future Environmental Issues. Areas planned to be set aside for waste disposal and waste treatment shall be identified. Address the impact on siting of facilities. This information may be referenced if contained in NEPA documents.
- e. TSI Five-Year Plan. Prepare a Five-Year Plan that outlines the incremental steps necessary to reach the goals outlined in the Master Plan. Document these steps and proposed projects (line items, general plant, capital equipment, or operating expense funded). The Five-Year Plan shall begin with the current budget year under preparation and run out 4 additional years. The following issues shall be addressed and documented:

- (1) Facility Uses. Prepare a table showing the existing and planned buildings with the present use of each, its proposed use at the end of the 5-year period, and address the interim actions required to accomplish any changes. Address how these uses implement the goals and objectives of the Master Plan.
- (2) Modifications to the Site. On a map locate all new construction and improvements, major alterations or modifications, and demolition planned for the 5-year period. Provide a tabular list of the site modifications with the proposed fiscal year of accomplishment and total estimated cost in the fiscal year they will be funded.
- (3) Updates. The Five-Year Plan shall be updated yearly to reflect the addition of a new fiscal year and any changes to the objectives, which have caused changes to the plan.



CHAPTER 11

SITE DEVELOPMENT PLAN FORMAT

1. CONCEPT: The Site Development Plan is a brief document that presents site development issues that require a commitment of resources from an outlay program manager to solve. The plan should state the problems or issues to be solved, identify the solution and corresponding resource requirements, and impact if not provided. The plan documents, in summary, the thought process that leads to the request for resources. Special effort should be taken to ensure the protection of classified information and UCNI.

2. SPECIAL REQUIREMENTS: All sites shall have one Site Development Plan. However, Strategic Petroleum Reserve, Oak Ridge Reservation, Idaho National Engineering Laboratory, Hanford Site, Savannah River Site, and the Nevada Test Site may have one Landlord Site Development Plan each and one Site Development Plan for each noncontiguous or uniquely separate area. The Landlord Site Development Plan shall address those issues that require resource commitments from the Landlord. Plans for the individual noncontiguous or uniquely separate areas shall address those issues that require resource commitments from their respective outlay program managers.

3. FORMAT
 - a. All Site Development Plans shall be of a consistent format within a body of text, tables and graphs 10 pages or less plus a title page and table of contents. The pages shall be 8-1/2" wide x 11" long, printed on one side, and shall be contained in a white 1/2" wide 3-ring binder. Two folding maps (an Existing Land Use map and a Master Plan map) are required, shall be self contained within the Site Development Plan, and shall have a bar (graphic) scale, legend, and North arrow. The suggested size for these maps is 11" x 17". Due to the size and complexity of some sites, the two map limitation may restrict the usefulness of the document. In these situations the head of the operations office may waive the two map limit on a case-by-case exception basis.

- b. The contents of each page of the Site Development Plan in the following paragraphs are to be considered a guide. All the topics shall be addressed, but the length of the topics may be shortened or expanded to convey meaningful information about the site. The length of the body of text may be less than but shall not exceed 10 pages.

4. CONTENTS OF PAGES 1 AND 2

- a. Existing Missions, Workload, and Site Population. Discuss the following:
 - (1) Existing major missions at the site as provided by outlay program managers, i.e., perform research, manufacture a product, etc.;
 - (2) Workload as provided by the outlay program manager, i.e., specific research goals or objectives to be reached within a specified timeframe, quantities of a product to be manufactured (if not classified), etc.; and
 - (3) Population or personnel loading at the site.
- b. Site and Regional Information.
 - (1) Briefly describe any conditions that exist or may develop in the surrounding regions that would enhance or deter from accomplishing the missions at the site.
 - (2) Describe the site itself addressing:
 - (a) Condition of facilities;
 - (b) Conditions that would enhance or deter establishing new or expanding current missions; and
 - (c) Factors that may influence the future use of the site.

5. CONTENTS OF PAGES 3 AND 4

- a. Program Mission Projections and Mission Resource Requirements. Discuss the following:

- (1) Future missions projections (relate to any changes in current missions);
- (2) Mission resource requirements;
- (3) Future workload as provided by the outlay program managers, i.e., specific research goals or objectives to be reached within a specified timeframe, quantities of a product to be manufactured (if not classified), etc.; and
- (4) Future population or personnel loading at the site.

6. CONTENTS OF PAGES 5, 6, 7 AND 8

- a. Master Plan. Discuss the following relevant to the future of the site:

- (1) Goals (What are we trying to accomplish?);
- (2) Facility and land requirements;
- (3) Future land uses;
- (4) Future major facility locations and construction programs;
- (5) Utility sources, loads, and distribution/collection system configurations; and
- (6) Provide a one page summary tabular chart of the 5-year construction program at the site.

NOTE: The Master Plan shall be coordinated with all other program initiatives that have an impact on facilities and land management at the site. Some of these initiatives are the Laboratory Institutional Plan, environmental restoration/hazardous waste management plans, workload plans, National Environmental Policy Act per SEN-15-90, etc.

7. CONTENTS OF PAGES 9 AND 10. Use this section to identify special considerations. Address any site planning issues that should be brought to the attention of senior level managers including issues that need resolution, solutions to those issues, and the required resource commitments.

8. MAPS. Provide the following:
 - a. Existing Land Use Map;
 - b. Master Plan Map.

- (1) Future missions projections (relate to any changes in current missions);
- (2) Mission resource requirements;
- (3) Future workload as provided by the outlay program managers, i.e., specific research goals or objectives to be reached within a specified timeframe, quantities of a product to be manufactured (if not classified), etc.; and
- (4) Future population or personnel loading at the site.

6. CONTENTS OF PAGES 5, 6, 7 AND 8

- a. Master Plan. Discuss the following relevant to the future of the site:

- (1) Goals (What are we trying to accomplish?);
- (2) Facility and land requirements;
- (3) Future land uses;
- (4) Future major facility locations and construction programs;
- (5) Utility sources, loads, and distribution/collection system configurations; and
- (6) Provide a one page summary tabular chart of the 5-year construction program at the site.

NOTE: The Master Plan shall be coordinated with all other program initiatives that have an impact on facilities and land management at the site. Some of these initiatives are the Laboratory Institutional Plan, environmental restoration/hazardous waste management plans, workload plans, National Environmental Policy Act per SEN-15-90, etc.

7. CONTENTS OF PAGES 9 AND 10. Use this section to identify special considerations. Address any site planning issues that should be brought to the attention of senior level managers including issues that "need resolution, solutions to those issues, and the required resource commitments.

8. MAPS. Provide the following:
 - a. Existing Land Use Map;
 - b. Master Plan Map.

- (1) Future missions projections (relate to any changes in current missions);
- (2) Mission resource requirements;
- (3) Future workload as provided by the outlay program managers, i.e., specific research goals or objectives to be reached within a specified timeframe, quantities of a product to be manufactured (if not classified), etc.; and
- (4) Future population or personnel loading at the site.

6. CONTENTS OF PAGES 5, 6, 7 AND 8

- a. Master Plan. Discuss the following relevant to the future of the site:

- (1) Goals (What are we trying to accomplish?);
- (2) Facility and land requirements;
- (3) Future land uses;
- (4) Future major facility locations and construction programs;
- (5) Utility sources, loads, and distribution/collecti on system configurations; and
- (6) Provide a one page summary tabular chart of the 5-year construction program at the site.

NOTE: The Master Plan shall be coordinated with all other program initiatives that have an impact on facilities and land management at the site. Some of these initiatives are the Laboratory Institutional Plan, environmental restoration/hazardous waste management plans, workload plans, National Environmental Policy Act per SEN-15-90, etc.

7. CONTENTS OF PAGES 9 AND 10. Use this section to identify special considerations. Address any site planning issues that should be brought to the attention of senior level managers including issues that need resolution, solutions to those issues, and the required resource commitments.

8. MAPS. Provide the following:
 - a. Existing Land Use Map;
 - b. Master Plan Map.

U.S. Department of Energy
Washington, D.C.

PAGE CHANGE

DOE 4320.16 Chg 1

3-26-92

SUBJECT: SITE DEVELOPMENT PLANNING

1. PURPOSE. To transmit revised pages to DOE 4320.1B, SITE DEVELOPMENT PLANNING, of 1-7-91.
2. EXPLANATION OF CHANGE. To make organizational title and routing symbol editorial changes required by SEN-6D-91, DEPARTMENTAL ORGANIZATIONAL AND MANAGEMENT ARRANGEMENTS, of 5-16-91. No substantive changes have been made.
3. FILING INSTRUCTIONS.

<u>a. Remove Page</u>	<u>Dated</u>	<u>Insert Page</u>	<u>Dated</u>
1	1-7-91	1 Chg	3-26-92
2	1-7-91	2	1-7-91
3	1-7-91	3	3-26-92
4	1-7-91	4	1-7-91
5	1-7-91	5	3-26-92
6	1-7-91	6	1-7-91
7 thru 9 (and 10)	1-7-91	7 thru 9 (and 10)	3-26-92
1-1	1-7-91	1-1	3-26-92
1-2	1-7-91	1-2	1-7-91
1-9 (and 1-10)	1-7-91	1-9 thru 1-10)	3-26-92
11-3	1-7-91		3-26-92
11-4	1-7-91	11-4	1-7-91

b. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:



JOHN J. NETTLES, JR.
Director of Administration
and Human Resource Management

DISTRIBUTION:

All Departmental Elements

INITIATED BY:

Office of Organization, Resources
and Facilities Management

U.S. Department of Energy
Washington, D.C.

ORDER

DOE 4320.1B

1-7-91

Change: 3-26-92

SUBJECT: SITE DEVELOPMENT PLANNING

-
1. PURPOSE. To establish policies and assign responsibilities and authorities for the planning and development of Department of Energy (DOE) sites.
 2. CANCELLATION. DOE 4300.1B, REAL PROPERTY AND SITE DEVELOPMENT PLANNING, of 7-1-87, Chapters 1 and 2.
 3. SCOPE. The provisions of this Order apply to all Departmental Elements, except as otherwise provided by this Order, statute, or specific delegation of authority from the Secretary of Energy. The provisions of this Order shall be applied by Contracting Officers to management and operating contracts.
 4. EXCLUSIONS.
 - a. Administrators of Power Marketing Administrations. In accordance with Sections 302 of the Department of Energy Organization Act (PL 95-91), the Secretary operates and maintains the Power Marketing Administrations' (PMA) electric power transmission systems by and through the PMA Administrations. The PMAs have in place site development processes, which are geared to the special needs of utility operations, are responsive to coordinated multiutility system requirements, and are in conformance with prudent utility practice. In view of the unique nature of the Administrators' obligations to meet their statutory and public utility responsibilities for the safety, security and reliability of electric power transmission and of their legal and contractual obligations, the Administrators shall determine the appropriate site development planning criteria for their facilities. This will include consideration of appropriate parts of the criteria set forth by this Order.

Vertical line denotes change.

DISTRIBUTION:
All Departmental Elements

INITIATED BY:
Office of Organization, Resources,
and Facilities Management

- b. Director. Naval Nuclear Propulsion Program. Executive Order 12344, statutorily prescribed by PL 98-525 (42 USC 7158 note), establishes the responsibilities and authority of the Director, Naval Nuclear Propulsion Program (who is also the Deputy Assistant Secretary for Naval Reactors within the Department) over all facilities and activities, which comprise the joint Navy-DOE Program. In view of the unique nature of naval nuclear propulsion applications, and the statutorily prescribed responsibilities noted above, the Director shall determine the appropriate site development planning criteria applicable to program property and activities, which will include consideration of appropriate parts of the criteria set forth by this Order.
5. REFERENCES. The following references are useful or necessary to perform the functions of this Order:
 - a. DOE 5000.1A, INSTITUTIONAL PLANNING OF MULTI PROGRAM LABORATORIES, of 9-12-86, which establishes the institutional planning process for DOE multi program laboratories.
 - b. DOE/AD/062 12-1, "Site Development Planning Handbook," P-1, of 1-81, which provides a suggested methodology, along with some specific techniques for preparing a Site Development and Facility Utilization Plan.
 - c. DOE/MA/06212-2 , "Site Development Planning Handbook Supplement," P-2, of 11-82, which is a case study to demonstrate the principles and illustrate the process of facility planning.
 - d. DOE/MA-0129, "Site Development Planning for Energy Management," P-3, of 8-85, which identifies the relationship between site planning and energy consumption and how consumption can be reduced.
 - e. DOE/MA-0328, "Utilities Planning and Management," of 8-88, which provides guidance in the planning, acquisition and management of utility services.
 - f. Office of Management and Budget Circular A-16, Coordination of Surveying and Mapping Activities of May 16, 1967 (as amended), which describes the responsibilities of Federal agencies with respect to coordination of Federal surveying and mapping activities financed in whole or in part by Federal funds.

- g. DOE 5440.1C, NATIONAL ENVIRONMENTAL POLICY ACT, of 4-9-85, which establishes policy and procedures to implement National Environmental Policy Act (NEPA) .
- h. SEN-15-90, NATIONAL ENVIRONMENTAL POLICY ACT, of 2-5-90, which establishes DOE policy and procedures to implement NEPA.
- i. DOE 5650.3, IDENTIFICATION OF UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION (UCNI), of 2-29-88, which establishes policies, procedures, and responsibilities for the identification and control of UCNI .
- j. SEN-25-90, STRATEGIC PLANNING INITIATIVE, of 7-24-90, which establishes policy concerning implementation of a process for planning, programming and budgeting.

6. DEFINITIONS.

- a. Facility. A general term to describe fixed site improvements such as buildings, structures, roads, and utilities.
- b. Field Element. Any officially established Departmental organization located outside the Washington, DC, metropolitan area.
- c. Outlay Program Managers. Assistant Secretaries for Conservation and Renewable Energy; Environmental Restoration and Waste Management; Nuclear Energy; Fossil Energy; Defense Programs; and the Directors of Energy Research; New Production Reactors; and Civilian Radioactive Waste Management, who manage the Headquarters organizations responsible for outlays of Federal funds other than for salaries and expenses.
- d. Program Mission Projections. Prepared by the outlay program managers and identify the level of support, product, or services required at each site.
- e. Mission Resource Requirements. Prepared by the site and describe the necessary resources, i.e., people, equipment, cubic feet of storage material, etc., required to meet program mission projections at that specific site.
- f. Facilities Requirements. Prepared by the site and quantify the size and configuration of buildings, roads, structures, lands, and other facilities/resources at a site required to satisfy the mission resource requirements.

Vertical line denotes change.

- g. Site. A geographic entity comprising leased or owned land, buildings, and other structures required to perform program activities.
 - h. Unclassified Controlled Nuclear Information. Certain unclassified Governmental information prohibited from unauthorized dissemination under section 148 of the Atomic Energy Act and DOE 5650.3.
 - i. Site Development Plan (SDP). A summary level document for senior managers to use that presents site development issues that require a commitment of resources to solve.
 - j. Technical Site Information. The documented result of the site planning process that contains information and data for use by staff and technical personnel.
 - k. Master Plan. A document or map that shows facilities or land uses required to support future missions at some point in time, usually 20 years.
7. POLICY. It is the policy of the Department that:
- a. All sites shall have in place a process to plan for and develop real property holdings to support the missions of the site. This process shall result in two documents: (1) the "Technical Site Information" described in Chapter I for use by technical and staff personnel, and (2) the "Site Development Plan" described in Chapter 11 for use by senior managers.
 - b. All sites are required to have the Technical Site Information (TSI) and a SDP. See Chapter II for specific guidance concerning Oak Ridge Reservation, Idaho National Engineering Laboratory, Hanford Site, Nevada Test Site, Strategic Petroleum Reserve, and Savannah River Site.
 - c. The TSI shall be the documented result of the planning process, contain detailed information structured for technical and staff personnel use, and shall address, as a minimum, those issues outlined in Chapter I relative to the stewardship of real property at a site.

- d. Site planning is a continuing process. As such, the TSI shall be maintained consistently with the SDP, shall be updated yearly, and shall be approved by the responsible manager of the operations office.
- e. The SDP shall be sufficiently flexible to be structured for use by senior managers making decisions concerning broad programmatic issues and shall be in the format described in Chapter II. This document will be a summary and will present those site initiatives and issues that require program resource commitments or support.
- f. The Site Development Plan shall be revised as required, issued yearly, cover a period of 3 years into the future and be approved by the Field Office Manager.
- g. The mission resource requirements shall reflect the most recent guidance from Headquarters Program Offices and from current planning, programming and budgeting systems.
- h. Sites shall include in the planning process the acquisition and use of standard Geographic Information Systems (GIS), which promote coordinated development, use, sharing and dissemination of surveying, mapping, and related spatial data. Cooperation with State and local governments and the private sector is encouraged to the fullest practical extent.
- i. At the time a SDP is developed or revised, the Field Office Manager and/or outlay program manager shall evaluate any existing site-wide or relevant programmatic NEPA documentation, in consultation with Assistant Secretary for Environment, Safety and Health, to determine whether further NEPA documentation is required. Likewise, reviewers of the SDP and TSI shall evaluate any existing site-wide or relevant programmatic NEPA documentation for consistency.

8. RESPONSIBILITIES AND AUTHORITIES.

a. The Secretary or Designee.

- (1) Establishes principles and policies relating to site development planning.

Vertical line denotes change.

- (2) Shall make determinations and resolve site development issues where conflicting programmatic requirements, land uses, or other issues cannot otherwise be resolved at lower organizational levels.
- (3) Shall determine on a yearly basis those issues or matters relating to site development planning that require review and evaluation, and shall delegate review authority.

b. Director of Administration and Human Resource Management.

- (1) Provides within DOE Headquarters the core of professional planning expertise to the Secretary or Designee, to Headquarters Program Offices, and to Field Elements.
- (2) Provides recommendations to the Secretary or Designee to develop policies relating to site development planning criteria.
- (3) Assesses and evaluates the planning process at the Field Elements on behalf of the Secretary or his Designee.
- (4) Reviews, independently and jointly with outlay program managers, the Field Elements for areas and methods to improve site development planning policy, and for those issues or matters directed by the Secretary or Designee.

c. Outlay Program Managers.

- (1) Provide the program mission projections (from Strategic Plans per SEN-25-90) upon which the SDP is based.
- (2) Concur with the site's mission resource requirements.
- (3) Jointly reviews annually, with the Director of Administration and Human Resource Management, the site planning process for field elements and other site planning issues or matters as directed by the Secretary or Designee.

| d. Headquarters Program Secretarial Officer with Landlord Responsibilities.

- (1) Review SDP.
- (2) May request, as required, detailed supporting planning information from Field Elements such as engineering evaluations of facility support capabilities, descriptions of physical plant infrastructure units, status of regulatory compliance, near-term construction schedules, TSI documentation, and environmental, utility, and transportation plans.
- (3) Jointly reviews annually, with the Director of Administration and Human Resource Management, the site planning process at field elements and other site planning issues or matters as directed by the Secretary or Designee.

| Field Office Managers shall:

- (1) Oversee at each site the development, implementation, maintenance, and documentation of a planning process that will address, as a minimum, all those elements outlined in Chapter I. This shall include formal coordination between site planning and all other facility-related administrative activities such as real property management, facility maintenance planning, environmental/safety/health/security performance, energy conservation, design for new construction, and budgetary planning.
- (2) Approve SDP and TSI documents.
- (3) Formally review the planning process yearly for each site under its cognizance" and maintain official documentation and records of those reviews.
- (4) Ensure the format of all SDP from sites under their cognizance is consistent with the format outlined in Chapter II.
- (5) Ensure that SDP and other related documents are reviewed for classified information and UCNI.

Vertical line denotes change.

9. APPROVALS AND PROCEDURES.

a. As shown on Figure 1, outlay program managers shall provide program mission projections or appropriate program guidance to the Heads of Field Elements.

b. Field Office Managers shall provide, to the outlay program managers for concurrence, the mission resource requirements based on the most recent program guidance or mission projections.

c. Preparation and approval of the TSI and the SDP based on the mission resource requirements will be accomplished by the responsible Manager of the Field Office. (For sites that report directly to a Headquarters organization, these responsibilities will be assumed by the cognizant outlay program manager.)

d. SDP shall be forwarded to the Headquarters Program Secretarial Officers with landlord responsibilities, one copy to the Director of Organization, Resources and Facilities Management, Office of Administration and Human Resource Management, and one copy to the Assistant Secretary for Environment, Safety and Health.

BY ORDER OF THE SECRETARY OF ENERGY:



JOHN J. NETTLES, JR.
Director of Administration
and Human Resource Management

Vertical line denotes change.

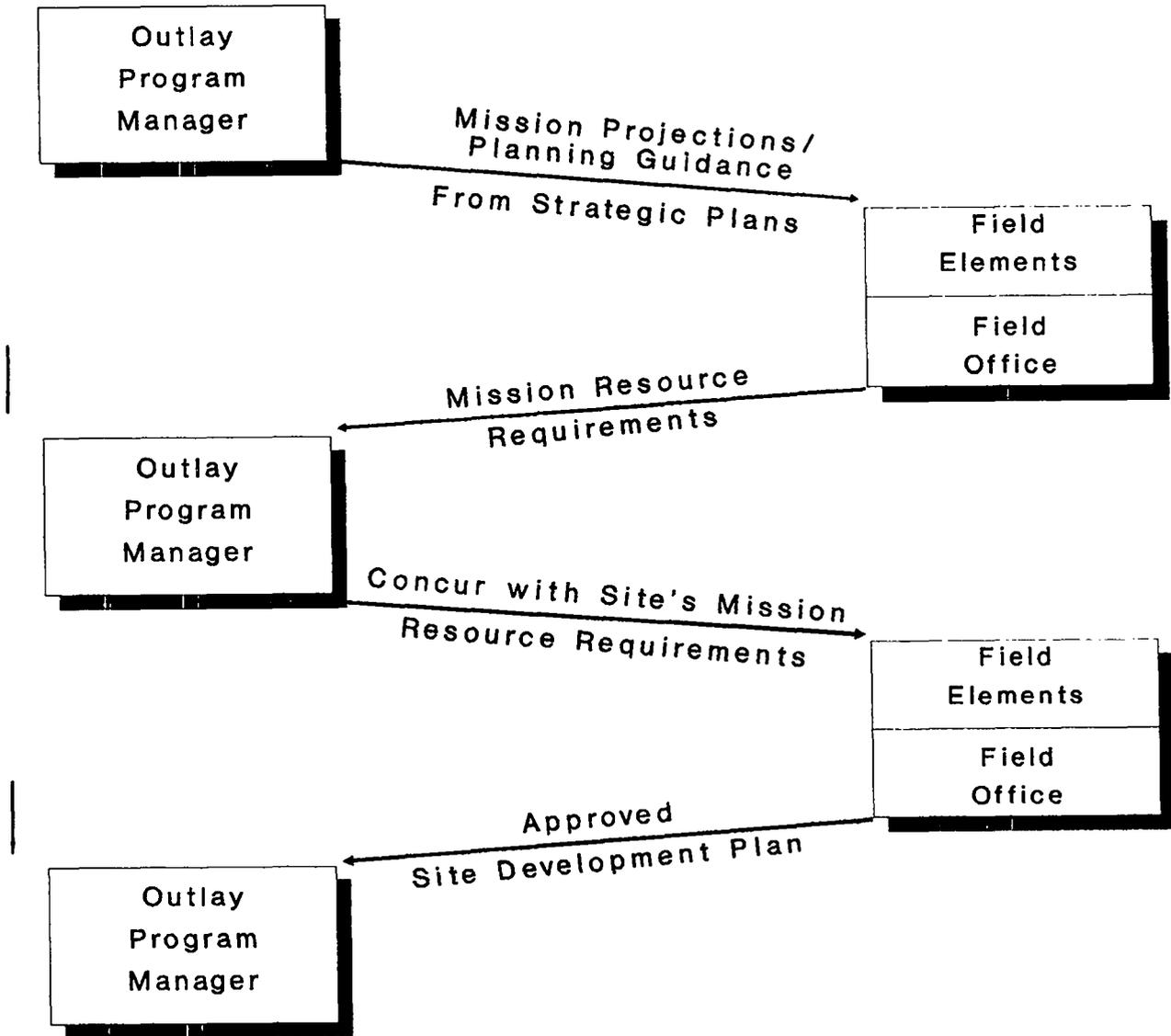


Figure 1
Site Development Plan
Sequence of Events

Vertical line denotes change.

CHAPTER I

SITE DEVELOPMENT PLANNING

1. PLANNING PROCESS.

- a. The planning process, as it relates to site planning, is defined as those incremental steps used by a site planner to:
 - (1) Identify and define current and future site missions;
 - (2) Evaluate existing site conditions and regional influences;
 - (3) Determine and quantify facility requirements to accomplish the missions of the site;
 - (4) Formulate alternatives to satisfy the facility requirements;
 - (5) Evaluate and rank the alternatives based on their merits; and
 - (6) Develop a plan of actions to implement the preferred solution.

- b. Site planning should not be accomplished in a vacuum and all affected parties should have input into the process. The Field Office Manager shall determine the appropriate level of community involvement in the planning process. This involvement will vary with each site and may range from meetings with local planning boards or public officials to formal hearings. The Field Office Manager shall prepare a community relations plan that addresses the level of community involvement and a plan of action and milestones.

- c. The planning process must be documented so that others may follow the site planner's thought processes to arrive at the solutions and plan of actions. This documentation shall be called "Technical Site Information" (TSI). Listed below is a detailed outline of the minimum TSI that documents the thought processes of the site planner to satisfy the requirements of this Order. The planning process and TSI may be modified to best serve the needs of a site, but the process must be based on industry-wide accepted and recognized planning principles. There may be additional unique requirements that should be used for special situations such as:
 - (1) At production sites industrial engineering fundamentals are usually paramount and should be used extensively in the planning process to identify the flow of work product and to identify facility requirements.

Vertical line denotes change.

- (2) At research laboratories a campus setting may be the most suitable working environment and planning should reflect that parameter.
- d. The TSI shall be comprehensive and shall be located and maintained at the site. It is not intended to reproduce in the TSI in total that information which is found in other planning documents, such as the Environmental Restoration and Waste Management Five-Year Plan. The intent is to summarize or reference those other planning documents, and to discuss the impacts on land use, siting of facilities, and mission. The documentation in the TSI shall be sufficient to permit readers to easily understand the analysis and conclusions established through the planning process. The TSI has been logically grouped into five sections with related subtopics. The subtopics may be rearranged into other sections to meet the unique requirements of a site, but all subtopics must be addressed as part of the planning process. The format of the TSI will generally be one volume containing the five sections. Each section, however, may be a stand-alone document if large amounts of material and data are required to document the planning process. In this case, the TSI may consist of two to five volumes depending on the grouping of the sections in each volume. Planners are urged to use judgement in expanding or contracting the steps outlined to fit the specific site being planned.

2. TECHNICAL SITE INFORMATION.

- a. Regional Conditions. Address the following issues:
 - (1) History. Describe the history of the site and how it has developed to the present.
 - (2) Regional Overview. Using a map and narrative, evaluate the relationship of the site with the surrounding region concerning demographic features, community attitudes and pressures, local issues or problems, labor supply, materials availability, housing, schools, and any other factors that may aid, limit, or otherwise affect the future development or operation of the site.

- (1) Facility Uses. Prepare a table showing the existing and planned buildings with the present use of each, its proposed use at the end of the 5-year period, and address the interim actions required to accomplish any changes. Address how these uses implement the goals and objectives of the Master Plan.
- (2) Modifications to the Site. On a map locate all new construction and improvements, major alterations or modifications, and demolition planned for the 5-year period. Provide a tabular list of the site modifications with the proposed fiscal year of accomplishment and total estimated cost and scope for the fiscal year in which they will be funded.
- (3) Updates. The Five-Year Plan shall be updated yearly to reflect the addition of a new fiscal year and any changes to the objectives, which have caused changes to the plan.

Vertical line denotes change.

- (1) Future missions projections (relate to any changes in current missions);
- (2) Mission resource requirements;
- (3) Future workload as provided by the outlay program managers, i.e., specific research goals or objectives to be reached within a specified timeframe, quantities of a product to be manufactured (if not classified), etc.; and
- (4) Future population or personnel loading at the site.

6. CONTENTS OF PAGES 5, 6, 7 AND 8

- a. Master Plan. Discuss the following relevant to the future of the site:

- (1) Goals (What are we trying to accomplish?);
- (2) Facility and land requirements;
- (3) Future land uses;
- (4) Future major facility locations and construction programs;
- (5) Utility sources, loads, and distribution/collection system configurations; and
- (6) Provide a one page summary tabular chart of the 5-year construction program at the site including the cost and scope of the projects.

Note: The Master Plan shall be coordinated with all other program initiatives that have an impact on facilities and land management at the site. Some of these initiatives are the Laboratory Institutional Plan, environmental restoration/hazardous waste management plans, workload plans, National Environmental Policy Act per SEN-15-90, etc.

7. CONTENTS OF PAGES 9 AND 10. Use this section to identify special considerations. Address any site planning issues that should be brought to the attention of senior level managers including issues that need resolution, solutions to those issues, the required resource commitments, and impact if not provided.

Vertical line denotes change.

8. MAPS. Provide the following:
 - a. Existing Land Use Map;
 - b. Master Plan Map.

