

## 6 - 3



## Fort Hills: Local Troop and Family Centers

### a. Post Situation and Population

**(1) Surrounding Context.** Fort Hills is located in a rural area of the Middle Western United States, in hilly terrain. It is ninety miles from the nearest large city, but within a few miles of two medium-sized towns. The closest town has a very extensive strip development along the long edge of the post boundary. This strip provides some fast food operations, restaurants, bars, pawn shops, recreation and entertainment facilities, and retail services. These off-post services are patronized by some of the post population, especially single troops; but most families and others avoid this area because of its unsavory reputation.

**(2) Post Mission and Population.** Fort Hills is the headquarters of an airborne division, with combat-ready troops and intensive training activities. Esprit de corps among personnel is high, with one of the highest reenlistment rates in the Army. The military strength of the post is 21,000. In addition, 26,000 military family members live on and off the post, 4,000 civilians work on-post, and 80,000 retired military and their families live in the surrounding area. Almost 50% of the military population is married, and 80% of the families have children.

**(3) Geography.** The post cantonment has a well-organized masterplan (see figure 6 - 9), with a well-developed Community Center/Main Post Center. The proposed post administrative center is right in the center. Most troop billeting stretches in a north-south band on the west side of the cantonment, with recent additions at the northern end. The troop billets are clustered in brigade-size units, with open space for sports fields, gymnasiums and other service facilities in between. The family housing consists of a series of neighborhoods on the east side of the cantonment, with officers' housing at the southern end and enlisted men and NCO's to the

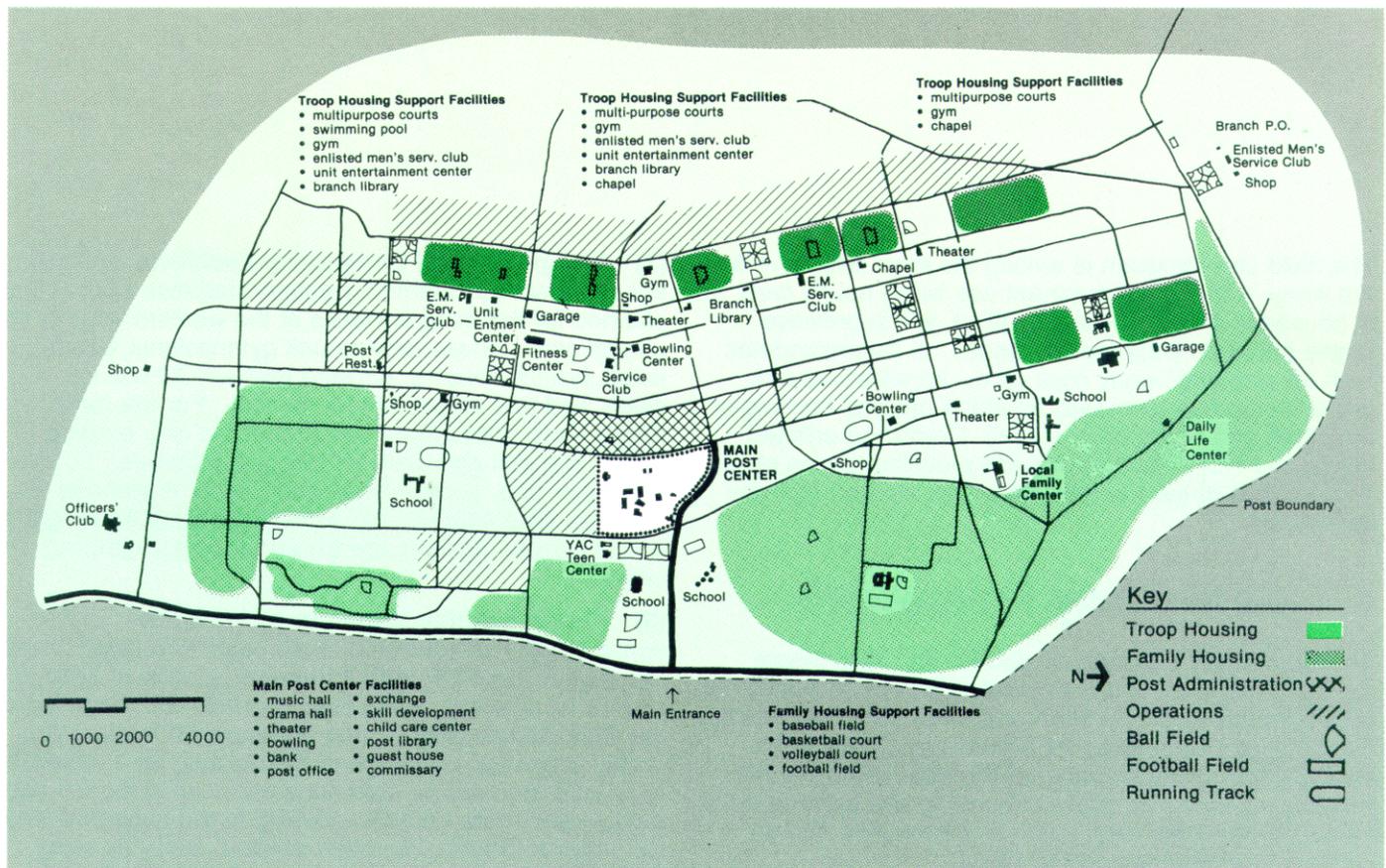


Figure 6 – 9 Fort Hills: Community Framework Plan

north. This family housing directly abuts the post boundary and the civilian town development. It is particularly dense and squeezed at the north end, where the enlisted family housing is very close to the most recent troop barracks.

## b. Existing Programs and Facilities

Fort Hills' Morale Support Activities program is quite active and generally quite successful, with many substantial new facilities housing most of the post-wide and some unit-oriented programs. However, construction of MSA and other community facilities has not kept pace with the new housing construction at the north end of the post. For this dense troop billeting and family housing area, MSA programs are not readily available - the distance to the Main Post Center being over three miles (see figure 6 - 9). Where MSA facilities are shared by troops and families, the specific programs generally schedule separate times for activities for each, with great success. However, all involved agree that separate facilities would be preferred.

Most physical fitness activities have good facilities, except for outdoor sports and swimming programs. Heavy military training schedules limit intramural sports involvement. Arts and crafts, used primarily by families and auto crafts, used more by troops, are housed in excellent centralized facilities. Dinner theatre and large scale theatre performances are quite successful. But the music program is limited by poor accommodations in older facilities. No unit entertainment centers are convenient to the troops, the primary participants. The large new post library is excellent for reference and general reading purposes, but already in need of expansion. Branches, especially for families and youth, would considerably improve service to these users.

The two existing recreation centers are old, homey, and very heavily utilized. They are used by the troops more for drop-in activities (especially pool, ping pong, television) and by the families for scheduled programs. The recreation centers are in demand as the only places with music practice rooms. The centers are also heavily scheduled with day and night time classes, performing groups, and family community functions. Youth activities are extremely active, providing a program center, teen center and field house. These are housed in makeshift facilities in various locations amidst the family housing neighborhoods.

The child care program is among the most extensive in the Army, with the predominant use being hourly care. It is housed in an old hospital building, which provides ample but often inappropriate space. It accommodates both full-day and hourly child care. An attractive new officer's club has been built amid the officers' housing at the south end of the cantonment. Combined enlisted men's and NCO clubs have been provided, or are planned, in most of the troop billeting area support facilities complexes.

### c. Community Framework

The Community Framework plan for Fort Hills (figure 6 - 9) in response to these existing factors, indicates the proposed distribution of MSA and other community facilities on post. The extensive Community Center/Main Post Center provides almost all the desired post-wide facilities. The configuration of housing and existing facilities determines the distribution of Community Activity Centers and other support facilities.

**(1) Main Post Center.** The Main Post Center is central to the entire cantonment, readily accessible from on and off post, and adjacent to the proposed post administrative center. It is also planned to be extremely comprehensive. The main exchange, commissary, bank, post office, movie theatre and other retail services front on a major parking area. At one end is an MSA complex including arts and crafts, music, drama and bowling. Nearby are the post library, guest house, the proposed general education facilities, main youth activity center and new child care center.

**(2) Troop-Oriented Community Facilities.** Reasonably satisfactory community support facilities exist or are planned for the troop barracks at the western edge of the cantonment. These provide unit gymnasiums, sports fields, branch libraries, enlisted men's/NCO service clubs, and unit entertainment centers. For the most recent troop billets at the north end, the only existing facility is a unit gym between the two brigades. To fill this major gap, a large local troop center is planned for this area (see figure 6 - 9) for which a detailed program and illustrative designs are presented in paragraph d, below.

**(3) Family-Housing Community Facilities.** The dense 3,000 - unit enlisted men's and NCO family housing area at the north end of the post is badly in need of a sizable local family center (see figure 6 - 9). Because of the limited availability of land at the post boundary, this facility is sited at one edge of the housing area, adjacent to an existing outdoor swimming pool and along the commonly used route from the housing to the shoppette and Community Center. The other officers' family housing areas are less densely developed. Some are close enough to be served by the main post center, others are effectively served by the Officers' Club. However, a second local family center may be considered for the southern family housing at a future time.

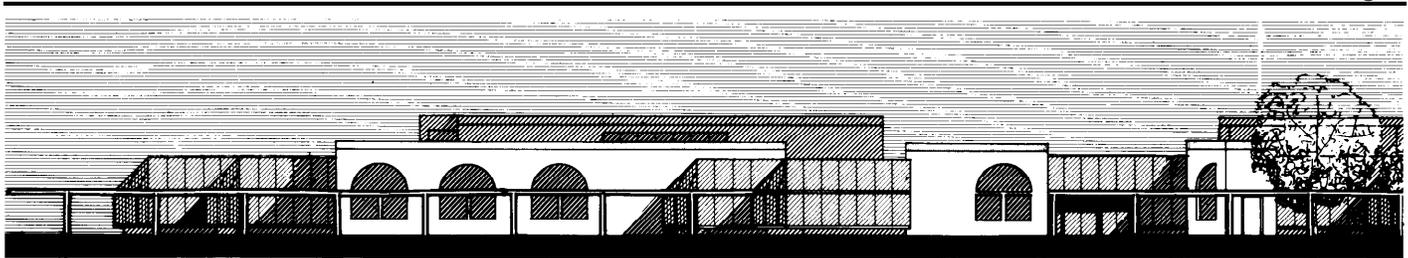


Table 6 - 4 Fort Hills Local Troop Center with Specialized Activities: Space Program

| Function-Space                     | Area (Gross Square Feet) |        |
|------------------------------------|--------------------------|--------|
| Social Activities                  |                          | 15,470 |
| Small Group Activities             | 10,800                   |        |
| I Active & Electronic Games        | 2050                     |        |
| I Television Lounge                | 1680                     |        |
| I Table Games                      | 950                      |        |
| I Open Multipurpose                | 1250                     |        |
| I Enclosed Multipurpose            | 3080                     |        |
| I Telephone Lounge                 | 160                      |        |
| I Meeting/Rehearsal                | 1630                     |        |
| Administration                     | 1160                     |        |
| I Offices                          | 600                      |        |
| I Information, Tour & Travel (ITT) | 200                      |        |
| I Control Center                   | 360                      |        |
| Refreshment                        | 3510                     |        |
| I Snack Bar                        | 2740                     |        |
| I Kitchen                          | 770                      |        |
| Arts and Crafts                    | 5,950                    |        |
| General Crafts & Woodwork          | 5450                     |        |
| Photography                        | 500                      |        |
| Music                              | 2,470                    |        |
| Practice & Listening Rooms         | 1920                     |        |
| Instrument Checkout                | 550                      |        |
| Drama                              | 11,610                   |        |
| 500-seat Theatre                   | 7960                     |        |
| Stage & Dressing Rooms             | 2690                     |        |
| Rehearsal Room                     | 960                      |        |
| Library                            | 4,950                    |        |
| Card Catalogue                     | 120                      |        |
| Control & Office                   | 930                      |        |
| Periodicals                        | 750                      |        |
| Stacks                             | 1010                     |        |
| Reading                            | 2140                     |        |
| Physical Fitness                   | 28,340                   |        |
| Gymnasium                          | 9400                     |        |
| Swimming Pool                      | 9000                     |        |
| Handball/Racquetball               | 3200                     |        |
| Exercise/Fitness                   | 2480                     |        |
| Support                            | 4260                     |        |
| I Trainer/First-Aid                | 290                      |        |
| • Lockers                          | 1400                     |        |
| I Showers                          | 540                      |        |
| I Toilets                          | 520                      |        |
| I Sauna/Whirlpool Bath             | 520                      |        |
| • Laundry                          | 190                      |        |
| • Equipment Issue and Storage      | 350                      |        |
| I Office/Control/ Concession       | 450                      |        |
| General Support                    | 5,220                    |        |
| Maintenance                        | 100                      |        |
| Toilets                            | 1000                     |        |
| General Storage                    | 4120                     |        |
|                                    | Total                    | 74,010 |

## d. Local Troop Center with Specialized Activities

**(1) Program.** This large local troop center for Fort Hills is programmed to serve two brigades, with 6,000 to 7,000 troops, that are far from any other community facilities. The building is intended to provide significant activities in all MSA program areas; physical fitness, theatre, music, arts and crafts, library and social activities. The program of functional spaces, totalling approximately 74,000 square feet, is detailed in table 6 - 4.

**(2) Design Solution.** The design of this local troop center reflects several key concepts (see plans, figures 6-10 and 6-12):

- Any duplication of programmed space that could be shared is eliminated. All meeting or classrooms are designed to be used as listening rooms, rehearsal rooms, or lounges. Different programs, such as arts and crafts, library, and recreation, are expected to share classroom/meeting space through time scheduling.

- The building consists of two major components. To the right of the main entrance are the more active, noisy athletic and drop-in/social functions, to the left are the arts and cultural activities. So that all program areas are reasonably close to the main entrance and control desk, a "T"-shaped circulation system was designed, with social activities and physical fitness in one wing, library, music and theatre in another, and arts and crafts with support spaces on the third.

- Visibility of activity from the entrance/lobby and other areas was a primary design goal. This arrangement both invites visitors to investigate new activities and permits easier staff supervision. Several means are used to provide this visibility. The space is divided by low partitions and furnishings so that it is as open as possible, as in the lobby, lounge, games and snack areas (all parts of the building are sprinklered, for adequate fire protection). Where closure is required, glass walls are used where feasible, with curtains for privacy when necessary, as in the library reading rooms, music listening/practice rooms, multipurpose meeting rooms, crafts, gymnasium and swimming pool spaces. Waiting lounge spaces are furnished to attract spectators and overlook the gym, pool, crafts and music practice spaces.

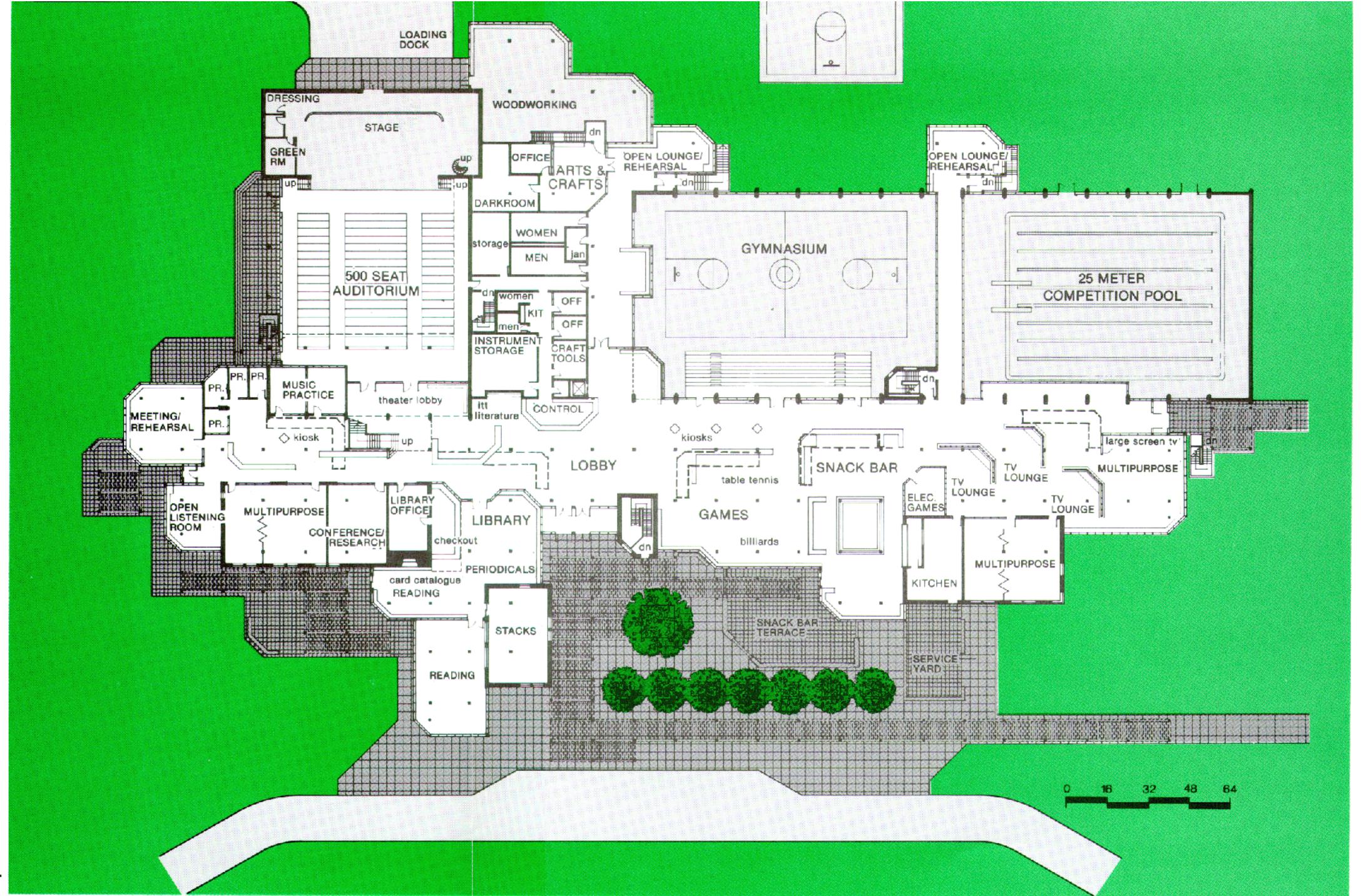


Figure 6 – 10 Fort Hills: Local Troop Center-  
Main Floor Plan

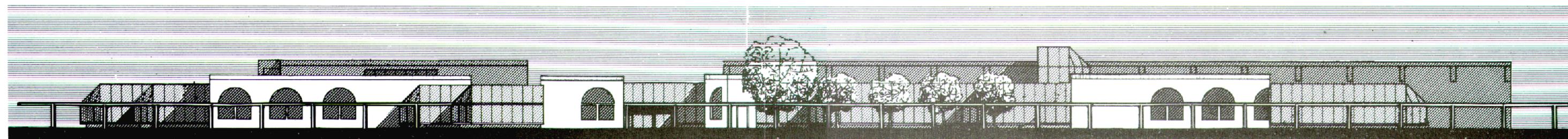


Figure 6 – 11 Fort Hills: Local Troop Center-Elevation

- In order to get natural light into as much of this large building as possible, the building is long and narrow. Also for this purpose, large glazed walls are designed for almost all the program areas, both to the exterior and to the circulation spaces. Large skylights introduce even more light over program and circulation spaces (see section, figure 6 - 13, and elevation, figure 6 - 11).

**(3) Building Organization.** Immediately inside the main entrance is the lobby, with a central control desk that provides views in all directions to all major program areas (see figure 6 - 10). The control desk, with enclosed offices and equipment storage behind, also operates all equipment provision, supplies sales, information and ITT for the center. The desk even controls access to support spaces like the toilets, which are centralized in the wing behind the control area. The social activity spaces such as games, snack bar, lounge, television, and meetings, open onto the lobby/circulation area. These are designed as continuous open space subdivided by low or medium-height walls, with built-in seating (zone (1), always open, except for one closed meeting room and the support spaces).

Across from the recreation areas, at a lower level (see section, figure 6 - 13), are a large gymnasium/basketball court, with bleachers (zone (2), "usable with support staff") and a 23 - meter competition swimming pool (zone (3), usable only with program specialists). The pool and gym are visible from the main level through glazed walls, with overlooks, and with direct access to the bleachers. These double-height spaces are served by shared lockers, showers, sauna, storage and other support spaces, located underneath the recreation areas, providing direct access to the pool and gym. A main lobby/control desk that serves both the gym and pool is at the center of this lower level sports area which includes racquetball courts and exercise rooms. Outdoor sports fields are directly accessible from this area.

On the other side of the main level control desk is an open lounge/waiting/circulation area providing a gathering space for the library, music area, and theatre (see figure 6 - 10). The large branch library, about 6,000 square feet, is designed to be as open as possible, with an accessible large general reading and periodicals area and lounge combined. This open lounge is supervised from the central control desk, and enclosed only by glazed walls for acoustic separation (zone (1), always open). Another more specialized reading area is more separated but still open and visible through glass walls (zone (2), usable with support staff). The stacks are closed (zone (3), usable only with program specialists), while the office is enclosed and off-limits (zone (4), staff only). This library is the illustrative example used to define these zones under Design for Consolidated Activities (see figure 5 - 9).

The music area includes six acoustically-sealed practice rooms, with glazed walls for views in and between each other, plus four rehearsal/listening/meeting/lounge rooms, of varying size and closure (generally zone (2), usable with support staff). The music spaces surround a lounge/waiting area with built-in seating. The theatre, one of the few large enclosed, unglazed volumes in the building (zone (3), only with program specialists), seats 500 on the main level plus the mezzanine (see plans, figures 6 - 10 and 6 - 12). This large hall is required for an active schedule usually consisting of a dozen major theatre productions per year. The theatre has direct exterior access from the stage and floor. There is a direct connection from backstage to the shared woodworking/set production shop.

The arts and crafts area is a two-level complex on the main and basement levels. It includes a darkroom and general purpose crafts space on the main level, overlooking the two-story woodworking shop (generally zone (3), with program specialists only). The woodworking area has direct exterior access for receiving material, and is adjacent to the theatre stage in order to double as the stage workshop. On both levels of this wing are other miscellaneous crafts and exhibition areas (zone (2), with support staff), a lounge/meeting space (zone (1), open), and various support spaces (zone (4), staff only). These work areas open onto a sculpture terrace for working on large projects or displays.

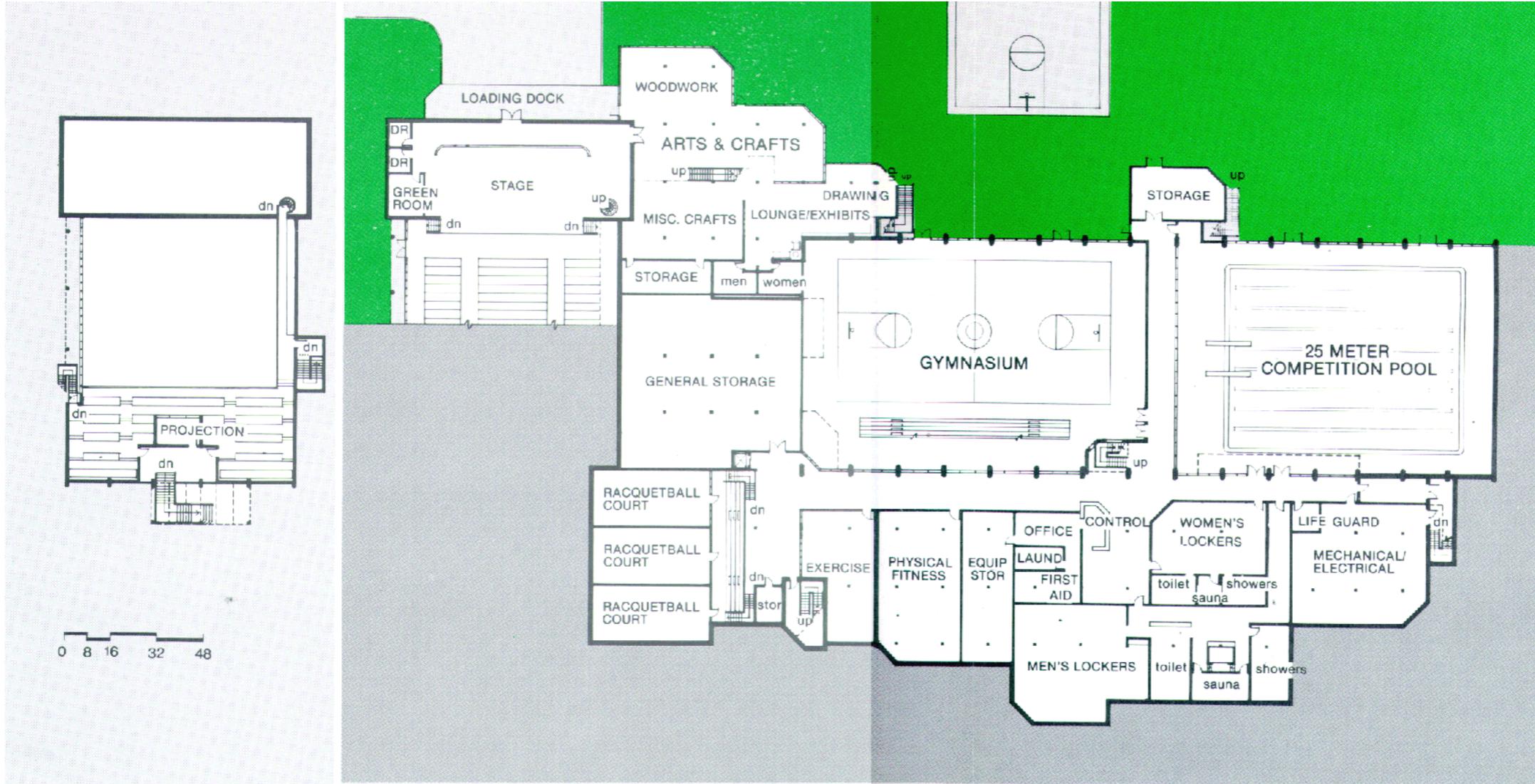


Figure 6 – 12 Fort Hills: Local Troop Center- Balcony and Basement Plan

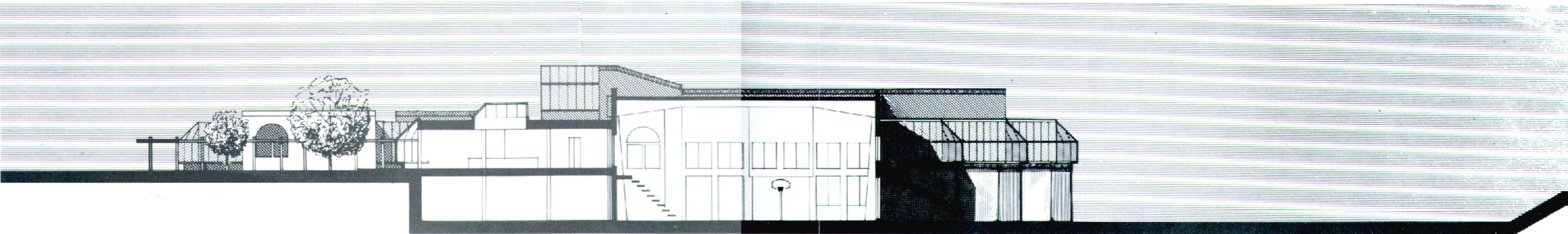
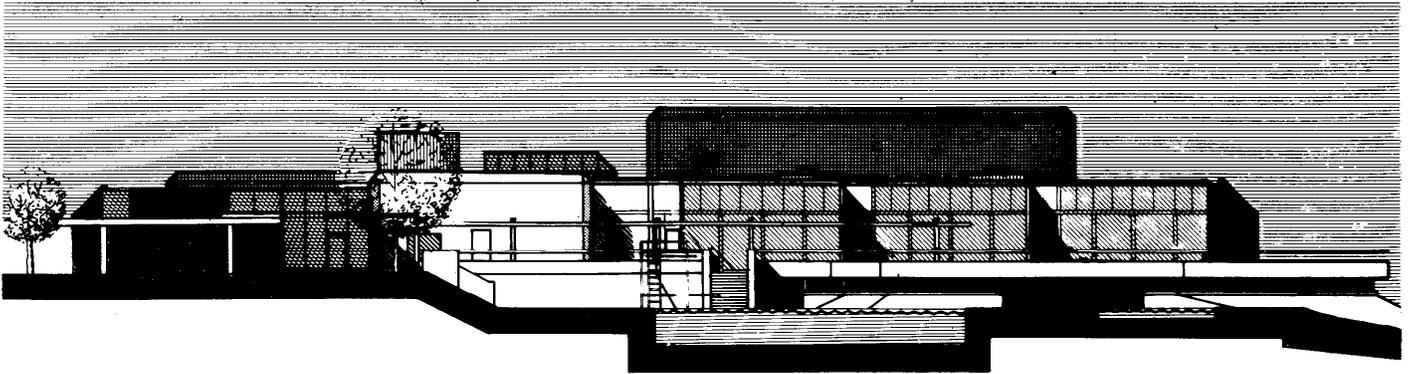


Figure 6 – 13 Fort Hills: Local Troop Center-Section



## e. Local Family Center With Specialized Activities

(1) **Program.** The Fort Hills local family center is programmed to serve the dense enlisted men's and NCO family housing area at the north end of the post (see Community Framework plan, figure 6 - 9). About 12,000 people are living in 3,000 units of housing with almost no local services. The building program calls for about

Table 6 - 5 Fort Hills Local Family Center with Specialized Activities: Space Program

| Function-Space                    | Area (Gross Square Feet) | Function-Space                    | Area (Gross Square Feet) |
|-----------------------------------|--------------------------|-----------------------------------|--------------------------|
| Social Activities                 | 10,530                   | Physical Fitness                  | 15,460                   |
| Small Group Activities            | 7720                     | Multi-purpose Gymnasium           | 7650                     |
| • Active and Electronic Games     | 2830                     | Handball/Racquetball              | 2400                     |
| • Television Lounge               | 880                      | Exercise/Dance/Weights            | 1300                     |
| • Table Games                     | 1400                     | Outdoor Swimming Pool (50 meters) | -                        |
| • Open Multipurpose               | 560                      | support                           | 4110                     |
| • Enclosed Multipurpose           | 2050                     | • Trainer/First-Aid               | 240                      |
| Administration                    | 810                      | • Lockers                         | 1620                     |
| • Offices                         | 250                      | • Showers                         | 350                      |
| • Control Center and ITT          | 560                      | • Toilets                         | 320                      |
| Refreshment                       | 2000                     | • Sauna                           | 220                      |
| • Snack Bar                       | 1200                     | • Laundry                         | 100                      |
| • Kitchen                         | 800                      | • Equipment Issue and Storage     | 930                      |
| Arts and Crafts                   | 8,230                    | • Control                         | 330                      |
| General Crafts                    | 6500                     | Child Care                        | 6,640                    |
| Crafts Supply Shop                | 320                      | Primary Indoor Activities         | 3490                     |
| Office and Storage                | 1410                     | • Infants                         | 900                      |
| Music                             | 1,340                    | • Toddlers                        | 640                      |
| Practice/Listening Rooms          | 1020                     | • Preschoolers                    | 990                      |
| Instrument Checkout/Storage       | 320                      | • Drop In                         | 960                      |
| Drama                             | 5,600                    | Support                           | 3150                     |
| Stage (in Multipurpose Gymnasium) | 2560                     | • Administration and Staff Lounge | 570                      |
| Dressing Rooms                    | 480                      | • Special Child Services          | 100                      |
| Storage                           | 2560                     | • Reception/Transition Areas      | 2030                     |
| Library                           | 2,440                    | • Food Preparation                | 300                      |
| Card Catalogue                    | 80                       | • Storage                         | 120                      |
| Control                           | 150                      | • Maintenance                     | 30                       |
| Periodicals                       | 360                      | General Support                   | 1,800                    |
| Stacks                            | 890                      | Maintenance                       | 100                      |
| Reading                           | 960                      | Toilets                           | 700                      |
|                                   |                          | General Storage                   | 1000                     |
|                                   |                          | <b>Total</b>                      | <b>52,040</b>            |

52,000 square feet in order to provide 2 ranges of MSA activities such as physical fitness, social activities, music, arts and crafts and library. A small child care center combining full-day, part-day and hourly day care spaces is also included. Table 6 - 5 provides a detailed functional space and square footage program.

**(2) Design Solution.** The design for this family center is based on the following concepts (see perspective, figure 6 - 14, and plans, figures 6 - 15 and 6 - 16):

- Maximize open space, visibility and accessibility. Spatial definition is provided by low walls and small changes in floor levels. Even closed volumes are designed to be largely visible from the general-use spaces through glazed walls (see figure 5 - 10 for zoning diagram of this center).
- Avoid duplication by maximizing shared meeting/class/rehearsal/lounge spaces, as in the Fort Hills local troop center.
- Relate the inside activity spaces closely to the landscaped areas outdoors. On one side, the library, music practice and child care areas overlook the wooded area beyond. On the other side, taking advantage of the sloping site, the more active spaces such as the athletic, snack bar and games spaces overlook an outdoor terrace, swimming pool and nearby playing fields. In this way, the area provides an attractive sense of open space for the family users (see perspective, figure 6 - 14, elevation, figure 6 - 17, and section, figure 6 - 18).
- Clearly define the site. Exterior site walls connect the main building volumes and focus approaching visitors toward the entrance. They also protect the outside swimming pool and child care play spaces from the vehicular access area.

**(3) Building Organization.** Two major site walls define the entrance. The lobby, supervised from the control desk, opens out immediately onto a continuous space that includes circulation, lounge, snacks, and games areas (figure 6 - 15). This open space abuts two sides of the gym, is subdivided by low walls and raised platforms defining snack areas and table games areas,

and is accessible to the handicapped through short ramps. One wing of this continuous space overlooks and provides access to a deck and the outdoor 50 - meter swimming pool and diving pool. The other wing of the recreation area overlooks the gym through large glass walls.

The gymnasium, half a level lower than the main lobby and recreation spaces, doubles as a performance/function space with a stage and dressing rooms at one end. Gym support spaces, as well as exercise rooms, racquetball courts and athletics control desk, are half a level below this in the basement (see plan, figure 6 - 16, and section, figure 6 - 18). These athletic support areas also open directly outside, serving the outdoor swimming pool and sports fields.

The music area provides four enclosed practice rooms, a glazed listening room and three shared multipurpose rehearsal/meeting rooms, with a small sitting-lounge entry area. The crafts space occupies two levels, with a two-story open connection between, and includes a separate control/office/supplies cluster, general crafts, ceramics, and woodworking. The woodworking area abuts the stage of the gymnasium and doubles as a theatre performance workshop. The crafts area opens onto an outside court for an extended work space.

Across from the main control desk is a small (1500 square foot) branch library for recreational reading and children's collections. The main library space is always open, continuous with the lobby and with a fireplace reading area. Another library reading and collections room is glazed but closeable. The library and the control desk, with its associated office and storage spaces, form two large volumes defining either side of the main entrance.

The child-care center is designed as a separate structure for independent identity and convenient drop-off (see figure 6 - 15). It is connected to the main building by the site-defining walls. The 2,000 square-foot space accommodates full-day and part-day, as well as hourly programs with separate spaces for the different ages - infants, toddlers and pre-schoolers. A reception desk and staff lounge/office area is at the core of the space, but parents bringing children have direct access to each individual room. Between the child-care center, the main building and the protective site wall are outdoor play spaces for each age group, accessible directly from the classrooms.

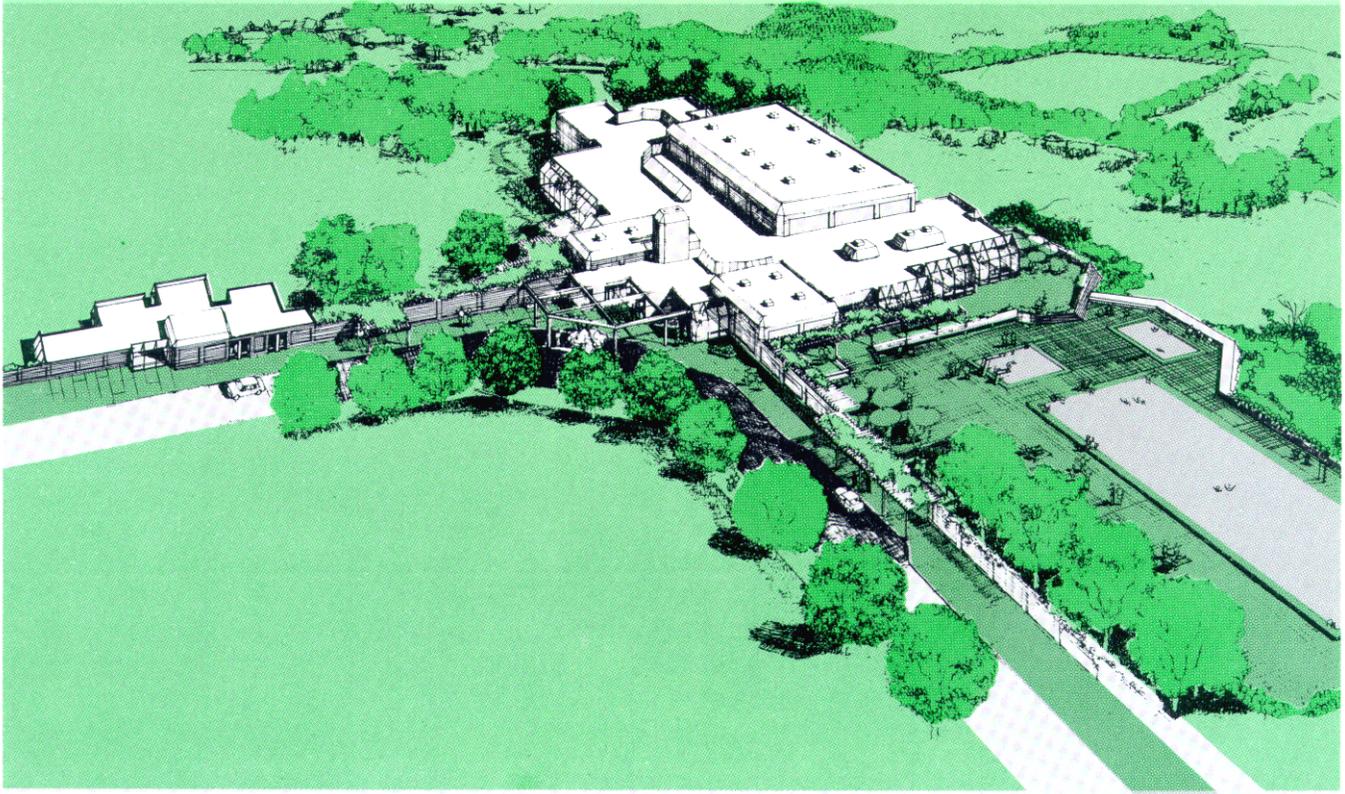


Figure 6 – 14 Fort Hills: Local Family Center

Fort Hills  
**Local Family Center**

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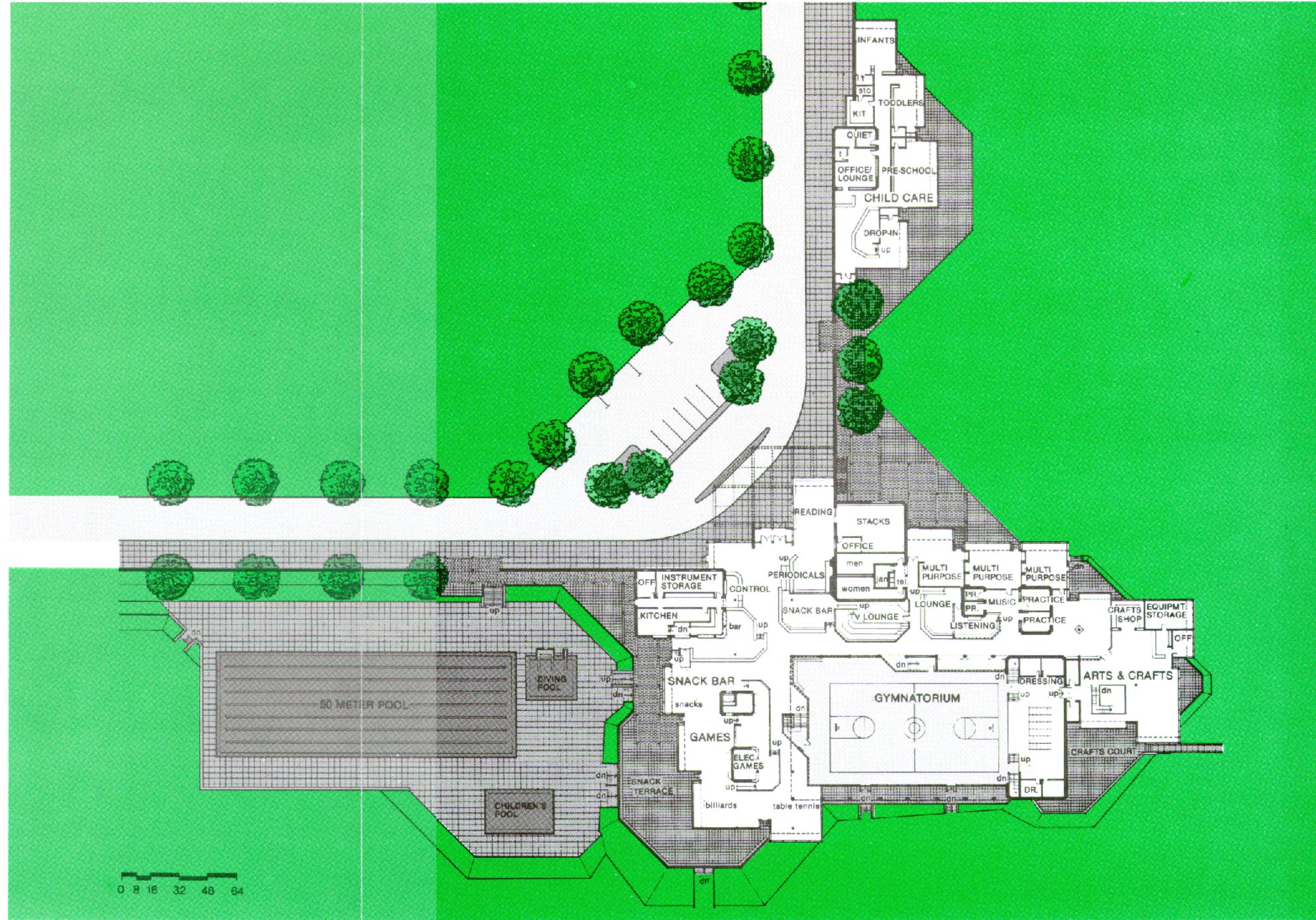


Figure 6 – 15 Fort Hills: Local Family Center- Main Floor

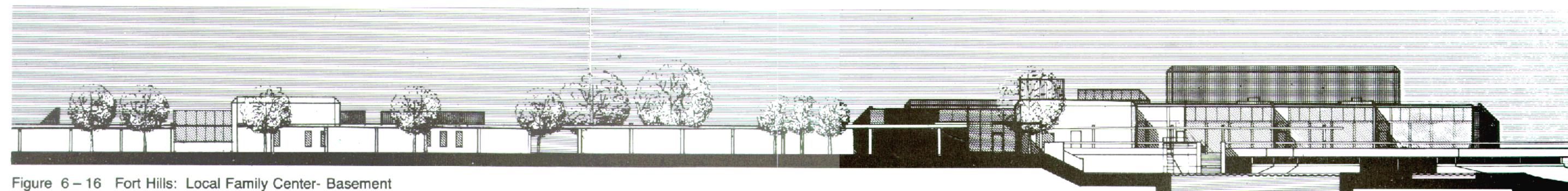


Figure 6 – 16 Fort Hills: Local Family Center- Basement

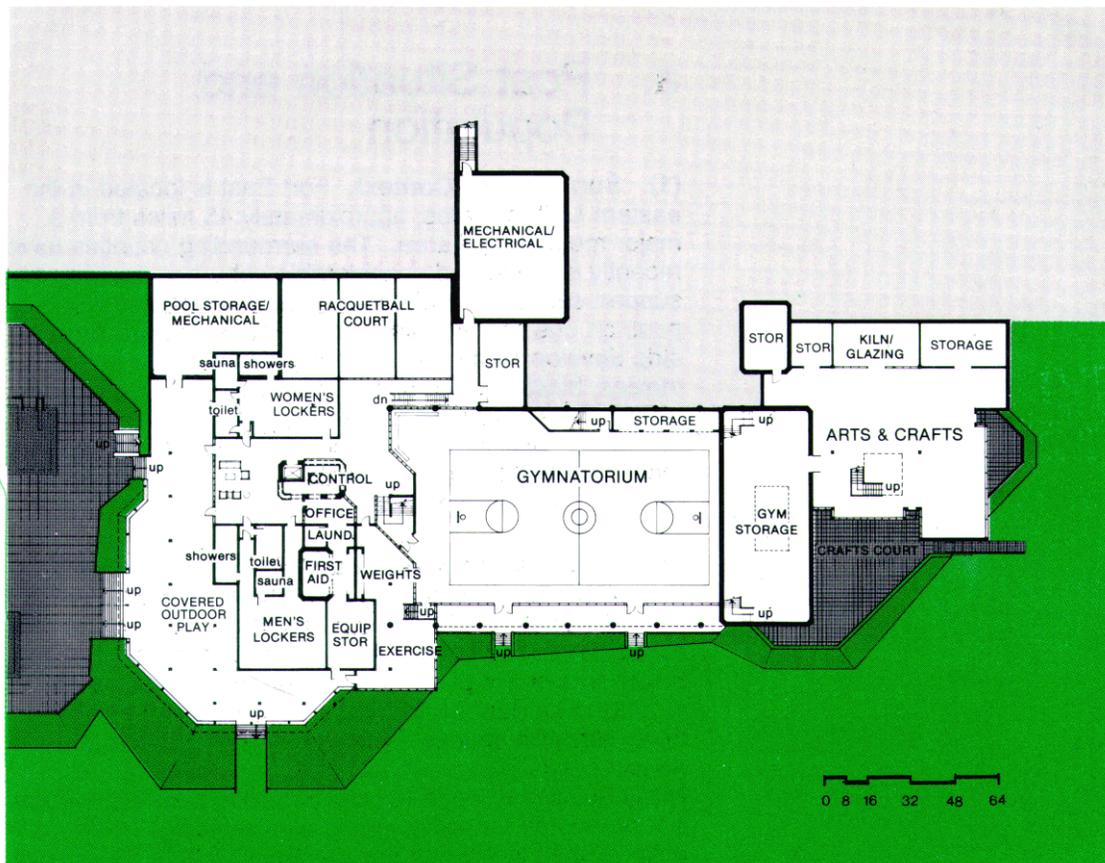


Figure 6 – 17 Basement Plan

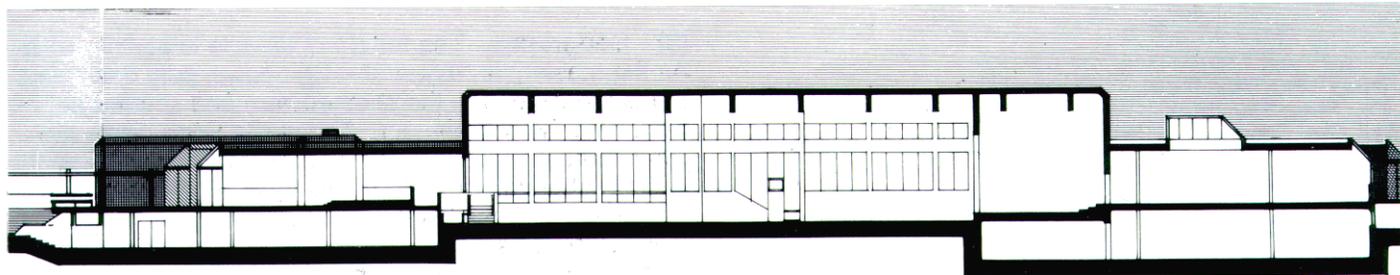


Figure 6 – 18 Section