

CCB Application Notes:

1. Character(s) preceded & followed by these symbols ([␣]␣) or (␣␣) are super- or subscripted, respectively.
EXAMPLES: 42m^{␣3␣} = 42 cubic meters
CO_{␣2␣} = carbon dioxide
2. All degree symbols have been replaced with the word deg.
3. All plus or minus symbols have been replaced with the symbol +/-.
4. All table note letters and numbers have been enclosed in square brackets in both the table and below the table.
5. Whenever possible, mathematical symbols have been replaced with their proper name and enclosed in square brackets.

Naval Facilities Engineering Command
200 Stovall Street
Alexandria, Virginia 22332-2300

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Functional Requirements
and Design Guidance

DESIGN MANUAL 37.5
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ABSTRACT

Design criteria for use by experienced architects and engineers are presented for facilities covered by category class 740-25. The contents include criteria for Navy Family Service Center facilities. This includes architectural, mechanical, and electrical requirements, plus prototypical designs and functional zoning diagrams. The prototypical design work presented is for guidance and should not be confused with design development drawings. Each Family Service Center (FSC) designed according to the criteria in this text should also be a unique response to specific site constraints and opportunities and unique FSC programs.

FOREWORD

This design manual is one of a series developed from an evaluation of facilities in the shore establishment, from surveys of the availability of new materials and construction methods, and from selection of the best design practices of the Naval Facilities Engineering Command, other Government agencies, and the private sector. This manual uses, to the maximum extent feasible, national professional society, association, and institute standards in accordance with NAVFACENGCOM policy. Deviations from these criteria should not be made without prior approval of NAVFACENGCOM Headquarters (Code 04).

Design cannot remain static any more than can the naval functions it serves or the technologies it uses. Accordingly, recommendations for improvements are encouraged from within the Navy and from the private sector and should be furnished to NAVFACENGCOM Headquarters (Code 04).

This publication is certified as an official publication of the Naval Facilities Engineering Command and has been reviewed and approved in accordance with SECNAVINST 5600.16.

J. P. JONES, JR.
Rear Admiral, CEC, U. S. Navy
Commander

COMMUNITY FACILITIES DESIGN MANUALS

DM Number	Chapter Superceded in Basic DM	Title	Date Issued
DM-37.1	2, Sec. 10, 11	Swimming Pools	--
DM-37.2	--	Child Care Center	--
DM-37.3	3	Outdoor Sports Facilities	08/76
DM-37.4	1, Sec. 2	Brigs and Detention Facilities	--
DM-37.5	--	Family Service Centers	04/85
DM-37.6	2, Sec. 2	Chapels and Religious Educational Facilities	--
DM-37.7	2, Sec. 5	Clubs	--

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SECTION 1: FAMILY SERVICE CENTERS

1. SCOPE. Criteria and guidance contained herein are applicable to the design of new Family Service Centers (FSC) as well as to the modification of existing facilities which are to be converted to FSC operations. The document is intended to be used by competent design professionals. As such it does not contain generic design and planning criteria which represent standard professional practice.

The document includes planning criteria specifying location, site development, and functional zoning. Architectural requirements include both general design considerations and individual space requirements. The mechanical/electrical text consists of criteria relevant to plumbing, heating and ventilation, electrical system design, and energy conservation. Family Service Center facility planning, architecture, and mechanical/electrical criteria are described in facility plates. (See Facility Plate No. 740-25, Sheets 1-10.) These facility plates illustrate general layout provisions, example functional layouts, schematic designs, and zone plans.

2. RELATED CRITERIA. For criteria related to Family Service Centers appearing elsewhere, see the following sources:

Subject	Source
Architecture	NAVFAC DM-1
Carpet Selection Guide	NAVFAC DM-14.2
Civil Engineering	NAVFAC DM-5 Series
Color for Naval Shore Facilities	NAVFAC P-309
Construction Criteria Manual	DOD 4270.1-M
Electrical Engineering	NAVFAC DM-4 Series
Facility Planning Criteria for Naval Shore Activities	NAVFAC P-80
Family Service Center Organizational Aspects	Guide for Planning and Operating Navy Family Service Centers (Working Draft)

Subject	Source
Fire Protection	MIL-HDBK 1008 and NFPA 101
Handicapped Criteria	DOD 4270.1-M Chap. 18
Mechanical Engineering	NAVFAC DM-3 Series

3. PLANNING REQUIREMENTS.

a. Location

(1) General Considerations. Family Service Centers are one-stop facilities which offer by referral or direct service a wide range of assistance needed by Navy families. Types of referral or direct service are determined by local needs. The following services are routinely provided: centralized information and referral; individual, group, and family counseling; assistance to families with special needs; and crisis intervention.

The location of the center should be determined by the specific program of service to be offered at each base. As part of a Navy initiative to meet the personal and family needs of its service members, the FSC location should be chosen to facilitate coordination with other individual and family services. In addition, all centers must be accessible to the handicapped as specified in the Department of Defense Construction Criteria Manual, DOD 4270.1-M Chapter 18.

(2) Detailed Considerations. As a focal point for family services, the FSC should be in proximity to the base entrance and on a well-traveled route within the base. If possible, it should be close to family quarters, as well as the personnel processing center, to facilitate the use of its services by both newly-assigned and resident personnel. Location with other support services and other facilities is encouraged to integrate FSC activities with other daily base operations as well as make maximum use of available facilities.

For organizational aspects of FSC's relating to location, refer to the Guide for Planning and Operating Navy Family Service Centers.

b. Site Development. The building must provide a welcoming and attractive exterior that proclaims its purpose as a center for the distribution of services. The exterior should emphasize its general family service functions and permit confidential access by clients.

Parking considerations include the following:

(1) Unobscured visual access to the facade.

(2) Multiple building entry and egress and limited exposure of confidential clients.

(3) On-site parking; service areas to accommodate the loading and unloading of hospitality kits made up of kitchen utensils, bedding, and other household items provided to families awaiting the arrival of household goods shipments.

(4) In small centers, staff parking for nine, plus six visitor cars; and in large centers, staff parking for 17, plus eight visitor cars.

(5) At least one parking space for the handicapped, if there are 25 or fewer spaces, and at least two parking spaces for the handicapped, if there are 26-50 spaces.

(6) Access to parking at other nearby facilities to accommodate as many as 50 additional cars for occasional large meetings.

Site planning should provide a low-maintenance landscaping and paving which reflect the need for the FSC to "feel right"--to be warm and welcoming. Generic site planning considerations are illustrated in Facility Plate No. 740-25. Sheet No. 1.

c. Functional Zoning. The functions of the FSC are divided among the following zones: executive, administrative, reception, counseling and program.

Full public access should be provided for the reception and program zones. Private egress is required for counseling but should be observed from the reception zone. Executive and administrative zones must be located away from the reception zone to enhance their privacy, yet offer easy staff access to counseling and program areas. Consideration should be given to providing access to the program zone independent of the rest of the center for after-hours programs. At such times the rest of the center should remain secure. For an illustration of functional zone relationships, refer to Facility Plate No. 740-25, Sheet No. 1.

More general zoning considerations apply to the development of linear, axial, or central plans. The specific type of plan will, of course, be based on a wide range of conditions specific to each project. In general, considerations related to each type of plan are as follows:

(1) Linear zoning can be characterized by a primary circulation spine along which activity zones are arranged. Entry occurs through the reception zone and short-visit activities can be localized near that zone. The remaining zones are placed along the spine.

An arrangement such as this facilitates privacy by placing more private functions, such as executive offices and counseling, at the extreme ends of the spine away from the entrance. (See Facility Plate No. 740-25, Sheet No. 3.)

(2) Central zoning organizes the program's activities around a key zone. A good choice for such a central position is the reception zone which involves frequent public visits and offers lounge seating for visitors to all other parts of the center. Its central location acts as a hub for all other zones.

This kind of zoning scheme has the advantage of minimum circulation and more direct control of casual movement within the center. It also helps make the presence of a wide range of services obvious to first-time visitors. Privacy is accommodated by expressing a front and back to the hub arrangement; services located to the back are private, while services in front of the hub are more public. (See Facility Plate No. 740-25, Sheet No. 4.)

(3) Axial zoning combines the intent of both linear and central approaches. The axial scheme offers two spines with the most public zones located at the intersection of circulation. Opportunities for interaction are at the intersection, while more private zones are located at the ends of both spines away from the intersection. (See Facility Plate No. 740-25, Sheet No. 5.)

4. ARCHITECTURAL REQUIREMENTS.

a. General Design Considerations. The FSC must present an expression of informality, comfort, and clear organization. It must, above all else, be a facility which invites relaxed conversation, suggests discretion, and promotes confidence in the professional services to be delivered. A "residential" rather than institutional character is very important.

(1) Visitor and Staff Traffic. Interaction with Family Service Center staff takes place by mail, telephone, and personal visits. Personal visits are grouped into the following categories:

(a) Introductory visits for newcomers to learn what services are available.

(b) Crisis-oriented visits for those seeking the immediate assistance of skilled personnel in a private counseling area.

(c) Visits with specific purposes, such as volunteer activities, training, lectures, general information, etc.

(2) Public and Private Internal Zones. The Family Service Center provides a full range of family-related resources, offering both public and private services. Public and private functions

must be expressed internally as well as externally. The following five zones should be considered in the design of the FSC.

(a) The reception zone must help set the tone for the FSC, establishing without question that it is a place where one will be welcome and where an atmosphere of calm and order will prevail. It requires immediate visual access upon entering the building. The reception zone serves as the direction and control point for access to the other functional zones. The lobby, in particular, must be a warm and welcoming place but must also express its function as a control point. Resilient, sound absorptive surfaces, and a warm color scheme are recommended for the lobby. No overly bold colors or graphics should be used.

(b) The program zone requires direct access from the reception zone. It contains a variety of program and program support spaces with differing requirements for acoustical and visual privacy, as well as security.

(c) The counseling zone requires direct access from both the reception zone and from the exterior for visitors. Convenient staff access from the executive and administrative zones is also desirable. Visual privacy is required for client egress. Clients in the counseling zone should have the option of departing without going through other more public parts of the FSC. A high degree of acoustical and visual privacy is required for counseling rooms. A sound transmission class of 45-55 is recommended for wall construction in these rooms. The selection of these walls should be determined in accordance with the calculation method identified in NAVFAC DM-1.

(d) The executive zone offices require acoustical privacy from the administrative and other zones. The offices of the chaplain and director require a higher level of acoustical and visual privacy than other offices in the executive zone.

(e) The administrative zone requires direct access to the executive zone. It should be easy for administrative staff to get to all zones. Open-plan work stations would accommodate such access and meet staff requirements.

(3) Functional Zoning--Internal Circulation. The internal circulation will usually connect a range of activities occurring in different zones. Examples of such activities include:

- Client waiting - reception zone
- Educational programming - program zone
- Individual and small or large group counseling - counseling zone
- Routine office functions - administrative zone
- Equipment storage and exchange - administrative zone

The following description of internal circulation among functional zones is general and may require changes to accommodate

individual circumstances at a given site. For specific adjacency relationships, refer to Facility Plate No. 740-25, Sheet No. 2.

(a) The executive zone provides offices for the director, deputy director, chaplain, program coordinator, and chief of counseling services. It requires a direct access to the administrative zone, staff access between it and all other zones, and visitor access from the reception zone.

(b) The administrative zone requires facilities for the administrative officer, administrative assistant, yeoman/steno, office supply, office files, and staff lounge. It requires direct access to the executive zone and staff access to all other zones.

(c) The reception zone accommodates a lobby and child care area, an orientation room, an information and referral counter, facilities for relocation and hospitality functions, and an office for retired affairs. The reception zone offers easy visitor access to all other zones and should be conceived as the heart of the FSC.

(d) The program zone provides classroom and conference rooms; offices for a family coordinator, personal resources coordinator, ombudsman, and volunteers; and facilities for conference storage. It requires direct physical access from the reception zone and easy staff access from other zones.

(e) The counseling zone includes counseling rooms and provides offices for a counselor, social worker, information and referral (I & R) coordinator, and information and referral specialist. It requires visitor access from the reception zone and staff access from all other zones. It should also have a public egress.

b. Individual Space Requirements. The FSC should present an informal clearly organized, personable appearance of residential scale. Patrons of the center should find a relaxed atmosphere yet feel confident that they will receive efficient service.

Both the small and large FSC are composed of a core staff with duties and space allocations as listed in Table 1. This guidance is based on a prototypical facility. Modifications might, therefore, be considered based on local conditions. Specific functional requirements by zone are outlined below.

(1) Executive Zone.

(a) Director. This is a full-time position. The director is responsible for staff administration and accomplishment of FSC goals. This office will be used for small meetings and for individual and staff counseling and must be private. It requires 200 square feet (19 m²) in either small or large centers and should accommodate a desk, desk chair, credenza, a table with four visitor chairs, two filing cabinets, one large book case and pamphlet rack. The office must be adjacent to the office of the deputy director.

TABLE 1
SPACE ALLOCATION BY ZONE

	PRIVATE/ OPEN	PAID STAFF SML.	LGE.	NET AREA			
				SMALL		LARGE	
				ft ²	m ² *	ft ²	m ² *
A. EXECUTIVE ZONE				(600)	(56)	(775)	(72)
Director	P	1	1	200	19	200	19
Deputy Director	P	1	1	150	14	150	14
Chaplain	P		1			175	16
Program Coordinator	P	1	1	100	9	100	9
Chief of Counseling Services	P	1	1	150	14	150	14
B. ADMINISTRATIVE ZONE				(550)	(51)	(675)	(63)
Administrative Officer	O		1			110	10
Administrative Assistant	O	1	1	110	10	110	10
Yeoman/Steno	O	1	1	60	6	60	6
Office Supply	P/O			100	9	100	9
Office Files	O			80	7	95	9
Staff Lounge	P			200	19	200	19
C. RECEPTION ZONE				(840)	(78)	(1090)	(101)
Lobby	O			150	14	200	19
Child Care	O			200	19	200	19
Orientation Room	P/O			100	9	100	9
I&R Counter (Welcome Aboard)	O			40	4	40	4
Relocation Assistance Services							
Relocation Services Coordinator	O		1			90	8
Reloc. Ass't. (Emer. Serv. Co-ord)	O		1			60	6
Hospitality Kit Storage	P			250	23	300	28
Retired Affairs	O			100	9	100	9
D. PROGRAM ZONE				(930)	(86)	(1380)	(128)
Family Coordinator	O		1			90	8
Pers. Resource Coordinator	O		1			90	8
Ombudsman	P					100	9
Volunteers	O			200	19	270	25
Classroom/Conference	P			700	65	800	74
Conference Storage				30	3	30	3
E. COUNSELING ZONE				(580)	(54)	(1080)	(100)
Counselor	P	1		190	18		
Social Worker	P	1	3	150	14	450	42
Counseling Rooms (150 ft. ² each)	P			150	14	450	42
I&R Coordinator	P	1	1	90	8	90	8
I&R Specialist	P		1			90	8
NET TOTAL		9	17	3,500	325	5,000	466
Circulation, Toilets (25% of Net)				875	81	1,250	116
Mechanical Room (5% minimum of Net)				175	16	250	23
Gross Total				4,550	423	6,500	604

For additional information on space allocation data, consult NAVFAC P-80 (space allowance tables for Family Service Centers - category code 740-25.)

*Metric conversions have been rounded to the nearest square meter. This accounts for slight inconsistencies in totals.

(b) Deputy Director. The deputy director serves as second-in-command, assisting and advising the director. In the director's absence, the deputy assumes the director's duties. The deputy director also serves as personnel manager.

The deputy director's office will be used for individual staff and client counseling and must be private. It requires 150 square feet (14 m²) in either small or large centers and should accommodate a desk, desk chair, credenza, two visitor chairs, two filing cabinets, and book case. This office must be adjacent to the office of the director and should be adjacent to those of the chaplain (when applicable), program coordinator, and chief of counseling services.

(c) Chaplain. The chaplain serves as advisor and spiritual counselor and provides liaison with religious and social institutions of the civilian and military community. The chaplain's office will be used for small meetings and individual counseling and must be private. It requires 175 square feet (16 m²) and will be provided only in large centers to which a chaplain is assigned. It should accommodate a desk, desk chair, credenza, a table with three visitor chairs, filing cabinet, book case, and pamphlet rack. This office should be adjacent to those of the director, deputy director and chief of counseling services.

(d) Program Coordinator. The program coordinator develops and facilitates delivery of services to meet the needs of Navy families and coordinates child development services in conjunction with local, State, and Federal programs. This office must be private. The office area requires 100 square feet (9 m²) in either small or large centers and should accommodate a desk, desk chair, two visitor chairs, file cabinet and book case. It should be adjacent to those of the director, deputy director, relocation assistance coordinator, and emergency services coordinator.

(e) Chief of Counseling Services. The chief of counseling services develops and maintains counseling programs for Navy families. This office will be used for individual staff and client counseling and must be private. It requires 150 square feet (14 m²) in either small or large centers and should accommodate a desk, desk chair, credenza, two visitor chairs, filing cabinet, and book case. The office should be adjacent to those of the chaplain, deputy director and director, as well as to offices in the counseling zone.

(2) Administrative Zone. The administrative zone is an open-plan space with an enclosed office supply and staff lounge.

(a) Administrative Officer. The administrative officer administers the Family Service Center office and supervises administrative personnel. The office area may be open. It requires 110 square feet (10 m²) and will be provided only in large centers. It should accommodate a desk, desk chair, visitor chair, file cabinet, and book case. This office area must be adjacent to that of the administrative assistant, and to the yeoman/steno; it should be adjacent to office supply.

(b) Administrative Assistant. The administrative assistant supervises daily operations of the office staff, including filing, budgets and records. The office area may be open. It requires 110 square feet (10 m²) in either small or large centers and should accommodate a desk, desk chair, and visitor chair. The office area must be adjacent to the administrative officer or yeoman/steno and should be near the office supply and office files.

(c) Yeoman/Steno. The yeoman/steno types all office memoranda, documents, and publicity releases; greets all clients, arriving with or without an appointment, and directs them to the person; provides needed support services; and receives incoming calls. The office area may be open. It requires 60 square feet (6 m²) in either small or large centers. It should accommodate a secretarial desk and chair with typing extension. The office area must be adjacent to the administrative assistant and should be adjacent to office supply and office files.

(d) Office Supply. Office supply must provide secure storage. It requires 100 square feet (9 m²) in either small or large centers, and should accommodate the maximum storage and shelf area allowing easy access. Office supply should be adjacent to all office personnel.

(e) Office Files. Office files may be integrated in an open plan concept. Approximately 80 square feet (7 m²) is required in small centers and 95 square feet (9 m²) in large centers. The area should accommodate a maximum number of files and allow easy access. Office files should be directly accessible to the yeoman/steno and administrative assistant.

(f) Staff Lounge. The staff lounge is used for informal staff meetings, as a lunch room, and as a place for relaxation. It requires 200 square feet (19 m²) in either small or large centers and should be near the administrative zone. A sink for coffee preparation and cleanup should be provided.

(3) Reception Zone. All areas in this zone are discrete except lobby/child care and (in large centers) the shared office area of the relocation assistance services coordinator and the emergency services coordinator.

(a) Lobby/Childcare. The lobby serves as a waiting room, receptionist work station, control point, and the initial reception area for visitors, clients, and their children. It should be open and requires 150 square feet (14 m²) in small centers, accommodating approximately seven visitors. In large centers, the lobby should be 200 square feet (19 m²), accommodating approximately 10 visitors. Two hundred square feet (19 m²) should be provided as a child play area in both small and large centers. This area should have an implied separation from the lobby, while retaining full visual accessibility. Glass partitions may be used to accomplish this aim. Children's furniture, shelves, storage for toys, and display areas should also be provided. The lobby must be adjacent to the orientation room and the information and referral counter, and should be adjacent to both the program and reception zones.

(b) Orientation Room. The orientation room provides printed material and video presentations for orientation about naval bases and the Family Service Center. The orientation area requires 100 square feet (9 m²) in either small or large centers. It should be capable of being darkened enough to allow comfortable viewing of the video screen and should provide seating for four to six people. The orientation room must be adjacent to the lobby.

(c) Information and Referral Counter (Welcome Aboard). The information and referral counter provides access to crisis intervention resources and information on local civilian agencies available to Navy families. It must be open to the reception area and zoned in terms of its public services and confidential services. Confidential services will require visual and speech privacy and will normally be provided in the office of the information and referral coordinator. In small centers the information and referral counter should be near the office of the information and referral coordinator. In large centers the counter should be adjacent to this office. The counter requires 40 square feet (4 m²) and should accommodate computer terminal, automatic answering and recording devices, reference files, and one file cabinet.

(d) Relocation Services Coordinator. The relocation services coordinator provides briefings to new Navy personnel and administers the loaning of "hospitality kits". The office area should be open. It requires 90 square feet (8 m²) and will be provided only in large centers. It should accommodate a desk, desk chair, visitor chair, and file cabinet. The office area may be shared with the emergency services coordinator and hospitality kit storage. It should be adjacent to the lobby and the program coordinator.

(e) Emergency Services Coordinator. The emergency services coordinator administers emergency services program and administers the loaning of emergency food and clothing. The office area should be open. It requires 60 square feet (6 m²) and will be provided only in large centers. It should accommodate a desk, desk chair, and a visitor chair. The office area may be shared with relocation services coordinator and should be adjacent to the lobby.

(f) Hospitality Kit Storage. It must be possible to lock the hospitality kit storage. The storage area has been programmed as 250 square feet (23 m²) in small centers and 300 square feet (28 m²) in centers. It should accommodate the maximum amount of flexible storage with easy access. For ease of access, hospitality kit storage should be near the lobby and relocation services coordinator and may share the same space as the latter and the emergency services coordinator. The storage area should be adjacent to a covered loading area where patrons can load hospitality kits directly from storage to their vehicles.

(g) Retired Affairs. The retired affairs office answers questions relating to retirement from the Navy. The office area may be open. It requires 100 square feet (9 m²) in either small or large centers, and should accommodate a desk, desk chair, visitor chair and a file cabinet.

(4) Program Zone.

(a) Family Coordinator. The family coordinator supervises family programs and provides referral information. The office area may be open. It requires 90 square feet (8 m²) and will be provided only in large centers. It should accommodate a desk, desk chair, and visitor chair. The office should be near the lobby, personal resource coordinator, and ombudsman.

(b) Personal Resource Coordinator. The personal resource coordinator supervises the financial counseling program and consumer education program, develops employment services for Navy families, and maintains liaison with area-wide agencies. This office may be open. It requires 90 square feet (8 m²) and will be provided only in large centers. It should accommodate a desk, desk chair, and visitor chair. The office should be near the lobby, family coordinator, ombudsman and volunteers.

(c) Ombudsman. The ombudsman is a volunteer who serves outside of the military chain of command as a liaison between the Navy community and the base commander. The office should be private. It requires 100 square feet (9 m²) and will be provided only in large centers. It should accommodate a desk, desk chair, and visitor chair. The office should be adjacent to the lobby, family coordinator, and personal resource coordinator.

(d) Volunteers. The volunteers assist in programming and support services. Their office area should be open. An office area of 200 square feet (19 m²) in small centers and 270 square feet (25 m²) in large centers has been programmed. Space is allocated for three volunteers, each with a desk, desk chair, and visitor chair, and shared storage. The office should be adjacent to the lobby and program personnel.

(e) Classroom/Conference Room. The classroom/conference room is used for group presentations and meetings and should be private. Seven hundred square feet (65 m²) are programmed in small centers and 800 square feet (74 m²) in large centers. This room should accommodate seating for a minimum of 32 people around conference tables or in a classroom configuration. Facilities for audio/visual presentations should be provided and the room should be capable of being totally darkened. The classroom/conference room should be adjacent to the lobby, must be adjacent to an entrance and must be capable of being secured from the remainder of the building to allow use during non-working hours.

(f) Conference Storage. Conference storage of approximately 30 square feet (3 m²) in either small or large centers should be provided. Storage must be locked. Easy access from the classroom/ conference room is essential.

(5) Counseling Zone.

(a) Counselor. In addition to conventional office

requirements, the counselor needs ample room to provide counseling for individuals, families and couples. The counselor's office must be private and should provide 190 square feet (18 m²) accommodating desk, desk chair, small conference table with three chairs, visitor chair, book case, and file cabinet. This office must be adjacent to the social workers and counseling rooms, and must have a relatively private egress to the parking lot. Spatial requirements for the counselor's office may be adjusted according to case loads of individual Family Service Centers.

(b) Social Worker. The social worker provides short-term counseling for individuals, families, and couples. The offices must be private and are programmed to be 150 square feet (14 m²) each. Small centers have one office and large centers are programmed to have three. Each should accommodate a desk, desk chair, small conference table with three chairs, and visitor chairs. The office must be adjacent to the counselor and counseling rooms, and must have a relatively private egress to the parking lot.

(c) Counseling Rooms. The counseling rooms must be a private and require 150 square feet (14 m²) each. Small centers have one counseling room and large centers are programmed to have three. Each should accommodate a small conference table with three chairs, sofa, and lounge chair. The counseling rooms must be adjacent to the social workers and counselor, and must have a relatively private egress to the parking lot. Consideration should be given to incorporating the counseling rooms with social work and counselor space, if compatible with specific programs.

(d) Information and Referral Services Coordinator. The information and referral services coordinator maintains a data bank of resources and services available to all commands, offices, individuals, and families availing themselves of the Family Service Center programs. This staff member primarily handles telephone inquiries and requires a private office of 90 square feet (8 m²) in either small or large centers. The office should accommodate a desk, desk chair and visitor chair, file cabinet, facilities for computer terminal and book case. In small Family Service Centers, the office should be near the information and referral counter. In large centers it should be adjacent to the information and referral counter and share a more public space with the information and referral specialist. It should also be adjacent to the social workers, counselor, and chief of counseling services in both large and small centers.

(e) Information and Referral Specialist. This specialist provides training and referral consultation service. The specialist's office must be private. It requires 90 square feet (8 m²) and will be provided only in large centers. It must accommodate a desk, desk chair, visitor chair, file cabinet, facilities for computer terminal, and book case. The office should be adjacent to the information and referral counter, the social workers, counselor, and chief of counseling services. It should share open-plan space with the information and referral services coordinator.

5. MECHANICAL AND ELECTRICAL REQUIREMENTS.

a. Plumbing. Provide plumbing in accordance with NAVFAC DM-3.1 and DOD 4270.1-M criteria.

b. Heating and Ventilation. General heating and ventilation should be provided in accordance with NAVFAC DM-3.3 and DOD 4270.1-M. Mechanical room dimensions will be determined by specific system configuration and access requirements.

c. Electrical. Electrical and communication facilities should be provided under the following guidelines. (For additional design criteria, see NAVFAC DM-4.1 and 4.7)

(1) Communications Provide telephone service entrances, telephone cabinets, conduit runs, and outlet boxes for telephones. Locate telephones in each office as stipulated in the design program. Provide outlets for public telephones as required.

Special requirements for areas containing electronic equipment are contained in DM-34, Section 6, and MIL-HDBK-1008.

(2) Lighting. Provide lighting in accordance with the design criteria in DOD 4270.1-N and IES design criteria. Also refer to ASHRAE Standard 90A-80. Use high-efficiency lamps as much as practicable. For reading and writing tasks, the zonal cavity method can be used to select fixtures and lamps in an energy-conserving manner. Review of product literature will suggest the most beneficial placement of fixtures. Consideration should be given to enhancing spaces with natural lighting whenever appropriate. Even though it is not as efficient as fluorescent lighting, selective incandescent task lighting may be suitable for use in counseling areas to promote an informal, warm atmosphere. If daylighting is used, consider controls which automatically adjust electric light levels and save energy.

(3) Power Requirements. Provide power and control equipment as follows:

(a) Convenience Outlets. For each separate office room with 400 square feet (37 m^2) or less of floor area, provide at least one duplex receptacle for each 12 lineal feet (3700 mm) of wall space. Receptacles should be 20 amps-120 volts unless specifically noted. For the classroom/conference room which is over 400 square feet (37 m^2) provide at least four duplex receptacles for the first 400 square feet (37 m^2) and at least two duplex receptacles for each additional 400 square feet (37 m^2) or major fraction thereof. Outlets should be placed at suitable locations to serve all parts of each space. Circuits for convenience outlets should be separated from telephone signal circuits. In large open areas, separate floor outlets for telephone and signal circuits, for appliances, and for desk machines such as dictaphones, electric typewriters, word processors, and calculators should be provided. In spaces such as corridors, where the use of janitorial equipment or other portable appliances may be anticipated, duplex receptacles shall be provided in accordance with NFPA 70, National

Electric Code. All receptacles shall be the grounding type. Receptacles in the child care area shall be the locking cover type.

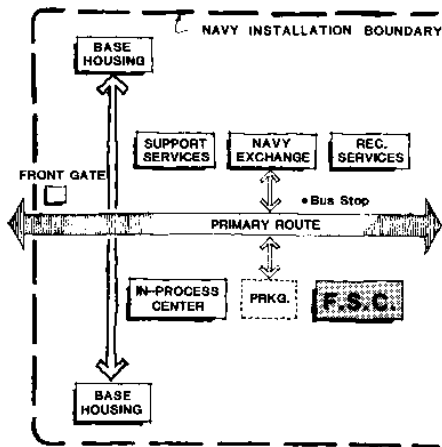
(4) Special Systems. The following special systems should be provided:

(a) Emergency Lighting. Provide emergency and exit lighting in accordance with NFPA 101, Life Safety Code.

(b) Clock System. Specify one electric clock, of the synchronous motor type, In each office and in lobby entrances.

(c) Fire Alarm System. A suitable fire protection and detection system, complete with an evacuation alarm system and connection to a station fire alarm system (where applicable), shall be provided. This system shall be in compliance with NAVFAC DM-8.

d. Energy Conservation. The building shall be energy efficient and its design shall take into consideration siting, orientation, outdoor design conditions, indoor design conditions, ventilation and infiltration rates, solar screening, building envelope, and insulation factors. (See NAVFAC DM-3.3, 3.4, 3.5, 3.16 and DOD 4270.1-M, Chapter 10 for guidance. Also refer to the AIA's Energy in Architecture Workbook Series for more general information.)



GENERAL SITE PLAN

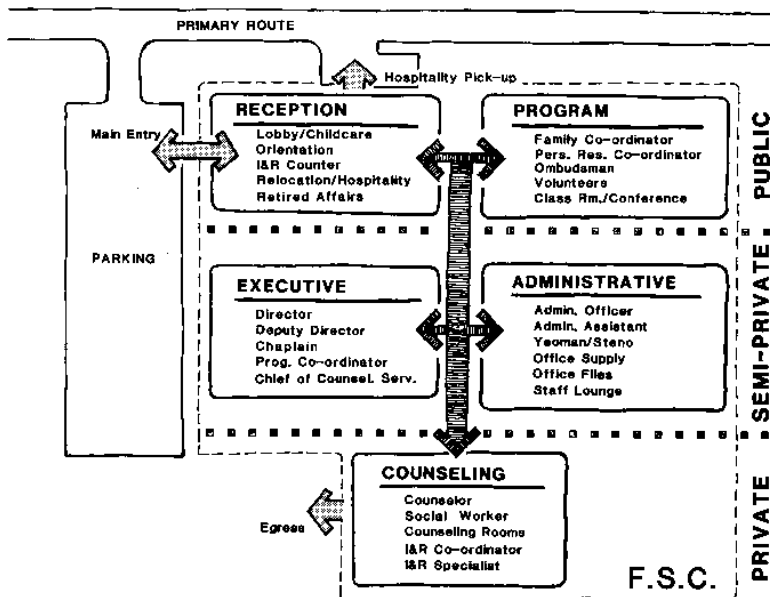
HVAC AND UTILITY REQUIREMENTS

	SMALL FSC (4550 SQ. FT.)	LARGE FSC (6500 SQ. FT.)
ELECTRICAL¹ TOTAL DEMAND	53 KVA	73 KVA
WATER²		
MAX. FLOW RATE COLD WATER	46 GPM	53 GPM
MAX. FLOW RATE HOT WATER	25 GPM	25 GPM
TOTAL DAILY WATER REQUIREMENT	690 GPD	975 GPD
SEWAGE² TOTAL DAILY RQMT	690 GPD	975 GPD
HEATING³ TOTAL LOAD	104,700 BTU/HR	147,200 BTU/HR
AIR CONDIT.³	11 TONS	16 TONS

1 The calculated electrical demand is the total estimated for mechanical, lights, receptacles and domestic water heating. electricity is assumed to be the only energy source used in the facility. Heating is assumed to be provided by heat pump with auxiliary/emergency electric heaters. Electrical capacity is sized so that, if necessary, full heating load of building can be met with integral auxiliary resistance heaters. The use of heat pump with electrical resistance heating shall be in accordance with OOD 4270.1-M.

2 Based on BOCA guidelines

3 Based on typical single story masonry construction located in Washington, DC.



FUNCTIONAL ZONE RELATIONSHIPS

TITLE:
GENERAL LAYOUT

DATE
1/85

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740-25

SHEET
1

ADJACENCY MATRIX

LEGEND

- - SAME SPACE
- ⊙ - MUST BE ADJACENT
- ⊖ - CLOSE OKAY, BUT ADJACENT PREFERRED
- - NEARBY
- ◇ - NO SPATIAL RELATIONSHIP REQUIRED
- P - PRIVATE
- O - OPEN

EXECUTIVE	DIRECTOR	P	●
	DEPUTY DIRECTOR	P	⊙
	CHAPLAIN	P	⊖
	PROGRAM COORDINATOR	P	○
	CHIEF OF COUNSELING SERVICES	P	○
ADMINISTRATIVE	ADMINISTRATIVE OFFICER	O	○
	ADMINISTRATIVE ASS'T. (SEC. SUPER)	O	○
	YEOMAN (TYPIST) / STENO	O	○
	OFFICE SUPPLY	P/O	○
	OFFICE FILES	O	○
	STAFF LOUNGE	P	○
RECEPTION	LOBBY/CHILD CARE	O	○
	ORIENTATION ROOM	P/O	○
	I & R COUNTER (WELCOME ABOARD)	O	○
	RELOC. ASSIST. COORDINATOR	O	○
	RELOC. ASSIST. (EMERG. SERV. CO-ORD)	O	○
	HOSPITALITY KIT STORAGE	P	○
PROGRAM	RETIRED AFFAIRS	O	○
	FAMILY COORDINATOR	O	○
	PERSONAL RESOURCE COORDINATOR	O	○
	OMBUDSMAN	P	○
	VOLUNTEERS	O	○
	CLASSROOM (CONFERENCE)	P	○
COUNSELING	COUNSELOR	P	○
	SOCIAL WORKERS	P	○
	COUNSELING ROOMS	P	○
	I & R COORDINATOR	P	○
	I&R SPECIALIST	P	○

*NOTE: To read an adjacency relationship between two areas, locate the row running either diagonally up or down from each area. The symbol located at the intersection denotes the relationship.

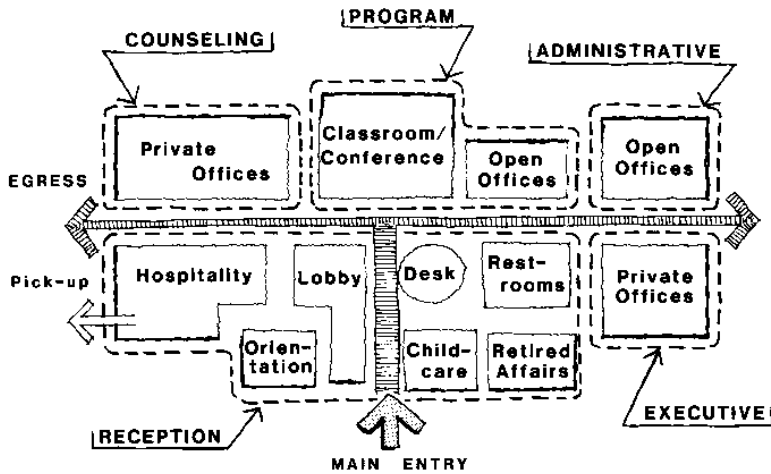
TITLE:
GENERAL LAYOUT

DATE
1/85

FACILITY PLATE NO.
740-25

SHEET
2

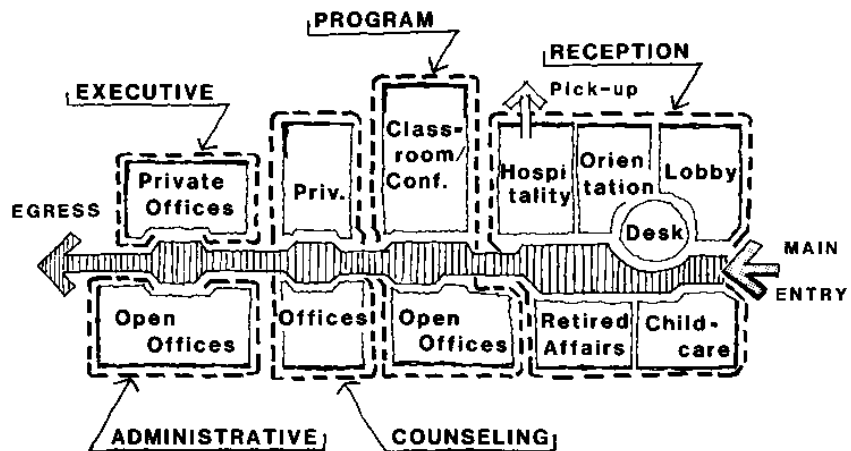
LINEAR CONCEPT 1



- RECEPTION ZONE ACTS AS A CONTROL POINT
- SEPARATION OF PRIVATE ZONES AT EITHER END
- PUBLIC FUNCTIONS LOCALIZED IN CENTER

LINEAR CONCEPT 2

- PROGRESSION FROM PUBLIC TO PRIVATE SPACES
- FSC FUNCTIONS ORGANIZED ALONG AN INTERNAL STREET



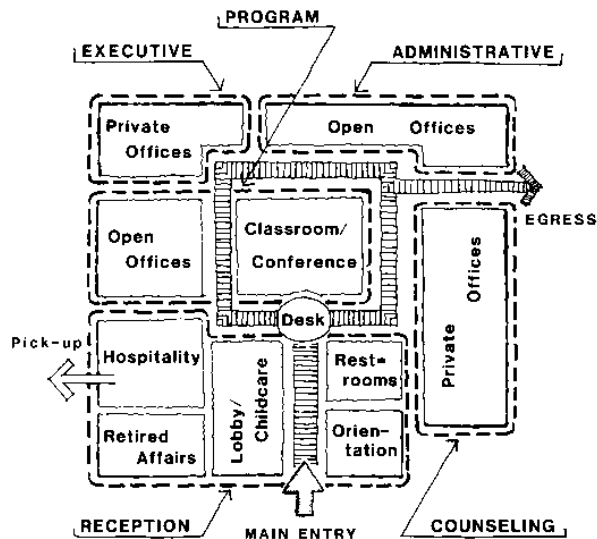
TITLE:
FUNCTIONAL DESIGN LAYOUT

DATE
1/85

FACILITY PLATE NO.
740-25

SHEET
3

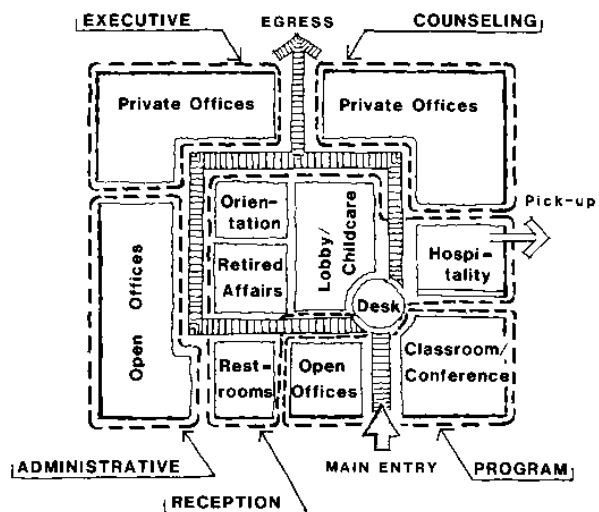
CENTRAL CONCEPT 1



- CLASSROOM/CONFERENCE IS ORGANIZING ELEMENT
- COUNSELING AREAS MAINTAIN PRIVACY BUT RETAIN DIRECT ACCESS
- RECEPTION DESK ACTS AS A CONTROL POINT

CENTRAL CONCEPT 2

- RECEPTION ZONE ACTS AS HUB AND CONTROL POINT
- PUBLIC ACTIVITIES OCCUR IN THE FRONT PORTION OF BUILDING
- PRIVATE ACTIVITIES ARE LOCATED IN REAR OF BUILDING



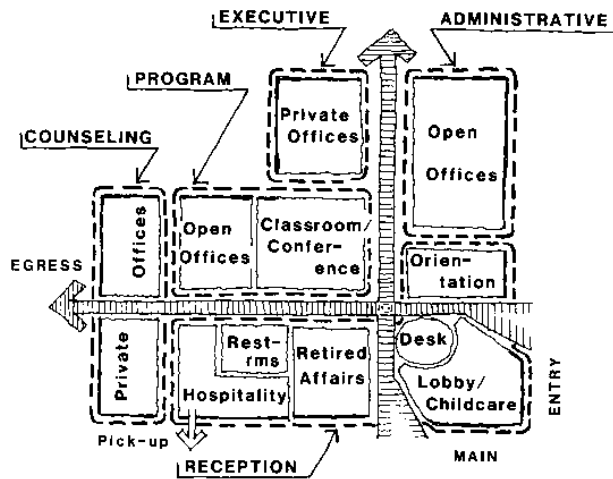
TITLE:
FUNCTIONAL DESIGN LAYOUT

DATE
1/85

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740-25

SHEET
4

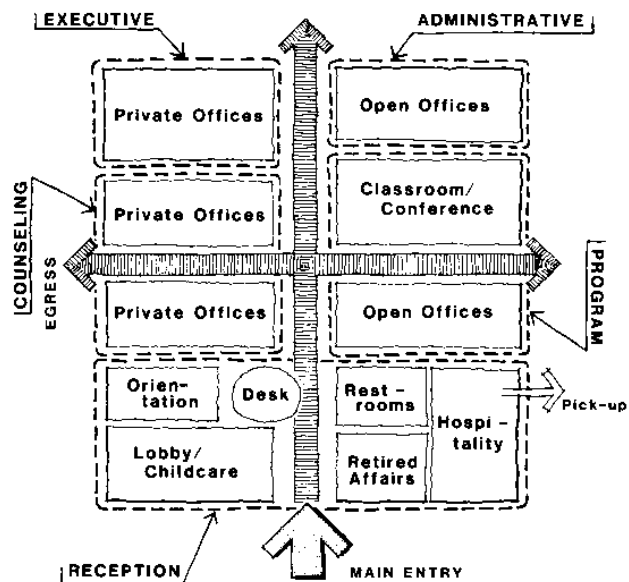
AXIAL CONCEPT 1



- RECEPTION ZONE LOCATED AT CIRCULATION SPINE INTERSECTION
- PRIVATE ZONES ARE SEPARATE AT EACH END
- CONFERENCE/CLASSROOM ACTS AS A FOCAL POINT

AXIAL CONCEPT 2

- SEPARATION OF FUNCTIONAL ZONES BY QUADRANTS
- PRIVATE ZONES ARE LOCATED AT THE ENDS OF CIRCULATING SPINES



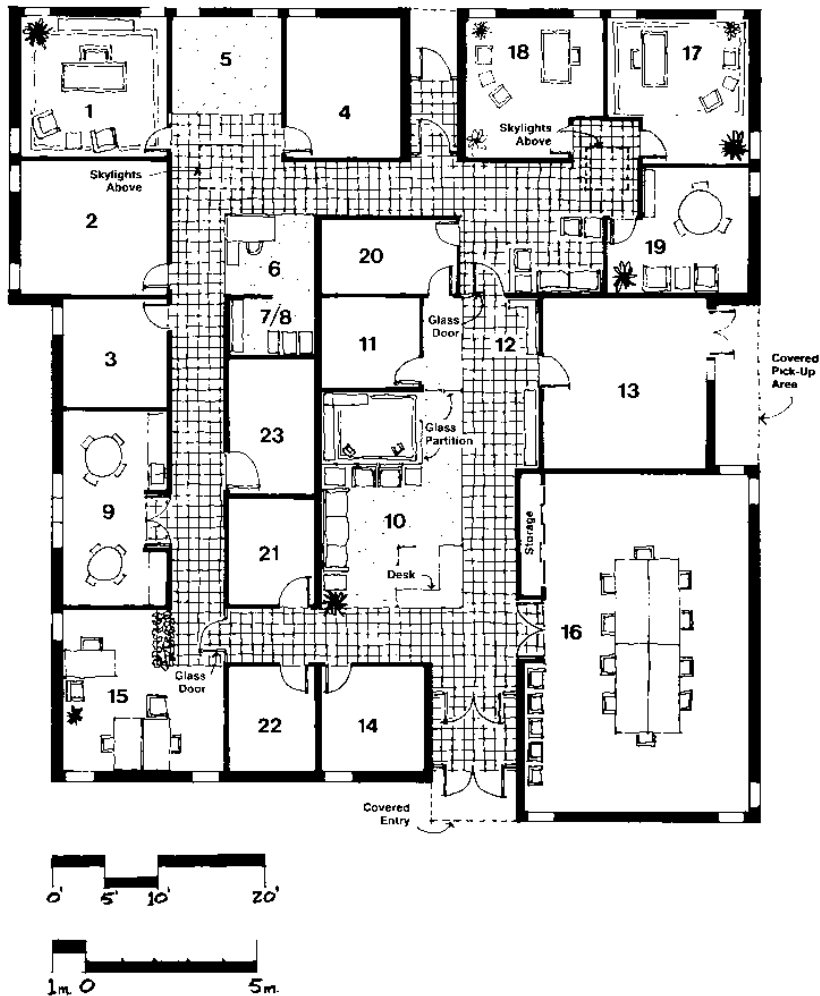
TITLE:
FUNCTIONAL DESIGN LAYOUT

DATE
1/85

FACILITY PLATE NO.
740-25

SHEET
5

SMALL FAMILY SERVICE CENTER CENTRAL PLAN/CONCEPT 2



EXECUTIVE ZONE

1. DIRECTOR
2. DEPUTY DIRECTOR
3. PROGRAM COORDINATOR
4. CHIEF OF COUNSELING SERVICES

ADMINISTRATIVE ZONE

5. ADMINISTRATIVE ASSISTANT
6. YEOMAN/STENO
7. OFFICE SUPPLY
8. OFFICE FILES
9. STAFF LOUNGE

RECEPTION/ZONE

10. LOBBY/CHILD CARE
11. ORIENTATION ROOM
12. I&R COUNTER
13. HOSPITALITY KIT STORAGE
14. RETIRED AFFAIRS

PROGRAM ZONE

15. VOLUNTEERS
16. CLASSROOM (CONFERENCE)

COUNSELING ZONE

17. COUNSELOR
18. SOCIAL WORKER
19. COUNSELING ROOM
20. I&R COORDINATOR

MISCELLANEOUS

21. MEN'S RESTROOM
22. WOMEN'S RESTROOM
23. MECHANICAL

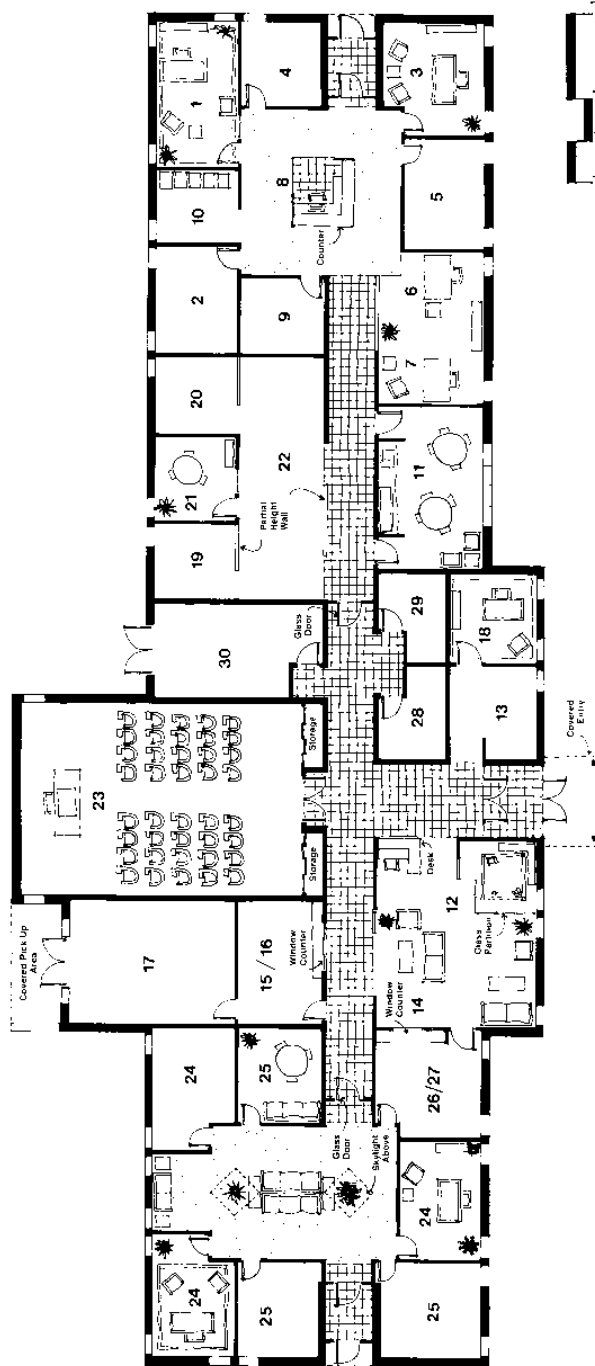
TITLE:
SCHEMATIC DESIGN LAYOUT

DATE
1/85

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740-25

SHEET
6

LARGE FAMILY SERVICE CENTER **LINEAR PLAN/CONCEPT 1**



- EXECUTIVE ZONE**
- 1. DIRECTOR
 - 2. DEPUTY DIRECTOR
 - 3. CHAPLAIN
 - 4. PROGRAM COORDINATOR
 - 5. CHIEF OF COUNSELING SERVICES
- ADMINISTRATIVE ZONE**
- 6. ADMINISTRATIVE OFFICER
 - 7. ADMINISTRATIVE ASSISTANT
 - 8. YEOMAN/STENO
 - 9. OFFICE SUPPLY
 - 10. OFFICE FILES
 - 11. STAFF LOUNGE
- RECEPTION/ZONE**
- 12. LOBBY/CHILD CARE
 - 13. ORIENTATION ROOM
 - 14. I&R COUNTER
 - 15. RELOCATION SERVICES COORDINATOR
 - 16. RELOC. ASSISTANT (EMERG. SERV. CO-ORD)
 - 17. HOSPITALITY KIT/STORAGE
 - 18. RETIRED AFFAIRS
- PROGRAM ZONE**
- 19. FAMILY COORDINATOR
 - 20. PERS. RESOURCE COORDINATOR
 - 21. OMBUDSMAN
 - 22. VOLUNTEERS
 - 23. CLASSROOM (CONFERENCE)
- COUNSELING ZONE**
- 24. SOCIAL WORKER
 - 25. COUNSELING ROOM
 - 26. I&R COORDINATOR
 - 27. I&R SPECIALIST
- MISCELLANEOUS**
- 28. MEN'S RESTROOM
 - 29. WOMEN'S RESTROOM
 - 30. MECHANICAL

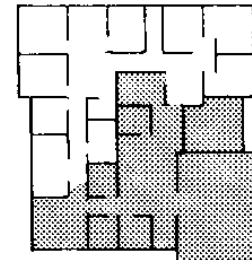
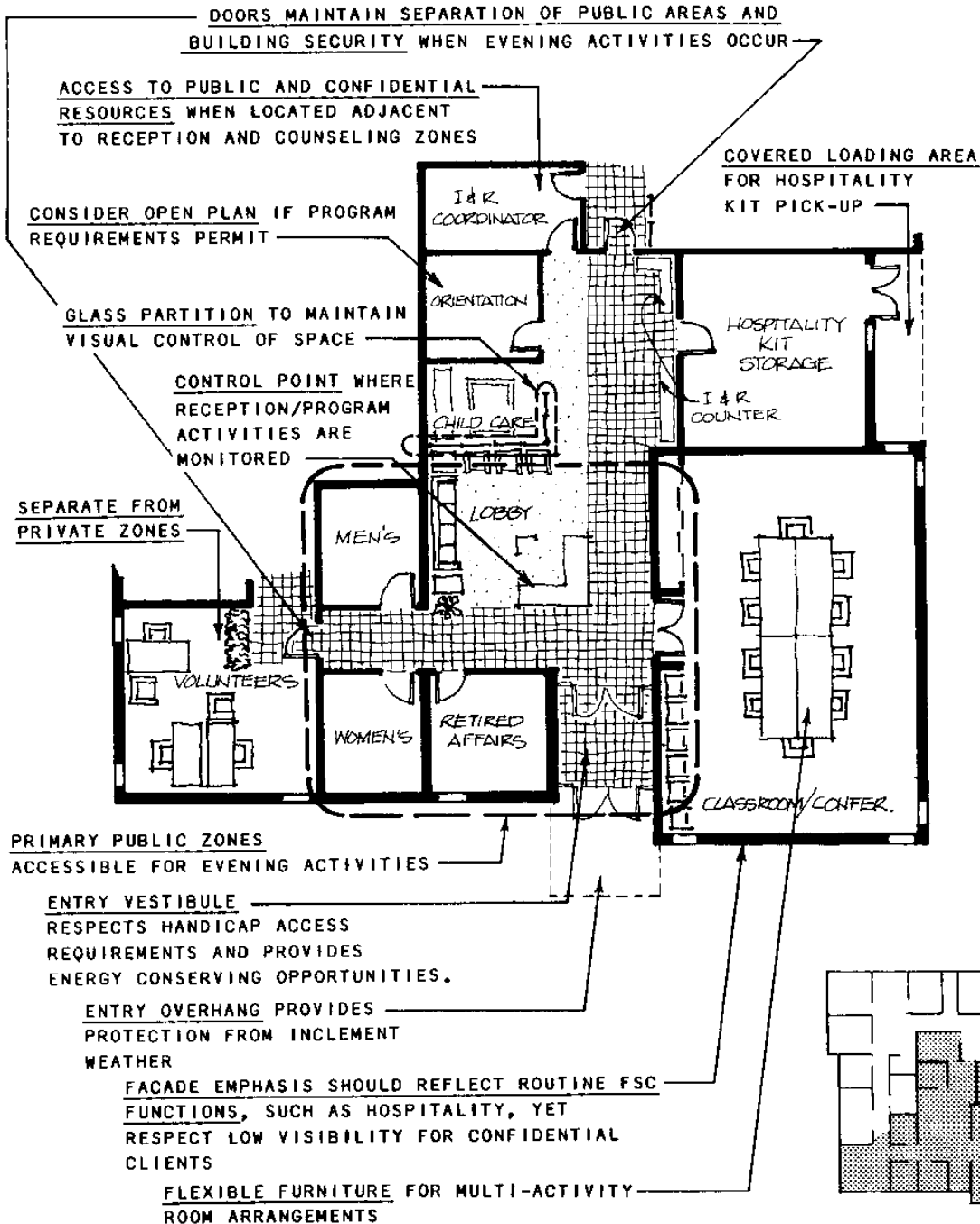
TITLE:
SCHEMATIC DESIGN LAYOUT

DATE
1/85

FACILITY PLATE NO.
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SHEET
7

ANALYSIS: RECEPTION/PROGRAM ZONE CENTRAL PLAN/CONCEPT 2



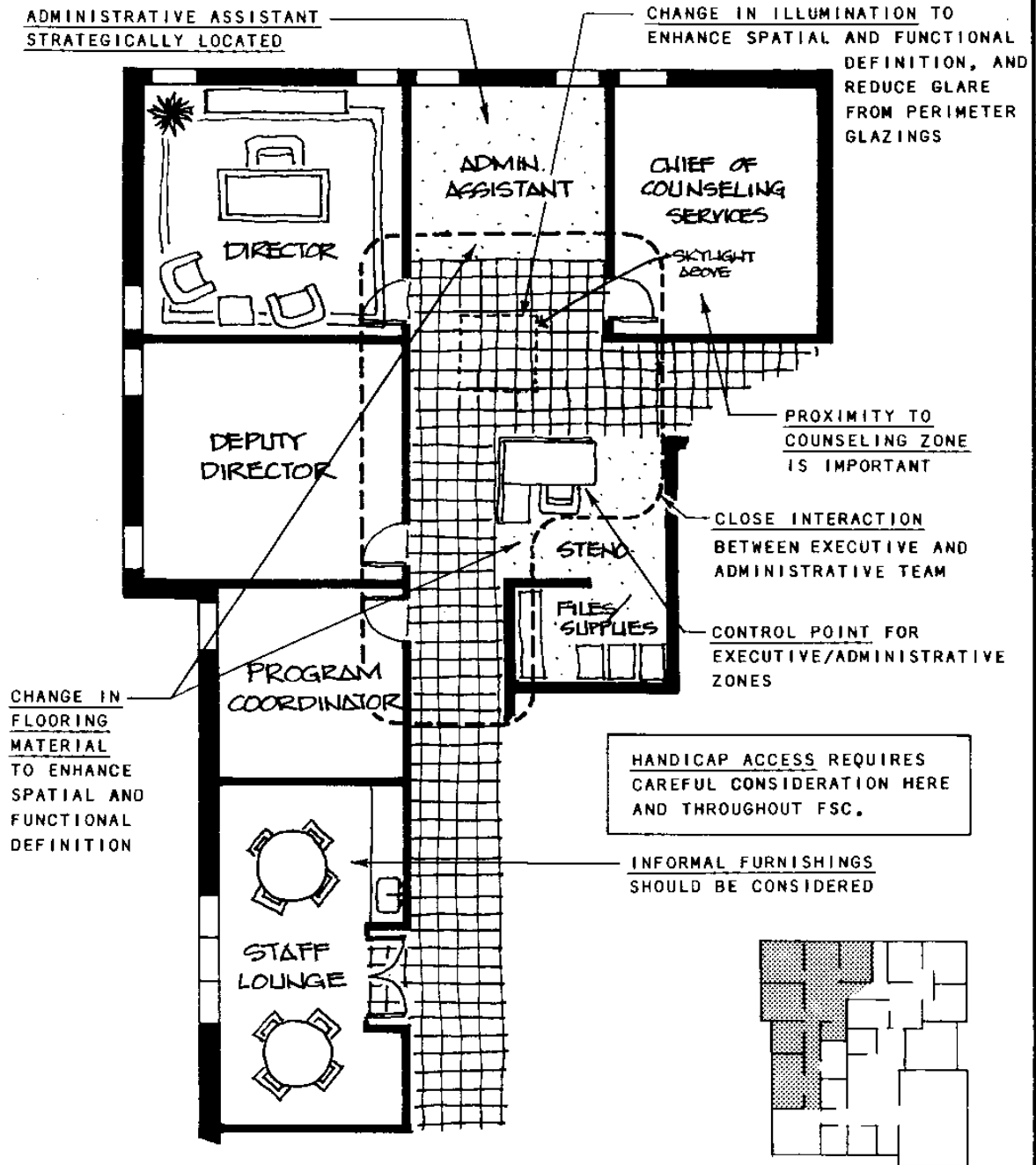
TITLE:
ZONE PLAN NO. 1 - PUBLIC

DATE
1/85

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ANALYSIS: ADMINISTRATIVE/EXECUTIVE ZONE **CENTRAL PLAN/CONCEPT 2 CONCEPT**



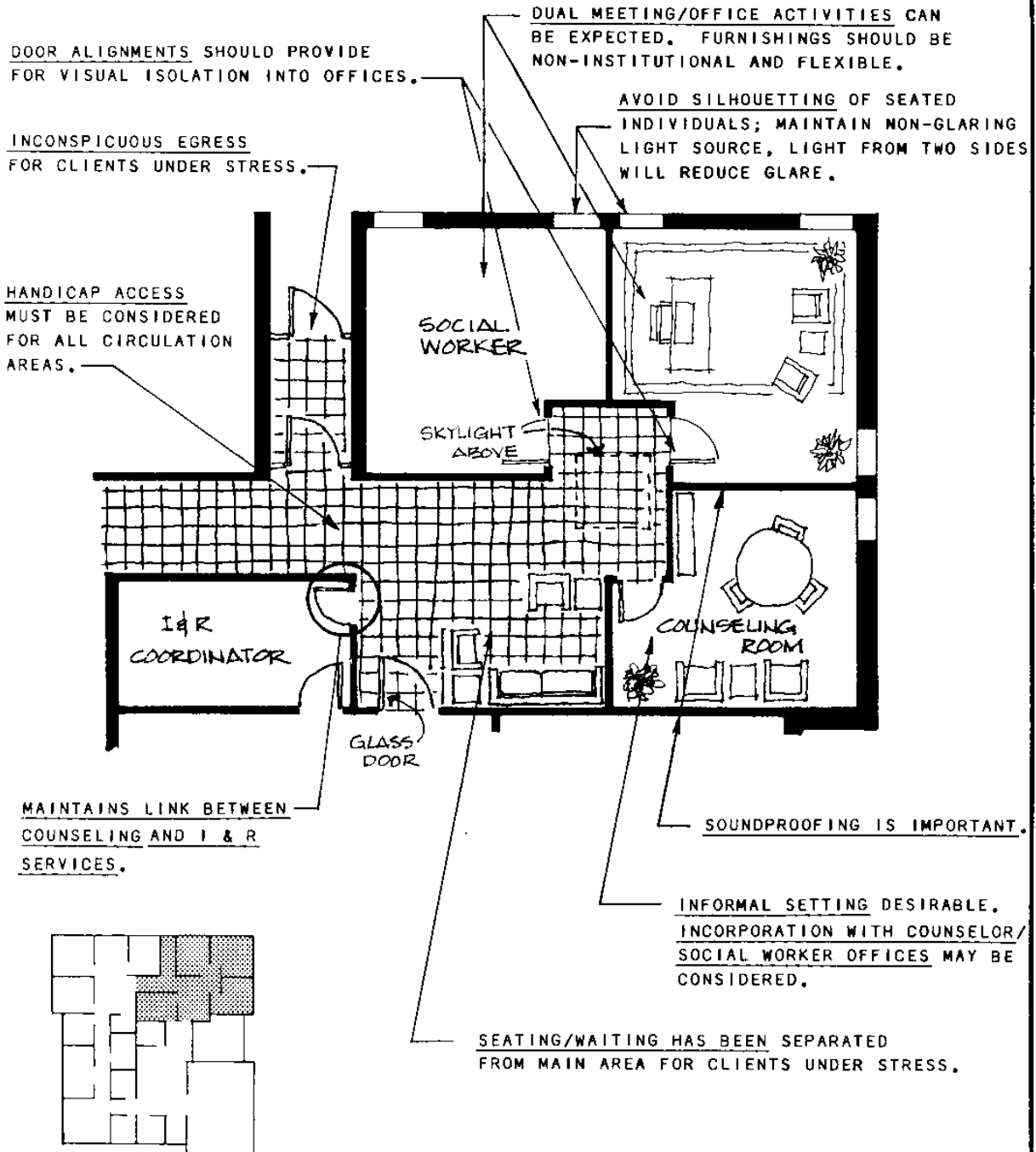
TITLE:
ZONE PLAN NO. 2 - SEMI-PRIVATE

DATE
1/85

FACILITY PLATE NO.
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SHEET
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ANALYSIS: COUNSELING ZONE CENTRAL PLAN/CONCEPT 2



TITLE:
ZONE PLAN NO. 3 - PRIVATE

DATE
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SHEET
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