

# **UNIFIED FACILITIES CRITERIA (UFC)**

## **YOUTH CENTERS**



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**UNIFIED FACILITIES CRITERIA (UFC)**

**YOUTH CENTERS**

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U.S. ARMY CORPS OF ENGINEERS

NAVAL FACILITIES ENGINEERING COMMAND (Preparing Activity)

AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

Record of Changes (changes are indicated by \1\ ... /1/)

<b>Change No.</b>	<b>Date</b>	<b>Location</b>



## FOREWORD

The Unified Facilities Criteria (UFC) system is prescribed by MIL-STD 3007 and provides planning, design, construction, sustainment, restoration, and modernization criteria, and applies to the Military Departments, the Defense Agencies, and the DoD Field Activities in accordance with [USD\(AT&L\) Memorandum](#) dated 29 May 2002. UFC will be used for all DoD projects and work for other customers where appropriate. All construction outside of the United States is also governed by Status of forces Agreements (SOFA), Host Nation Funded Construction Agreements (HNFA), and in some instances, Bilateral Infrastructure Agreements (BIA.) Therefore, the acquisition team must ensure compliance with the more stringent of the UFC, the SOFA, the HNFA, and the BIA, as applicable.


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**UNIFIED FACILITIES CRITERIA (UFC)  
NEW DOCUMENT SUMMARY**

**Document:** UFC 4-740-06, *Youth Centers*

**Superseding:** There is no superseding data; this is a new, unified criteria document.

**Description:** UFC 4-740-06 provides guidelines for evaluating, planning, programming, and designing Youth Centers. The information in this UFC applies to the design of all new construction projects, to include additions, alterations, and renovation projects in the continental United States and overseas. It also applies to the procurement of design/build services for the above-noted projects. Alteration and renovation projects should update existing facilities to meet the guidance and criteria within budgetary constraints.

**Need:** The Youth Center is a social and recreational center primarily for use by children ages 6 to 18 in support of a Youth Program, as defined by DoD Instruction 6060.4 *Youth Programs (YPS)*. The Youth Center supports opportunities for youth to develop their physical, social, emotional, and cognitive abilities and to experience achievement, leadership, enjoyment, friendship, and recognition. Youth Program activities are generally offered free of charge or at a reasonable cost to parents to encourage participation and make them affordable to families.

**Impact:**

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## CHAPTER 1 INTRODUCTION

### 1-1 SCOPE OF DOCUMENT.

This UFC provides guidelines for evaluating, planning, programming, and designing Youth Centers. The information in this UFC applies to the design of all new construction projects, to include additions, alterations, and renovation projects in the continental United States and overseas. It also applies to the procurement of design/build services for the above-noted projects. Alteration and renovation projects should update existing facilities to meet the guidance and criteria within budgetary constraints. This UFC is not intended as a substitution during design for thorough review by individual Program Managers and Operations Staff in the appropriate Service.

### 1-2 USERS OF THIS DOCUMENT.

This UFC is intended to be a source of basic architectural and engineering information for all individuals involved in the planning, design, or evaluation of Youth Centers. Note: where one Service's criteria vary from the other Services' criteria, it is noted in the text. Specific users of the UFC include the following:

#### 1-2.1 Architects and Engineers.

Architects and Engineers (A/Es) who will provide design services under the direction of the individual design agencies, including the Army Corps of Engineers (COE), Army Community and Family Support Center (CFSC), Naval Facilities Engineering Command (NAVFAC), and Navy Personnel Command (NPC).

#### 1-2.2 Planning Personnel.

Planning personnel will use this UFC for programming new or replacement facilities, pre-design planning, or assessing the extent of improvements required in an existing Youth Center in order to achieve the standard established herein.

#### 1-2.3 Additional Users.

Additional users include the following:

- a. Headquarters Staff and Field Operating Agencies
- b. Major Command Staff/Regions
- c. Installation Commanders
- d. Installation Facilities Management
- e. Installation Technical Proponents
- f. Program Directors

g. Facility/Program Operations Staff

1-3 **SCOPE OF FACILITY.**

The Youth Center is a social and recreational center primarily for use by children ages 6 to 18 in support of a Youth Program, as defined by DoD Instruction 6060.4, *Youth Programs (YPS)*. The Youth Center supports opportunities for youth to develop their physical, social, emotional, and cognitive abilities and to experience achievement, leadership, enjoyment, friendship, and recognition. Youth Program activities are generally offered free of charge or at a reasonable cost to parents to encourage participation and make them affordable to families.

The Youth Center facility may comprise up to three functional program areas. Not all of the three program areas are required, but if a certain program area is provided, it must include certain elements to meet individual program requirements. Beyond the required spaces, each program area may have additional spaces required or allowed by the individual Services.

The three functional program areas and their respective required elements are described in paragraphs 1-4 through 1-6. The other facility spaces are described in paragraph 1-7. All of these spaces are described in greater detail in Chapters 2 and 4. Additionally, due to the numerous possible variations of Youth Center programs, a special space program tool has been developed to help users navigate the intra- and inter-Service permutations. This tool is described in paragraph 2-2; it may be helpful to review this material in conjunction with these program descriptions.

1-4 **SAC PROGRAM AREA.**

Included in the Youth Center facility, but generally separate from the youth program functions, is a School-Age Care (SAC) program. This area supports the SAC program and includes the SAC Activity Rooms, the SAC Toilets, and support and outdoor areas.

**Note:** the **Navy** does not provide the dedicated SAC toilet—SAC youth share the toilets in the Youth Program Area. See Table 3-1 for more on this Service Exception.

The SAC program provides before- and after-school accountable childcare for a fee. This may include having the school bus pick-up and drop-off the children both before and after school. If children are dropped off by bus after school, the Youth Center keeps them until parents can pick them up from the center. The SAC program varies by Service:

- a. The **Army** SAC program is generally for children ages 6 to 10. The Army generally accommodates its SAC program in separate facilities. See Child Development Center Standard Designs, for School-age Children 6-10 Years of Age, approved December 2004.
- b. The **Navy** program is generally for children ages 6 to 12. The Navy does not separate the SAC functions from the youth program functions.

- c. The **Air Force** program is for children ages 6 to 12.
- d. The **Marine Corps** SAC program is generally for children ages 6 to 12.

## 1-5 **YOUTH PROGRAM AREA.**

This program area includes the following spaces:

### 1-5.1 **Commons.**

This area is the heart of the program area, around which all other program spaces generally revolve. It should accommodate social units of 12 to 15 youth gathering in pockets, while allowing these groups to interact with and feel part of the larger space. Subsets of the Commons include the Game Area, Snack Bar Eating Area, television (TV) viewing, and general gathering and conversation areas. All these spaces are generally in one open and inviting space, but the subset spaces may be defined by variations in ceiling heights or finishes.

### 1-5.2 **Activity Rooms.**

There are two categories of Activity Rooms that are the same size, but have different design characteristics. Each Service may specify General Activity Rooms, Special Activity Rooms, or both, depending on the size of the facility and its program needs.

The General Activity Room may be configured for gatherings, club meetings, arts and crafts (with the addition of a sink), or for other general uses. For these types of activities, this room accommodates up to 30 youth with the appropriate staff supervision.

The Special Activity Room is designed for active functions such as dance or martial arts. As such, it may have a higher ceiling, different flooring, and features such as dance bars and mirrors. For these types of activities, the room accommodates 10 to 15 youth with the appropriate staff supervision. This room is not intended for team sport activities, however. Those activities are accommodated in the multipurpose room.

### 1-5.3 **Homework/Computer.**

The Homework and Computer functions are required as part of the Youth Program, but the Services vary as to how they accommodate these functions:

- a. The **Army** generally provides separate Homework and Computer rooms, sized identically. For small programs/facilities, this function may be combined into one space;
- b. The **Navy and Marine Corps** provide a separate Computer Room and typically accommodate homework activities in one of the Activity Rooms; and

- c. The **Air Force** accommodates both functions in one Homework/Computer Room.

#### 1-5.4 **Outdoor Activity Area.**

There is a need for outdoor activity space as part of the Youth Program. This may be accommodated through the SAC Outdoor Activity Area or an additional outdoor space may be programmed as part of the Youth Program.

#### 1-6 **TEEN PROGRAM AREA.**

This area provides older teens their own space to socialize and have access to more independent activities in a home-like environment. Activities may include things like table games, video games, computers, and television watching. Teens should be given more latitude and independence than the younger youth. This area includes the Teen Room/Lounge and an outdoor Teen Patio.

#### 1-7 **ADDITIONAL FUNCTIONAL AREAS AND OPTIONAL SPACES.**

These spaces do not necessarily fall into any of the dedicated program areas.

##### 1-7.1 **Administrative Area.**

The administrative area includes the facility lobby, the check-in area, the communications room, and staff offices and work areas.

##### 1-7.2 **Other and Optional Spaces.**

Other spaces include various toilets (the Services accommodate toilets differently—see Table 3-1) and the multipurpose room. The multipurpose room accommodates large motor activities and team sports. There are different size options for the multipurpose room that vary by Service.

Optional spaces vary by Service and may include separate spaces not directly related to a program, such as a kitchen, or spaces that are optional within a program space such as a dedicated music/multimedia room (part of the Youth Program). The **Navy** normally does not permit kitchens in their Youth Centers.

#### 1-8 **USERS OF FACILITY.**

The primary facility users are as follows:

- a. Youth participants,
- b. SAC program participants,
- c. Teen participants,
- d. Facility staff,

- e. Volunteers,
- f. Other program partners, and
- g. Parents.

1-9           **RELATED DOCUMENTS.**

DoD Instruction 6060.4 provides the program requirements for Youth Centers and DoD Instruction 6060.3 provides the program requirements for SAC. Also review DoD School-age Program Inspection Checklist and the *NSACA Standards for Quality School-Age Care*.

Refer also to the following Service-specific related documents:

- a. For **Army** projects, this UFC will serve as the framework for the revision of the *Youth Center Definitive Standard Design*;
- b. For **Navy** projects, use this UFC in conjunction with the Navy Youth and School-age Care (SAC) Standards and Metrics;
- c. For **Air Force** projects, use this UFC in conjunction with the *USAF Services Design Guide for Youth/School Age Center*; and
- d. For **Marine Corps** projects, this UFC serves as the primary criteria document for Youth Centers.

## CHAPTER 2 PLANNING AND LAYOUT

### 2-1 SIZE DETERMINANTS.

Several factors determine the size of the facility.

#### 2-1.1 Needs Validation Assessment.

Conduct a Needs Validation Assessment (NVA) or Project Validation Assessment (PVA) to determine the need for each of the three program areas (see paragraphs 1-4 through 1-6), the optional spaces, and the size of the populations to be served by each program. The three program areas may be sized differently within a single facility. In some cases, one or more program areas may not be needed if the population served is too small or if that population is served by other, existing facilities. When reviewing existing facilities, consider both facilities on the installation and facilities within the community, such as the Boys & Girls Clubs of America, 4-H, and other community centers.

**Note:** Each Service may have different requirements with regard to the programs provided as part of this facility. While the NVA or PVA and the criteria in this UFC provide guidelines for the size of a Youth Center, the final space program will need to be carefully determined by installation representatives and the appropriate Service program office.

#### 2-1.2 SAC Program Size.

Once the need and population size for the SAC program area has been determined, the SAC area is sized based on the number of SAC activity rooms needed. Each room serves two ratio groups or a total of 30 children. An **Air Force** SAC room serves two ratio groups or a total of 24 children. A ratio group represents the ratio of children to adult caregivers, or 15 children to one adult caregiver. The **Air Force** ratio group is 12 children to one adult caregiver.

The maximum number of SAC rooms permitted per facility is eight. If the needs assessment determines that more than eight rooms are required, provide multiple facilities.

Included in the SAC program are dedicated SAC toilets, and a storage closet for each SAC room. The **Navy** does not provide a dedicated SAC toilet—SAC children share the toilets in the Youth Program area.

#### 2-1.3 Youth Program Size Classifications.

Once the need for the Youth program area has been determined, the size is classified by the number of youth to be accommodated in the *primary* program spaces. (Additional youth may be accommodated in optional spaces, like the Multipurpose Room.) Therefore, each size category provides for appropriate space in the Commons and support areas and provides the appropriate number of activity rooms.

Tables 2-1.1 and 2-1.2 illustrate these size classifications with the appropriate Service exceptions. The **Army** provides a combined Computer/Homework Room for their small youth program. For larger programs, they provide separate Computer Rooms and Homework Rooms. Due to the fact that the **Army** provides this additional program space for their larger programs, the number of youth that can be accommodated is greater than the other Services. These differences are reflected in Table 2-1.2.

In general for all Services, as noted above, the number of youth to be accommodated in the size classifications only account for the dedicated Youth program spaces. When programming the Youth program area, consider that additional youth may be accommodated in other areas such as the Multipurpose Room.

**TABLE 2-1.1 NAVY, AIR FORCE, AND MARINE CORPS  
YOUTH PROGRAM SIZE CLASSIFICATIONS**

Size Classification (No. of Youth)	Activity Rooms (General or Special)	Homework/ Computer Rooms*
Up to 60 Youth	1	1
61 to 90 Youth	2	1
91 to 135 Youth	3	2
136 to 155 Youth	4	2

\***Navy and Marine Corps** provide a separate Computer Room and typically accommodate the homework function in the Activity Rooms. The **Air Force** combines the Homework function with the Computer Room.

**TABLE 2-1.2 ARMY YOUTH PROGRAM SIZE CLASSIFICATIONS**

Size Classification (No. of Youth)	Activity Rooms (Gen. or Spec.)	Computer Rooms	Homework Rooms
Up to 60 Youth	1	1 combined room	
61 to 105 Youth	2	1	1
106 to 150 Youth	3	1	1
151 to 170 Youth	4	1	1

**2-1.4 Teen Program Size Classifications.**

Once the need for the Teen program area has been determined, classify the size as follows:

- a. Up to 15 teens,
- b. 16 to 30 teens,
- c. 31 to 45 teens, and
- d. 45 to 60 teens.

#### 2-1.5 **Optional Spaces.**

Once the program areas have been sized, determine which optional spaces to include. Optional spaces are identified in paragraph 2-1.5.3. Optional spaces vary by Service. The Base representatives, in conjunction with the program manager, must decide which optional activity spaces to provide. Note the following when selecting optional activities:

If an existing facility is being renovated to accommodate the Youth Center function, the amount of space available will likely determine what options may be provided. See paragraph 2-5 for more information on alterations to existing facilities.

Consider what can be provided within both the operational and construction budgets.

Optional spaces include the following:

- a. Multipurpose Room;
- b. Kitchen. **Navy** normally does not permit kitchens;
- c. Music Room(s);
- d. Additional Parent Waiting (in addition to the waiting area in the lobby). **Navy** does not permit additional parent waiting;
- e. Laundry Room. **Navy** normally does not permit laundry rooms;
- f. Youth Program Outdoor Activity Area; and
- g. Outdoor Open Area (large play area).

#### 2-1.6 **Administrative Area.**

Size the administrative area respective of all the program areas provided. For example, if a facility is to have only one or two SAC activity rooms and small youth and teen programs, a small administrative area will probably be sufficient. However, if a facility is to have only one or two SAC activity rooms, a small teen program, but a large youth program, a medium or large administrative area will probably be required. Carefully consider the entire program when sizing the administrative area.

#### 2-1.7 **Administrative Spaces.**



Administrative office space, both private offices and workstations, should be thoroughly justified to and approved by the program manager. In general, the administrative area includes the following:

- a. Lobby,
- b. Check-in,
- c. Staff Offices,
- d. Staff Workstations,
- e. Break/Staff Training Room,
- f. Copy/file Room,
- g. Storage,
- h. Communications Room,
- i. Staff/Visitor's Toilets/Janitor's closet (see Paragraph 3-5.1 for more information on toilets), and
- j. Administrative Site Support (including staff and patron parking, drop-off/bus drive, and service drive).

#### 2-1.8 **Office Limits.**

The overall number of private offices is limited to five and the number of workstations is limited to eight. These limits are regardless of the size of the Administrative Area. However, programmers should consider the overall size of the Administrative Area when selecting the number of private offices and workstations. For example, a small General Administrative Area will not typically require five private offices.

The **Navy** places additional limits on private office quantities. A small General Administrative Area is permitted one office. A medium General Administrative Area is permitted one office or two with additional justification. A large General Administrative Area is permitted two offices. An extra large General Administrative Area is permitted two offices or three with additional justification.

#### 2-1.9 **Other Size Considerations.**

If the projected installation requirements exceed the largest size allowances for a program area, provide multiple Youth Centers. Further, when the total program populations are broken down into distinctive geographic locations, consider providing multiple facilities sized individually for the geographic populations.

#### 2-2 **SPACE PROGRAM.**

The space program for Youth Centers is developed through the use of an interactive spreadsheet. It is completed by first entering the appropriate Service branch; then selecting the appropriate sizes for the three Program areas, the additional program spaces and options, the administrative area, and the site areas. The selections will vary depending on the Service branch selected. This is a result of the appropriate Service exceptions. As selections are made, the program areas are calculated and summed for both the building and the site.

This spreadsheet is available as a downloadable, zipped Microsoft<sup>®</sup> Excel<sup>®</sup> file from the Whole Building Design Guide DoD page (<http://dod.wbdg.org>) web site.

#### **2-2.1 Spreadsheets.**

Samples of the interactive spreadsheet with the Service branch selected as “Army” and “Navy” are illustrated in Figures 2-1 and 2-2, respectively. Figure 2-1 is a blank Army form and Figure 2-2 shows a completed Navy sample. These two Services were chosen to illustrate some of the differences in the options available on the form depending on the Service selected in the first line.

#### **2-2.2 Appendix B.**

The data upon which the interactive spreadsheet is based is illustrated in Appendix B. Do not use Appendix B to develop the space program—use only the interactive spreadsheet.

#### **2-2.3 Planning and Coordination.**

The space program developed through the use of the interactive spreadsheet serves as a guideline for the Youth Center planning team and generally represents the maximum space allowed. The final space program for a new Youth Center will need to be carefully determined by installation representatives and the appropriate Service program office guided by the criteria in this UFC.

**FIGURE 2-1. SAMPLE BLANK INTERACTIVE SPREADSHEET FOR AN ARMY YOUTH CENTER**

Select Service Branch:	<u>Army</u>			Gross m <sup>2</sup>   Gross ft. <sup>2</sup>
School Age Care (SAC): Enter no. of SAC Rooms	<u>                    </u>	SAC Building	<input type="text"/>	<input type="text"/>
*The Army generally accommodates SAC in other facilities. When provided, the SAC program includes no. of SAC rooms selected plus space for storage and toilets.				
Youth Program: Select Size of Youth Program	<u>                    </u>	Youth Building	<input type="text"/>	<input type="text"/>
*The Army Youth program adds an additional, dedicated homework room, except for small programs where it is combined with the comoputer room.				
Teen Program: Select Size of Teen Program	<u>                    </u>	Teen Building	<input type="text"/>	<input type="text"/>
<u>Additional Spaces and Options</u>				
Select Size of Multipurpose Room	<u>                    </u>	Multipurpose Room	<input type="text"/>	<input type="text"/>
*Army options include items 1 through 5.				
Select Kitchen size	<u>                    </u>	Kitchen	<input type="text"/>	<input type="text"/>
Select Music Room option (no. of rooms)	<u>                    </u>	Music Rooms	<input type="text"/>	<input type="text"/>
Select Additional Parent Waiting option	<u>                    </u>	Parent Waiting	<input type="text"/>	<input type="text"/>
*This is an additional waiting area located near the Activity Rooms and is in addition to the waiting area in the lobby.				
Select Laundry Room option	<u>                    </u>	Laundry	<input type="text"/>	<input type="text"/>
*A One-washer Room includes one washing machine and two dryers. A Two-washer Room includes two washing machines and three dryers.				
<u>Administrative Area</u>				
Select Size of General Admin. Area	<u>                    </u>	General Admin. Area	<input type="text"/>	<input type="text"/>
Office Requirements				
Enter no. of private offices required:	<u>                    </u>	Private offices	<input type="text"/>	<input type="text"/>
Enter no. of workstations required:	<u>                    </u>	Workstations	<input type="text"/>	<input type="text"/>
Subtotal Admin. Area and Offices			<input type="text"/>	<input type="text"/>
TOTAL GROSS BUILDING			<input type="text"/>	<input type="text"/>
<u>Site</u>				
SAC Site Program: Tied to SAC building selection (entered above)		SAC Site Support	<input type="text"/>	<input type="text"/>
Youth Site space not permitted without Youth Program	<u>                    </u>	Youth Site Support	<input type="text"/>	<input type="text"/>
Teen Site: Tied to Teen Program building selection (entered above)		Teen Site Support	<input type="text"/>	<input type="text"/>
Select Outdoor Open Area Option	<u>                    </u>	Outdoor Open Area	<input type="text"/>	<input type="text"/>
Administrative: Tied to building selection (entered above)		Admin. Site Support	<input type="text"/>	<input type="text"/>
TOTAL GROSS SITE SUPPORT			<input type="text"/>	<input type="text"/>
TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)			<input type="text"/>	<input type="text"/>

FIGURE 2-2. SAMPLE COMPLETED INTERACTIVE SPREADSHEET FOR A NAVY YOUTH CENTER

MCON P-000, Youth Center, Sample Naval Air Station, Virginia Beach, Virginia			
Select Service Branch:	Navy		Gross m <sup>2</sup>   Gross ft. <sup>2</sup>
School Age Care (SAC): Enter no. of SAC Rooms	2	SAC Building	228.76   2,462
*For Navy, SAC Program includes the number of SAC rooms selected plus appropriate space for storage.			
Youth Program: Select Size of Youth Program	61 to 90 Youth	Youth Building	430.72   4,636
*The Navy Youth program deletes the space allowance for vending machines and the activity room storage closet is smaller.			
Teen Program: Select Size of Teen Program	16 to 30 Teens	Teen Building	115.44   1,243
<b>Additional Spaces and Options</b>			
Select Size of Multipurpose Room	3. Half-court w/ bleachers	Multipurpose Room	466.34   5,020
*Navy options include items 1 through 4.			
Kitchen is not normally permitted for Navy			
Select Music Room option (no. of rooms)	1 room	Music Rooms	6.69   72
Parent Waiting is not permitted for Navy			
Laundry Rm not normally permitted for Navy		Laundry	
*A One-washer Room includes one washing machine and two dryers. *A Two-washer Room includes two washing machines and three dryers.			
<b>Administrative Area</b>			
Select Size of General Admin. Area	Large	General Admin. Area	182.02   1,959
<b>Office Requirements</b>			
Enter no. of private offices required:	2	Private offices	27.20   293
Enter no. of workstations required:	4	Workstations	21.76   234
*Navy limits private offices: Small Admin. gets 1 office. Medium gets 1 or 2. Large gets 2. Ex. Large gets 2 or 3. See Section 2-1.6 for more details.			
		Subtotal Admin. Area and Offices	230.98   2486
		<b>TOTAL GROSS BUILDING</b>	<b>1479.00   15,920</b>
<b>Site</b>			
SAC Site Program: Tied to SAC building selection (entered above)		SAC Site Support	355.81   3,830
Select Youth Site option	No	Youth Site Support	
*In facilities where Youth Program is provided but SAC is not, Youth Site area is mandatory. If SAC is provided, Youth Site area is optional.			
Teen Site: Tied to Teen Program building selection (entered above)		Teen Site Support	185.80   2,000
Select Outdoor Open Area Option	No	Outdoor Open Area	
Administrative: Tied to building selection (entered above)		Admin. Site Support	1915.60   20,620
		<b>TOTAL GROSS SITE SUPPORT</b>	<b>2457.21   26,450</b>
		<b>TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)</b>	<b>3,936   42,370</b>

## 2-3 LOCATION DETERMINANTS.

Several factors determine the most appropriate and cost-effective location for a Youth Center.

### 2-3.1 Access.

The Youth Center should be easily accessible by buses (dropping off), privately-owned vehicles (either dropping off/picking up or parking), and by youth patrons via foot or bicycle. Weigh these considerations against the effect on traffic during peak pick-up/drop-off times. For example, a location near or adjacent to a school or child development center may be convenient for patrons, but it may cause traffic congestion at peak times. To accommodate parent/patron access, provide adequate parking as close as possible, taking into account antiterrorism (AT) requirements (see paragraph 3.8).

### 2-3.2 Safety.

Consider the above-noted pedestrian and bicycle traffic by the youth patrons. Minimize the degree to which pedestrian and bike paths cross vehicular paths in the approach to the Youth Center site. If pedestrian and bike paths cross or run adjacent to busy streets and intersections, provide mitigation measures, such as bollards, to increase safety. Also consider the location of bus access for drop-off and pick-up.

### 2-3.3 Cost.

Design these facilities with the objective of achieving the lowest life cycle cost. To do so, the project's design program must adequately define the scope and performance requirements and match those needs against a budget. Conversely, the budget must adequately support an appropriate and high-quality program and the performance requirements outlined and identified in this UFC.

### 2-3.4 Related Facilities.

Consider locating near other facilities such as youth sports fields, open park space, etc.

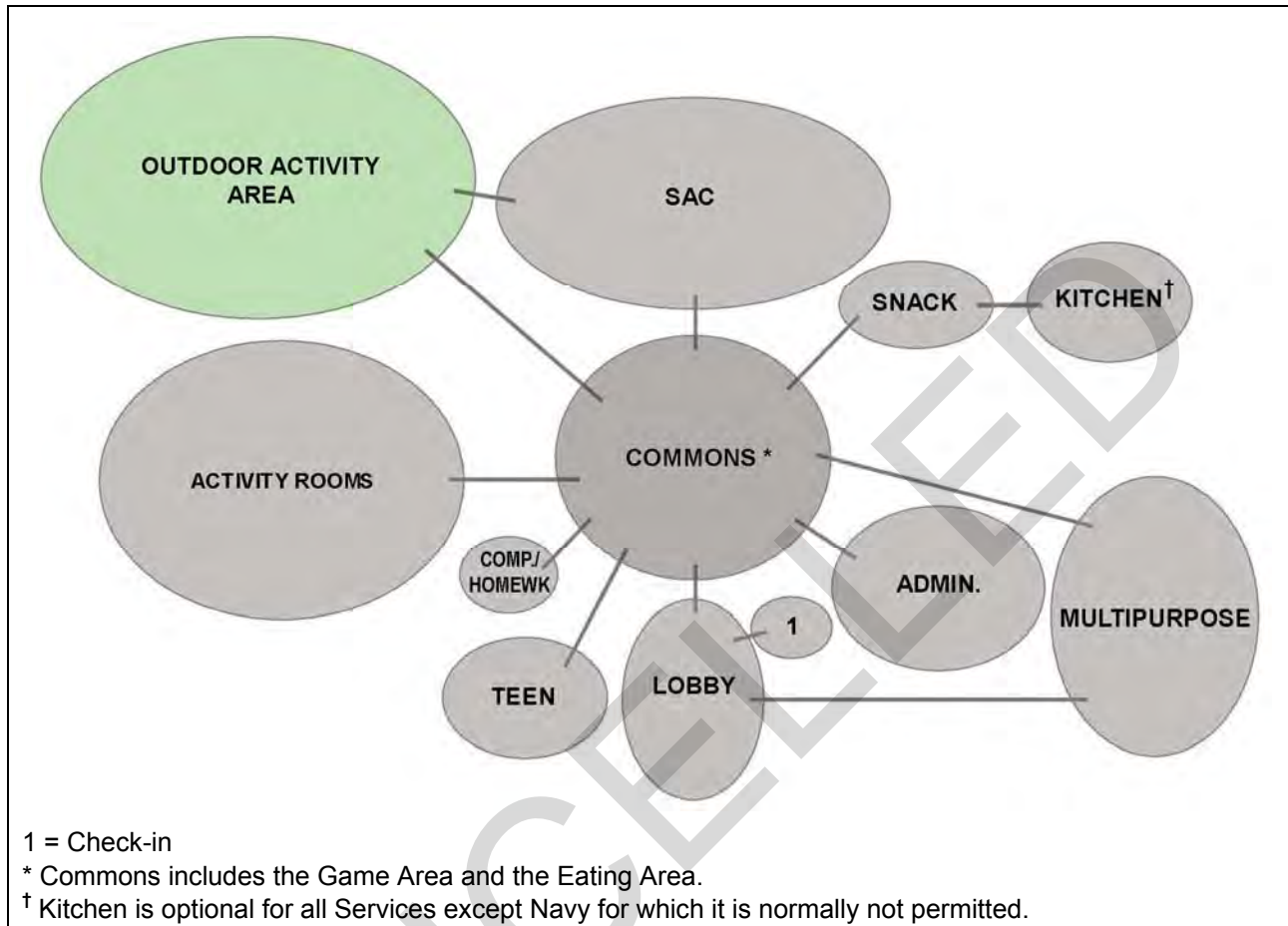
## 2-4 LAYOUT AND ADJACENCIES.

The appropriate layout and adjacencies are illustrated through a bubble diagram and adjacency matrices.

### 2-4.1 Functional Relationship Bubble Diagram.

The bubble diagram in Figure 2-3 indicates acceptable relative adjacencies of the functional spaces.

FIGURE 2-3. FUNCTIONAL RELATIONSHIP BUBBLE DIAGRAM



2-4.2 Adjacency Matrices.

Figures 2-4 and 2-5 further illustrate the acceptable relative adjacencies of functional spaces and should be used in conjunction with Figure 2-3. Figure 2-4 provides the adjacencies for **Army, Air Force and Marine Corps** facilities. Figure 2-5 provides the adjacencies for **Navy** facilities.

FIGURE 2-4. ADJACENCY MATRIX

Functional Spaces	Lobby/Building Entrance	Check-in	Administrative Offices	Break/Staff Training Room	Copy/File Room	Staff Lockers	SAC Activity Rooms	SAC Toilets †	SAC Outdoor Activity Area	Commons	Game Area	Snack Bar/Vending †	Eating Area	Kitchen * †	Homework/Computer Room †	General Activity Room(s)	Special Activity Room(s)	Music/Multimedia Room *	Parent Waiting Area *	Youth/Teen Toilet †	Teen Room/Lounge	Teen Patio *	Multipurpose Room †	Multipurpose Room Storage/Gear Issue	Laundry * †	Staff/Public Toilets †	Youth Outdoor Activity Area *	Outdoor Open Area *	Pick-up and Drop-off (Bus)	Service Drive/Trash	Staff Parking	Patron Parking					
	Lobby/Building Entrance	1	3																																		
Check-in		3					2			2	2	2	2	2	2	2	2	2	2																		
Administrative Offices			1	1	3																																
Break/Staff Training Room				1	1																				3	3											
Copy/File Room					1	1																															
Staff Lockers						3																															
SAC Activity Rooms							1	1							3	3																					
SAC Toilets †								3																													
SAC Outdoor Activity Area									1	1																	2/3	2/3									
Commons										1	1				1	1	1	1	1	1			1				3	3	2								
Game Area											3	3									3	3															
Snack Bar/Vending †												1	1									1/3	3														
Eating Area																						2/3	3														
Kitchen * †																															3						
Homework/Computer Room †																3						3															
General Activity Room(s)																	3	3																			
Special Activity Room(s)																	1/2	3																			
Music/Multimedia Room *																	3	3																			
Parent Waiting Area *																			3							3											
Youth/Teen Toilet †																				3			3														
Teen Room/Lounge																							1														
Teen Patio *																																					
Multipurpose Room †																								1	3											3	
Multipurpose Room Storage/Gear Issue																											3	3									
Laundry * †																																					
Staff/Public Toilets †																																					
Youth Outdoor Activity Area *																																					
Outdoor Open Area *																																					
Pick-up and Drop-off (Bus)																																		2	2		
Service Drive/Trash																																					
Staff Parking																																					
Patron Parking																																				3	

1 = Direct physical access/adjacency  
2 = Direct visual access/visual control  
3 = Near but not necessarily adjacent

\* = Optional space  
† = There are one or more Service Exceptions associated with this space.

FIGURE 2-5. NAVY ADJACENCY MATRIX

Functional Spaces	Lobby/Building Entrance	Control/Check-In	Administrative Offices	Break/Staff Training Room	Copy/File Room	Staff Lockers	SAC Activity Rooms	SAC Toilets	SAC Outdoor Activity Area	Commons	Snack Bar/Vending	Computer Room	General Activity Room(s)	Special Activity Room(s)	Music/Multimedia Room	Youth/Teen Toilet	Teen Lounge	Teen Patio	Multipurpose Room	Multipurpose Room Storage/Gear Issue	Staff/Public Toilets	Youth Outdoor Activity Area/Hard Surface	Youth Outdoor Activity Area/Covered	Outdoor Open Area	Pick-up and Drop-Off (Bus)	Service Drive/Trash	Staff Parking	Patron Parking	
Lobby/Building Entrance	1	3																											
Control/Check-In		3					2	2		2	2	2	2	2	2	2	2		2		3					2		3	3
Administrative Offices			1	1	3																3								
Break/Staff Training Room				1	1																								
Copy/File Room					1	1																							
Staff Lockers						1																							
SAC Activity Rooms							3	1	1		3																		
SAC Toilets								1																					
SAC Outdoor Activity Area									1													2/3	2/3	2/3					
Commons									1	1	1	1	1	1	1	3			1			3	1	2					
Snack Bar/Vending										1	1	1	1	1	1	3													
Computer Room											1	3				3													
General Activity Room(s)												3										3	3	3					
Special Activity Room(s)												3																	
Music/Multimedia Room													3																
Youth/Teen Toilet														3					3										
Teen Lounge															3														
Teen Patio																3								3				3	
Multipurpose Room																			1					1					
Multipurpose Room Storage/Gear Issue																			1			3	1						
Staff/Public Toilets																					3								
Youth Outdoor Activity Area/Hard Surface																						1	1						
Youth Outdoor Activity Area/Covered																							2/3						
Open Outdoor Play Area																													
Pick-up and Drop-Off																										3	1		
Service Drive/Trash																													
Staff Parking																												3	
Patron Parking																												3	

1 = Direct physical access/adjacency  
2 = Direct visual access/visual control  
3 = Near but not necessarily adjacent

2-4.3 **Space Assessment.**

See the Functional Data Sheets in Chapter 4 for additional information on the space types and their relationships to each other.

2-5 **ALTERATIONS TO EXISTING FACILITIES.**

2-5.1 **Regulatory Authorities.**

Refer to the following for the appropriate authorities for each Service:

- a. **Army.** The standard may be modified to accommodate the existing structure. However, all proposed modifications to the standard must be sent to the Army Corps of Engineers, Engineering & Support Center, HSV (CEHNC) for review and HQDA (CFSC#8209;CYS) for approval prior to the initiation of concept design.



- b. **Navy and Marine Corps.** Authorities are contained in OPNAVINST 11010.20 and NAVFACINST 11010.45. Prior to planning alterations to an existing facility to convert it to a Youth Center, the activity should consult the following: Navy: NPC (Pers 656D/659) and Marine Corps: MCCA HQ (MRY/MRD).
- c. **Air Force.** HQ AFCEE for architectural and publication coordination; HQ Air Force Civil Engineering Support Agency (AFCEA) for technical issues relating to fire, life safety, and certification; HQ AFSVA for functional requirements; and HQ USAF/ILV for functional policies.

#### 2-5.2 **Other Considerations.**

Consider the site of the existing facility and its limitations with regard to the Youth Center's needs. Only consider permanent facilities for conversion to a Youth Center. Exceptions may be made for other buildings that are in excellent condition, subject to the location determinants in paragraph 2-3.

Consider adaptability to the intent of the building program. For instance, can the building accommodate a multipurpose room? Does it have site space for the outdoor activity area and the teen patio? Whether planning a conversion, alteration, addition, or new construction, antiterrorism requirements must be taken into account (see paragraph 3.8). Also consider barrier-free design requirements as noted in paragraph 3-7.

## CHAPTER 3 GENERAL DESIGN CRITERIA

### 3-1 GENERAL.

Use UFC 1-200-01 for guidance on the use of model building codes for design and construction of Department of Defense facilities. See paragraph 3-5 for the appropriate governing codes for building services.

### 3-2 STRUCTURE.

The Youth Center must be a single-story structure. The **Air Force** may allow two-story Youth Centers, but prefers a single-story structure.

#### 3-2.1 Foundation.

The foundation is site specific and must be designed upon known geotechnical considerations, by an engineer knowledgeable of the local conditions.

#### 3-2.2 Superstructure.

Provide clear spans as required for the activity areas and multipurpose room. Use pre-engineered components for superstructure framing, where feasible.

#### 3-2.3 Materials.

Consider climate conditions, high humidity, industrial atmosphere, saltwater exposure, or other adverse conditions when selecting the following:

- a. The type of cement and admixtures used in concrete,
- b. The concrete cover on reinforcing steel in concrete membrane,
- c. The coatings on structural members,
- d. Expansion joints,
- e. The level of corrosion protection, and
- f. The structural systems.

### 3-3 EXTERIOR DESIGN.

In general, keep the building's image, theme, and fixtures consistent with the programs offered. Design the Youth Center to reflect a residential, non-institutional character. The building design should comply with the Service command and installation architectural standards and design guides. Also consider the local geographical and cultural environment. The building and site should provide a visually attractive and welcoming appearance with ample parking, and signs giving directions to the site.

### 3-3.1 Entrances.

The main facility entrance to the lobby should serve as a welcome and transition point—elements such as a covered entry are very desirable. Such a feature might be combined with a covered walkway that connects the building to short-term parking to protect arriving youth and parents from inclement weather. If a covered walkway feature is provided, it should be structurally independent from the main Youth Center structure. In cold climates, provide a canopy (or a recess) at required egress doors to ensure that doors can completely open without obstruction from snow and ice.

Consider providing separate entrances to the multipurpose room and the teen room. Alternatively, consider providing a paved path from the parking area to a multipurpose room exit. The **Navy** requires a separate, exterior entrance to the Teen Room/Lounge that is independent from the main lobby but visible from the check-in.

### 3-3.2 Doors and Windows.

Residential size and type of doors and windows should be provided. Casement and other projecting types of windows must be recessed or located so as to be free from dangerous protrusions. Ensure windows and doors comply with antiterrorism criteria as noted in paragraph 3-8.

### 3-3.3 Exterior Finishes.

Keep the exterior color, texture, and design consistent with the programs offered, the local environment and appropriate for the building type. Design the Youth Center to reflect a residential-style, non-institutional character—the design should communicate a sense of fun while complying with installation architectural standards. The physical environment supports the operational quality of a center and profoundly affects the behavior and development of youth, as well as the efficient functioning and sense of well being in adult staff. Also coordinate the exterior finishes with the Service-specific design standards noted below in paragraph 3-4.2 for interior finishes.

Consider climate conditions, high humidity, industrial atmosphere, salt-water exposure, or other adverse conditions when selecting exterior finishes, including the roof system, to ensure durability.

### 3-3.4 Exterior Signage.

Equip the main entrance with an attractive, clearly located sign that provides the program hours of operation. Ensure that signage complies with Installation requirements. (**Air Force** use UFC 3-120-01.) Sign placement and type are site-specific, but signs must be strategically located, adequately lit, and of sufficient size to permit proper viewing by individuals approaching the facility.

## 3-4 INTERIOR DESIGN.

Use construction and finishes (walls, floor, and ceiling) that support the image and theme of the facility and that are consistent with the programs offered. Use finishes that are extremely durable with good acoustical, noise reducing characteristics. The interior design should offer the same interest, excitement, and professionalism that can be found in comparable commercial hospitality facilities. As with the exterior, design the Youth Center to reflect a high energy, non-institutional character that communicates a sense of fun. Consider techniques to display and celebrate the youth's artwork. For **Navy** facilities consider bright and vibrant colors and wall murals in common areas.

#### 3-4.1 Interior Construction.

Use high-quality, durably constructed counters, casework, and cabinets. Specify Architectural Woodwork Institute (AWI) Premium or Custom for finishes per *AWI Quality Standards Illustrated*. Provide casework and cabinet doors and drawer faces of veneer panel core. Provide doors, drawers, and casework faces as plastic laminate at a minimum. Where no water source is present, use countertops of plastic laminate as a minimum with hardwood or solid surface edging. Where a water source is present, use countertops of solid surface/solid composite plastics only. Specify 20-mm (.75-in.) minimum thickness for plywood, plywood backing, and solid wood panels.

Confirm the amount (linear mm/ft.) of counter/casework for each space within the Youth Center with the following Service-specific contacts:

- a. The Installation Manager for **Army** and **Air Force** projects and
- b. HQ Program Managers for **Navy** and **Marine Corps** projects.

All Interior glass must be tempered safety glass and mirrors must be break-resistant materials.

#### 3-4.2 Finishes.

Finishes should take into account the intended uses and be appropriately durable. They must meet the requirements listed in NFPA 101, *Life Safety Code*. Also coordinate the interior design with the following Service-specific standards or agencies:

- a. **Army**. DG 1110-3-122, *Interior Design Guide and Installation Design Guide Standards*;
- b. **Navy**. PERS-656;
- c. **Air Force**. *Air Force Interior Design Guide*, Major Command and installation design standards, and Engineering Technical Letter (ETL) 00-06, *Air Force Carpet Standard*; and
- d. **Marine Corps**. MCCA HQ MRY/MRD.

3-4.2.1 In moist climates, do not cover the inside of exterior walls with impervious materials such as mirrors or vinyl wall coverings. This is due to a concern over mold developing in the wall.

3-4.2.2 For the teen room/lounge, consider guiding a teen focus group in selection of an interior color scheme. For more information on finishes in specific areas, see the Functional Data Sheets in Chapter 4. The **Navy** requires the involvement of a teen focus group in the selection of interior color schemes for the Teen Room/Lounge.

**3-5 SERVICES.**

Also see paragraph 3-9 for information on sustainable design and energy consumption.

**3-5.1 Plumbing.**

Design domestic hot and cold water, sanitary and storm drainage, propane, fuel oil, or natural gas systems to meet the requirements of UFC 3-420-01.

**Navy** requirements differ from the other Services on toilet requirements. See Table 3-1 for this Service exception.

**TABLE 3-1. TOILET REQUIREMENTS BY SERVICE**

Service	SAC	Youth	Teens	Staff	Visitors
<b>Army, Air Force, and Marine Corps</b>	Separate male/female (child-use only).	Separate male/female (child-use only) shared by Youth & Teens.		Separate male/female shared by staff and visitors.	
<b>Navy</b>	Separate male/female (child-use only) shared by SAC & Youth.		Multiple unisex toilets shared by Teens, Staff, and Visitors.		

**3-5.2 Heating, Ventilating, and Air Conditioning (HVAC).**

Design the HVAC system to comply with the requirements of the most current edition of the International Mechanical Code (IMC). Use UFC 3-410-02N as supplemental guidance. Comply with antiterrorism requirements in the design of the HVAC system (see paragraph 3-8).

Consider climate conditions, high humidity, industrial atmosphere, salt-water exposure, or other adverse conditions when selecting exterior HVAC components to ensure durability.

**3-5.3 Fire Protection and Life Safety.**

Design fire protection and life safety to comply with UFC 3-600-01; the National Fire Protection Association (NFPA) Standards; and the requirements listed below. Complete compliance with the NFPA 101 is required by Public Law (USC Title 10, Section 1794) and may not be waived except by the Secretary of each military Service.

In case of conflict between this UFC and the latest edition of NFPA 101, contact the appropriate Service representative below for resolution:

- a. **Army.** USACE District Fire Protection Engineer
- b. **Navy.** NAVFAC FEC/EFD/EFA Fire Protection Engineer
- c. **Air Force.** HQ AFCESA/CES
- d. **Marine Corps.** HQ Fire Protection Engineer

### 3-5.3.1 **Occupancy Classification.**

The entire facility, except for the multipurpose room, will be classified as an educational occupancy as defined in NFPA 101. The multipurpose room, if provided, will be classified as an assembly occupancy as defined in NFPA 101.

### 3-5.3.2 **Exiting Requirements.**

Use the NFPA 101-listed occupant load factors for the purpose of designing the means of egress as follows:

- a. Use the factor for “Educational Use, Classrooms” for the entire facility except the multipurpose room and
- b. Use the factor for “Assembly Use, Concentrated use, without fixed seating” for the multipurpose room.

3-5.3.2.1 Rooms normally occupied by second-grade children and older may be located no more than one floor above the ground floor. Note: Only the **Air Force** allows a Youth Center of more than one floor.

3-5.3.2.2 Provide at least two separate, accessible exits on every story. Any interior stair serving as an exit will be enclosed by fire resistant construction as required by NFPA 101 and allow discharge from the stairway directly to the outside.

3-5.3.2.3 Provide corridors of at least 1830 mm (72 in.) clear width.

3-5.3.2.4 Egress corridors may not be used as a portion of a supply, return, or exhaust air system serving adjoining areas.

3-5.3.2.5 Provide sufficient doors between the multipurpose room and the building core areas to accommodate the egress of at least one-half of the maximum multipurpose room occupant load into the building core areas. Size the main

entrance/lobby and other exits directly connected to the main entrance/lobby to accommodate the exit of the multipurpose occupants along with the occupants of the building core areas.

3-5.3.2.6 Equip all exit doors from the facility to the outside with panic hardware.

3-5.3.2.7 Where cold weather vestibules are provided at activity room exits and exits other than the primary entrance, use a non-latching-type door held closed by a hydraulic door closer for inside door. Install panic egress hardware only on the exterior door.

3-5.3.2.8 Provide either of the following methods to protect the means of egress:

- a. Provide a direct exit to the outside from every room normally occupied by children, or
- b. Design corridor walls to form smoke partitions. Use magnetic hold-open devices for all fire doors and kitchen doors.

3-5.3.2.9 Provide a smooth, accessible, and unobstructed evacuation route to a safe gathering area not less than 23 m (75 ft.) from the facility for all activity rooms. The route must not cross any emergency vehicle access path, parking area, or street. The evacuation route must be at least 1020 mm (44 in.) wide, and turns and bends in the route should be wider to account for use of wheelchairs. Provide gates with not less than 1020 mm (44 in.) clear width as necessary in the play area fence. Provide sufficient outdoor lighting for the egress path to meet NFPA 101 minimum illumination requirements.

### 3-5.3.3 **Exit Marking.**

Provide exit signs in accordance with UFC 3-530-01 and UFC 3-600-01. Install exit signs in child occupied rooms when exterior exit doors are provided.

### 3-5.3.4 **Additional Exiting Requirements for Extreme Cold Weather Locations.**

If the facility location meets the weather criteria outlined below, provide for horizontal exiting within the facility according to NFPA 101 and the criteria in this section.

Extreme cold weather locations are those with more than 50 hours per year with a dry-bulb temperature below  $-15$  degrees C (5 degrees F) between the hours of 0900 and 1600. (See UFC 3-400-02 for information on obtaining this data.)

3-5.3.4.1 Provide a two-hour area separation wall dividing the facility areas roughly in half on either side of the wall. When a gymnasium is provided, provide the separation wall between the gymnasium and the core areas.

3-5.3.4.2 Design corridor doors in the two-hour area separation wall to recess into the wall providing a smooth continuous wall surface. Install magnetic latches to hold

door open, which release when the fire evacuation signal sounds. Install swinging doors that swing in opposite directions.

3-5.3.4.3 Install magnetic latches to hold open other doors in the two-hour area separation wall that release when the fire evacuation signal sounds.

3-5.3.4.4 Seal and fire stop all penetrations of the two-hour separation wall for conduit, piping, HVAC and electric service to maintain the fire rating of the wall.

### 3-5.3.5 **Emergency Lighting.**

Provide emergency lighting in all areas required by NFPA 101 and at the front desk area for desk attendant to make emergency calls and carry out other duties necessary for the safety and security of the children. Whenever possible, incorporate the emergency lighting into the normally provided lighting fixtures.

### 3-5.3.6 **Flammability Codes and Standards.**

Use textiles and upholstered components complying with the applicable interior finish requirements stated in NFPA 101 and other applicable local, state, or federal standards. In addition, comply with the following:

- a. Use carpets tested for Volatile Organic Compounds (VOCs) and that bear a green label from the Carpet and Rug Institute indicating that the carpet emissions are within the acceptable range and
- b. Use products containing less than 0.05 parts per million (ppm) of formaldehyde. Any product purchased with formaldehyde levels above 0.05 ppm must bear a label in accordance with 29 CFR 1910.1048.

### 3-5.3.7 **Fire Hydrants.**

Provide at least one fire hydrant within 45 m (150 ft.) of the building's fire department connection.

### 3-5.3.8 **Fire Separation.**

3-5.3.8.1 Provide one-hour fire-rated construction to separate the multipurpose room from the building core areas.

3-5.3.8.2 Provide a one-hour fire-resistive barrier around the laundry room, if provided, and at least a 45-minute fire-rated door.

3-5.3.8.3 Other fire separations are not required in a typical one-story Youth Center fully protected with an automatic sprinkler system. Additionally, smoke barriers are not required if direct exits are provided from each room normally occupied by children (see paragraph 3-5.3.2).

### 3-5.3.9 **Fire Extinguisher Cabinets.**



If fire extinguishers are required by the local installation, provide recessed fire extinguisher cabinets. Recessed cabinets located in fire-rated walls must be listed or approved fire-rated cabinets that can be installed in fire rated walls without having to “build-out” the wall.

### **3-5.3.10 Fire Suppression Systems.**

Provide complete automatic sprinkler systems meeting the requirements of UFC 3-600-01. Wet pipe sprinkler systems are the preferred system type because of the high reliability and low maintenance requirements. Take care to avoid freezing sprinkler pipes located in attic spaces. Sprinkler systems subject to freezing may be dry pipe sprinkler systems. Note the following additional criteria:

- a. Design the sprinkler system water flow indication to activate the building fire evacuation system;
- b. Discharge inspectors' test connections to a safe, outside location onto a hard surface outside of areas where children play or congregate. Indicate discharge location on drawings;
- c. Use quick response type sprinkler heads; and
- d. Ensure that the fire department connection is accessible without entering or transiting an outdoor play area or crossing a discharge path.
- e. Pipe penetrations of the exterior wall must be no greater than 610 mm (24 in.) above finished grade.

If the optional kitchen is included, provide a wet chemical or water spray hood duct and cooking surface fire extinguishing system according to NFPA 96.

### **3-5.3.11 Fire and Alarm System.**

3-5.3.11.1 Provide an automatic fire evacuation alarm system according to NFPA 72 and complying with the installation's requirements. Note the following requirements:

3-5.3.11.2 Locate the fire alarm control panel in an environmentally controlled location in the facility.

At a minimum, meet the following criteria for circuits in the systems:

- a. Initiating circuits – Class B, Style C
- b. Notification circuits – Class A, Style Z
- c. Signaling Circuits – Class B, Style 3.5

3-5.3.11.3 Fully addressable control panels with addressable supervisory sensors, pull stations, notification devices, and other devices are recommended.

3-5.3.11.4 Provide audio and visual notification devices/strobes in accordance with NFPA 72 and UFC 4-021-01.

Note: **Army** and **Navy** require the following additional criteria: Provide a voice evacuation system that is capable of accepting input from a remote location. This system must be UL listed for fire alarm use. The voice evacuation system will satisfy the requirements of the Mass Notification System. Provide a single type of visual notification device that will serve as the fire alarm visual alarm notification and as the Mass Notification System visual alarm notification that complies with NFPA 72 and is labeled "Alert." The spacing and location of the visual notification devices must meet the requirements of NFPA 72.

3-5.3.11.5 The signal type/tone will be the same throughout the building, and will be heard on the playgrounds. Sufficient alarm notification devices will be provided so that the signal is not excessively loud in any location (15 dB above ambient is the target level).

3-5.3.11.6 Provide manual pull stations inside the facility at each exterior exit door.

3-5.3.11.7 Building smoke detection is not required and should not be provided except for the one smoke detector that is required by NFPA 72 to be located over the fire alarm control panel. Heat detectors are not required in any area because the facility is fully sprinkled. Smoke detectors must be installed in HVAC ducts as required by NFPA 90A.

3-5.3.11.8 Provide either a graphic or alphanumeric annunciator at the front desk or vestibule.

3-5.3.11.9 Provide and install a fire alarm transmitter compatible with the installation fire alarm receiving equipment to transmit fire alarm and system supervisory signals to the installation fire alarm reporting center. Consult with the Installation Fire Chief or fire system maintenance activity. This may be a sole source item.

### 3-5.4 **Electrical.**

Provide electric service and distribution equipment, wiring receptacles and grounding, interior and exterior lighting and control, emergency lighting, telephone, communication systems, fire alarm, and intrusion systems in accordance with NFPA 70; UFC 3-520-01; and the latest installation design requirements. See the latest edition of *Electric Current Abroad* to determine voltages and cycles in overseas locations. Service grounding system and all wiring methods must meet the current NFPA 70 requirements. All service equipment must be Underwriters Laboratories (UL) listed. Alternately, published proof from an approved independent testing laboratory may be provided.

#### 3-5.4.1 **Lighting.**

Vary lighting levels and types throughout the Youth Center. Provide a combination of task and ambient light to create interest. Consider that most public spaces in the Youth

Center should exhibit a more residential or hospitality-oriented character than an office or educational facility. For more information on the specific spaces, refer to the Functional Data Sheets in Chapter 4 and UFC 3-530-01.

#### 3-5.4.2 **Communications and Data.**

Provide a junction box with rigid conduit to the ceiling for telephone and data connections. Telephone and data outlets may be independent of each other or combined into a single junction box. If these connections can be combined into a single junction box then the cover plate to that junction box must allow for multiple connections. In some unique situations, the cable television (CATV)/internal video connection can also be combined into a single junction box with the appropriate cover plate.

Confirm the preference for individual or combined telephone/data/video outlets with the following Service-specific contacts:

- a. The Installation Manager for **Army** and **Air Force** projects and
- b. HQ Program Managers for **Navy** and **Marine Corps** projects.

The **Navy** requires that each space supplied with a data connection have two hard-wired connections: a primary and an alternate. The alternate serves as a back-up and is generally not activated. Facilities that will contain Navy and Marine Corps Intranet computers must comply with UFC 3-580-10.

#### 3-5.4.3 **Alarm System.**

Consider providing an alarm system for intrusion detection to protect equipment and assets. Provisions for an alarm system must be justified during the planning/programming process. For **Navy**, the individual Navy Installation desiring an alarm system may fund the system as collateral equipment.

#### 3-5.4.4 **Closed Circuit Television (CCTV).**

CCTV is designed to deter and reduce the risk of child abuse and protect staff from any unwarranted allegations of child abuse. Service requirements vary on CCTV systems—note the following criteria:

3-5.4.4.1 **Army.** The video surveillance system for Army programs is to be digital, which allows for speed (quicker access to images), reduced space requirements (few tapes to store), and higher quality images. Locate the central monitor in the administrative/reception area. Design the system to provide documentation of the following areas:

- a. All activity spaces,
- b. Hallways to include exit doors,

- c. Kitchen to include delivery entrance and storage room,
- d. Reception area (front desk/lobby area/main entrance), and
- e. Outdoor Activity Areas to include the outdoor storage area that children can access.

This equipment, external to the outlets, is considered personal property. All video monitoring security systems will be coordinated with U.S. Army Community and Family Support Center, Child and Youth Services Directorate for the latest specifications for Video Monitoring Equipment. All patrons must be notified of the camera surveillance.

3-5.4.4.2 **Navy.** Provide conduit (minimum 19 mm (.75 in.)) and cabling in each activity space with the central monitors located at the check-in desk and a remote monitor located in the Youth Center Director's office. The conduit will accommodate government-furnished/government-installed, locally-funded video equipment. This may require outlets higher in the ceilings, walls, or both. Provide electrical service adjacent to anticipated location of cameras and monitors.

3-5.4.4.3 **Air Force.** Provide the entire CCTV system including cameras, monitors, conduit, cabling, power, and junction boxes required for a complete and operational system. Place monitors at the main check-in desk where they can be easily viewed by staff and in the Youth Center Director's office.

3-5.4.4.4 **Marine Corps.** Provide the entire CCTV system including cameras, monitors, conduit, cabling, power, and junction boxes required for a complete and operational system. Place monitors at the main check-in desk where they can be easily viewed by staff and in the Youth Center Director's office.

## 3-6 **SITE WORK.**

### 3-6.1 **Landscaping.**

Design landscaping s to reflect the programs offered and the local geographical environment. Choose plants that are easy to maintain and enhance the visual quality of the facility in all seasons. Indigenous species are preferred. Refer to the local installation landscape standards. For **Air Force**, also refer to the *USAF Landscape Guide* and any Major Command standards.

Do not use poisonous or toxic plants or rocks. Table 3-2 provides a non-comprehensive list of common plants that are known to be poisonous. Table 3-3 provides a list of plants for which no evidence currently exists of a poisonous quality. These lists are provided by the Maryland Poison Center. Within the United States, check with local extensions of the U.S. Department of Agriculture for more information about the nature of common plantings in specific locations. These lists are not intended to serve as a guide for plants to use or not use but are merely provided for informational purposes. Refer to a comprehensive, commercially-available field guide for complete lists of poisonous plants.

**TABLE 3-2. COMMON POISONOUS PLANTS**

Amaryllis	Jerusalem cherry
Azalea	Jimsonweed
Barberry	Jonquil
Black locust	Lily-of-the valley
Boxwood	Mistletoe
Caladium	Mountain laurel
Castor bean	Narcissus
Chinaberry	Nephtytis/Arrowhead
Chinese evergreen	Nightshade family
Chrysanthemum	Oak (acorns)
Crown of thorns	Peony
Daffodil	Philodendron family
Dumbcane/Dieffenbachia	Poison ivy/oak/sumac
English ivy	Pokeweed
Euonymous	Privet
Four o'clock	Rhododendron
Fruit pits or seeds	Snowball bush/Hydrangea
Gladiola	Water hemlock
Holly	Wisteria
Hyacinth	Yew
Iris	

**TABLE 3-3. COMMON NON-POISONOUS PLANTS**

African violet	Marigold
Christmas cactus	Mulberry (ripe berries only)
Coleus	Norfolk pine tree
Corn plant	Peperomia
Crocus	(spring) Petunia
Dandelion	Poinsettia*
Dogwood	Prayer plant
Dracaena	Pyracantha/Firethorn
Easter lily	Rose
Ferns	Rubber tree plant
Ficus*	Sansevieria/Snake plant
Forsythia	Scheffiera*
Fuchsia	Spider plant
Geranium	Swedish Ivy
Hibiscus	Tulip*
Honeysuckle	Wandering Jew
Impatiens	Wax plant
Jade plant	Wild strawberry/Snakeberry
Lilac	Zebra plant

\* Sap may be irritating.

3-6.2 **Drop-off Area/Bus Stop.**

Comply with antiterrorism standards noted in paragraph 3-8 below. Consider providing a sign at the entry to the bus drop-off lane that reads, "Bus Drop-Off Lane Only. All Other Vehicles Prohibited."

3-6.3 **Parking and Access Drives.**

Provide adequate parking for both staff and patrons with the appropriate access drives. Consider location of bicycle racks near the facility entrance in a secure location.

3-6.4 **Service Drive.**

Verify the size of required service vehicles prior to planning the service access areas. Provide a back-up spur for dead-end and service drives that exceed 30 m (100 ft.) in length. Access should be near the serviced areas, i.e., kitchen (if provided), garbage dumpster/storage (indoor or outdoor), mechanical room, and service entry, if one is designated. Provide a service vehicle apron and consolidate service access when possible. Screen or separate the service area from public use or traffic areas with attractive fences, depressions, berms, and landscaping. Ensure proper drainage if depressions are used. Do not cross outdoor activity areas with service access. Ensure compliance with antiterrorism standards noted in paragraph 3-8, particularly for dumpster separation and access control.

3-6.5 **General Site Lighting.**

Ensure that parking areas and the facility have adequate lighting for safety, evacuation, and security measures. See UFC 3-530-01.

3-6.6 **SAC Outdoor Activity Area.**

The SAC Outdoor Activity Area should comply with the *Handbook for Public Playground Safety* guidelines for developmentally-appropriate play spaces and groupings. It should also comply with ASTM F1487. See Table 4-4.2 for more information on this space.

3-6.7 **Youth Outdoor Activity Area.**

If both SAC and Youth programs are accommodated in a facility, the youth program may share the SAC Outdoor Activity Area, in which case there are no additional criteria. If SAC is not provided or if an additional, separate Youth Outdoor Activity Area is programmed, it should at a minimum meet the *Park, Recreation, Open Space and Greenway Guidelines*. Also consider providing features such as an exterior basketball court.

3-6.8 **Teen Patio.**

See Table 4-10.2 for more information on this space.

3-6.9 **Optional Outdoor Open Area.**

This optional area is intended for large area outdoor activities, such as team sports. Consider designing features to accommodate a regulation soccer field or a little-league baseball field. At a minimum, this space should also meet the *Park, Recreation, Open Space and Greenway Guidelines*.

### 3-7 **BARRIER FREE DESIGN REQUIREMENTS.**

Design Youth Centers to be barrier-free and accessible in compliance with the Architectural Barriers Act (Public Law 90-480) of 1968, <http://www.access-board.gov/ufas/ufas-html/ufas.htm> - ABA. Provide barrier free design requirements in accordance with the Uniform Federal Accessibility Standards (UFAS), published as Federal Standard (FED-STD)-795, <http://www.access-board.gov/ufas/ufas-html/ufas.htm>, and 28 CFR Part 36, the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG), <http://www.access-board.gov/adaag/html/adaag.htm>.

### 3-8 **ANTITERRORISM.**

For antiterrorism requirements, refer to UFC 4-010-01 and UFC 4-020-01, *DoD Security Engineering Facilities Planning Manual*.

### 3-9 **SUSTAINABLE DESIGN.**

Use an integrated approach to the planning and design of Youth Centers that minimizes energy consumption and optimizes life cycle cost renewable energy possibilities. Use a practical combination of site selection and siting, energy conserving building envelope technologies, energy efficient lighting, occupant sensing controls, variable frequency drives for motors and exhaust fans, and high efficiency HVAC systems to achieve this goal. Incorporate renewable energy principles such as day-lighting, passive and active solar heating, natural ventilation, and photo-voltaics where they are life cycle cost effective.

#### 3-9.1 **Service Specific.**

See the following Service-specific requirements:

3-9.1.1 **Army.** Design Youth Center projects with consideration for sustainable ratings in eight facility categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Facility Delivery Process, Current Mission, and Future Missions. The minimum rating for the Army's Sustainability Project Rating Tool (SPiRiT) must be in accordance with the current rating. Most projects can reach the sustainability rating without increasing costs, while improving installation sustainability and balancing available resources with customer requirements. Understanding and applying the principles of Sustainable Design and Development and using the SPiRiT rating process improves day-to-day decisions and project quality.

3-9.1.2 **Navy and Marine Corps.** Use the United States Green Building Council (USGBC) LEED™ Green Building Rating System to measure the sustainability of the completed project. It can also be used during planning and design as a source of green building strategies. LEED™ addresses sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. The minimum LEED™ rating of “Certified” should be met within budgetary constraints. Actual certification is encouraged, but not required.

Follow the guidance in UFC 3-400-01.

3-9.1.3 **Air Force.** It is Air Force policy to apply sustainable development concepts in the planning, design, construction, environmental management, operation, maintenance, and disposal of facilities and infrastructure projects, consistent with budget and mission requirements.

Each Major Command should incorporate sustainable development using LEED™ criteria. The *Air Force Sustainable Facilities Guide* will provide tools and suggested guidelines for selecting candidate projects. The goal is to have all MILCON/NAF projects in the FY09 program capable of achieving LEED™ certification. Submission to the USGBC for actual LEED™ certification is at MAJCOM discretion. This policy does not apply to Host Nation or NATO funded projects.

Sustainable development concepts will benefit the Air Force by creating high-performance buildings with long-term value. They are to be integrated into the development process and balanced with all other design criteria to achieve best value for the Air Force. The economic analysis process need not change, but the elements to consider will now include sustainable technologies and their potential for long-term savings. Complete Air Force policies may be found in the *Air Force Sustainable Facilities Guide* found at <http://www.afcee.brooks.af.mil/dc/dcd/arch/rfg/index.html>.

### 3-9.2 **Other Sustainable Design Criteria.**

The following general references provide more information:

3-9.2.1 When specifying products that are included in EPA’s list of affirmative procurement guideline items, designers must include the requirement for these products to meet or exceed the recycled material content standards established by EPA. The list of products and their corresponding recycled content requirements are found at [www.epa.gov/cpg/products](http://www.epa.gov/cpg/products). Listed products likely to be used in Youth Centers include building insulation, carpet and cushion, cement and concrete, latex paint, floor tiles, patio blocks, restroom dividers, and structural fiberboard.

3-9.2.2 The “Whole Building Design Guide” [www.wbdg.org](http://www.wbdg.org) further explains the environmental issues related to building materials and provides technical guidance on green building material selection.

### 3-9.3 **DoD Energy Budget.**



Design of new facilities must ensure that building energy consumption does not exceed the DoD energy budget figures.

CANCELLED

CHAPTER 4 SPECIFIC DESIGN CRITERIA

4-1 INTRODUCTION.


This chapter identifies the specific design needs for each functional area as outlined in the space program. Tables 4-1 through 4-11 provide this data in a standard Functional Data Sheet format.

These Data Sheets are available as a Microsoft® Word® file for use during project execution. The file is available with the Space Program spreadsheets, downloadable from the Whole Building Design Guide DoD page (<http://dod.wbdg.org/>) web site.

TABLE 4-1. LOBBY

<b>Description/ Usage</b>	The Lobby serves as the entrance to the facility. This entrance should be recognizable from the outside and be close to the school bus drop-off, base bus stop, and patron parking. The lobby should be open and friendly and serve to introduce the rest of the facility. It should have a comfortable area for waiting. The Check-in (see Table 4-2) is an integral part of the lobby.
<b>Min. Ceiling Ht.</b>	2.74 m (9 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Provide a low-maintenance, durable finish. Prefer a wainscot. Consider painted gypsum wallboard or the use of vinyl wall covering where budget and practical considerations allow. <b>Floor.</b> Provide a low-maintenance, durable, moisture and slip-resistant finish suitable for this high traffic area. Consider seamless vinyl, stained concrete, or stone or quarry tile. Provide a walk-off mat/area at the entrance door. <b>Ceiling.</b> Provide a decorative ceiling. Consider exposed, painted structure.
<b>Plumbing</b>	None required. Consider providing a drinking fountain.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code. Consider outlets for display cases.
<b>Lighting</b>	430 lux (40 fc). General ambient lighting. Consider decorative and task lighting.
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Consider providing one line for local or toll-free calls. <b>Data.</b> None required. <b>Security.</b> None required.
<b>Casework</b>	Consider providing display cases in this space and along corridors for display of projects.
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	Floor mat at entrance; soft padded furniture for seating/waiting area; tables; magazine rack, and tack surfaces. Consider providing a pay phone. For <b>Army</b> , consider providing a ceiling or wall-mounted TV and security monitors.
<b>Special Req.</b>	Airlock at main entrance. Signage.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

TABLE 4-2. CHECK-IN

<b>Description/ Usage</b>	<p>The Check-in area is the primary area to monitor and control access into and out of the building. Youth will be checked in here, and all visitors must register at this point. It must have visible control over all primary entrances/exits and the Commons and access points to other spaces.</p> <p>Game supplies may be stored at the check-in desk. The audio and CCTV controls will also be located here.</p>	
<b>Min. Ceiling Ht.</b>	2.74 m (9 ft.) minimum.	
<b>Finishes</b>	<p><b>Walls.</b> Painted gypsum wallboard. Consider vinyl wall coverings.</p> <p><b>Floor.</b> VCT with vinyl or rubber base. Consider carpet or cushioning properties behind the counter.</p> <p><b>Ceiling.</b> ACP. Consider using the ceiling to define and separate this area from the Lobby.</p>	
<b>Plumbing</b>	None required.	
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum	
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.	
<b>Power</b>	Provide power for all equipment. Perform a power requirement survey, as this area's power requirements are extremely site and locale specific.	
<b>Lighting</b>	540 lux (40 fc). General ambient lighting. Provide task lighting; consider decorative fixtures.	
<b>Communication</b>	<p><b>CCTV.</b> All lobby monitors must be viewable from this area.</p> <p><b>CATV/Internal Video.</b> None required.</p> <p><b>PA/Audio.</b> PA controls. Provide a speaker.</p> <p><b>Telephone.</b> Provide one line per two points of sale (POS). Provide at least two additional general-purpose phone lines.</p> <p><b>Data.</b> Provide one outlet per POS. Provide additional outlets, as needed, for associated hardware.</p> <p><b>Security.</b> None required.</p>	
<b>Casework</b>	Provide a 610 mm (24 in.) deep counter with built-in cabinets. Provide file drawers and storage drawers with a minimum of two lockable drawers for each POS. The counter should be dual height for standing transactions, seated office functions, and ADA customer service. Note that ADA-height counter should have knee-hole space on both sides of the counter. Consider a durable material for the counter such as solid surface—laminated edges are not permitted. Consider supports such as steel angle braces for counters with knee-hole space. Modesty panels and apron must be of durable materials. Consider providing wall and base cabinets and equipment counter.	
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	Point-of-Sale units, desktop computer for administrative functions. CCTV monitors. Printers. Chairs and stools. Scanner or swipe-card check-in device.	
<b>Special Requirements</b>	Consider providing a gate between desk and surrounding area. Consider providing a coiling door or grille at the counter to serve as a security screen.	
<b>For use during project execution by the appropriate Service agency</b>		
<b>Occupancy</b>	Staff. Patrons/Youth.	
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>		

**TABLE 4-3.1 ADMINISTRATIVE OFFICES**

<b>Description/ Usage</b>	The Administrative Offices consist of a mix of closed and open office space. The quantity and selection of closed offices is facility specific. The remaining staff sits in open offices or workstations arranged in an open office plan with systems furniture. All offices are used for planning, developing, organizing, supervising, implementing, promoting, and evaluating facility operations. The offices should be free from frequent distraction, have a professional appearance, and provide a sense of work place.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wallboard or vinyl wall covering. <b>Floor.</b> Carpet with vinyl or rubber base <b>Ceiling.</b> ACP
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Ensure an adequate number of circuits to power all equipment. Provide a minimum of one quad outlet in closed offices on at least three walls. Gang outlets with data and telephone. Workstations should provide at least one quad outlet per staff. Provide additional outlets as necessary to operate shared equipment such as printers, fax, etc.
<b>Lighting</b>	540 lux (50 fc). General ambient fixtures.
<b>Communication</b>	<b>CCTV.</b> Provide one outlet for remote monitor in Director's office and one for the School-age Coordinator. <b>CATV/Internal Video:</b> None required. <b>PA/Audio:</b> Provide a speaker. <b>Telephone.</b> Provide one line per staff plus one additional line for fax and copier. <b>Data.</b> Provide one outlet per staff plus one outlet for each printer, copier, scanner, etc. <b>Security.</b> None required.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Private Offices—provide furniture for 11 m <sup>2</sup> (120 ft. <sup>2</sup> ) office: desk, credenza, filing cabinet, desk chair and two side chairs. Workstations—provide furniture for 4.5 m <sup>2</sup> (48 ft. <sup>2</sup> ) workstation: desk chair and side chair for open offices. Workstation systems furniture must provide adequate space for filing and overhead storage.
<b>Special Requirements</b>	Provide vision panels in office doors.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-3.2 BREAK/ STAFF TRAINING ROOM**

<b>Description/ Usage</b>	Used for staff training, meetings, breaks, and lunches. Consider that staff lockers may be in this area (see Table 4-3.4).
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wallboard or vinyl wall covering. <b>Floor.</b> VCT with vinyl or rubber base. <b>Ceiling.</b> ACP
<b>Plumbing</b>	Provide a sink. Consider water connection for refrigerator icemaker.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code. Provide one additional outlet at counter height for convenience. Provide additional outlets necessary to operate dedicated equipment such as the coffee machine, refrigerator, time clocks, microwave, and various training equipment.
<b>Lighting</b>	540 lux (50 fc). Consider dimmable lights.
<b>Communication</b>	<b>CCTV.</b> None required. <b>CATV/Internal Video.</b> Consider providing one outlet. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Provide one line. <b>Data.</b> Provide a minimum of one outlet. Consider providing additional outlets for training purposes. <b>Security.</b> Provide a vision panel in the door.
<b>Casework</b>	Solid-surface countertop; see paragraph 3-4.1 for length criteria. Provide lockable wall and base cabinets. Provide storage for training materials and AV cart.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Table and chairs, microwave, coffee machine, and refrigerator. Bulletin board with tack surface. Dry-erase board. AV cart with TV, VCR, and DVD for training purposes. Projector and screen. Computers.
<b>Special Requirements</b>	Provide a vision panel in the door.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-3.3 COPY/FILE AREA**

<b>Description/ Usage</b>	This area could be either enclosed and centralized or open and decentralized within the Administrative area. It houses copy machines, printers other than those dedicated to specific individuals, filing cabinets, and storage for general office supplies. In addition, provide sufficient space to act as a workroom for staff to allow for collating documents, presentations, and work projects.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wallboard or vinyl wall covering. <b>Floor.</b> VCT with vinyl or rubber base. <b>Ceiling.</b> ACP
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code and dedicated outlets for copiers and printers.
<b>Lighting</b>	540 lux (50 fc)
<b>Communication</b>	<b>CCTV.</b> Consider providing one outlet. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Provide at least one line for telephone and one additional line, if appropriate, for a facsimile machine. <b>Data.</b> As necessary for network printers. <b>Security.</b> Lockable area for filing or lockable filing cabinets.
<b>Casework</b>	610-mm (24-in.) deep countertop. Lockable base and wall cabinets and storage shelves.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Photocopy machine and other office equipment, as appropriate. Work table for collating documents and other work.
<b>Special Requirements</b>	If this is a dedicated room with a door, provide a vision panel.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-3.4. OPTIONAL STAFF LOCKER AREA**

<b>Description/ Usage</b>	This optional area is used by all staff for the storage of personal articles only. It is not intended as a rest room or shower facility. It is usually part of or adjacent to the Break/Staff Training room (see Table 4-3.2).
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wallboard or vinyl wall covering. <b>Floor.</b> VCT with vinyl or rubber base. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 lux (50 fc).
<b>Communication</b>	<b>CCTV.</b> None required. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> None required.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Half-sized lockers with key/combination locks. <b>Navy</b> requires padlock lockers
<b>Special Requirements</b>	If this is a dedicated room with a door, provide a vision panel in the door.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-3.5 STAFF/VISITORS TOILETS/ JANITOR'S CLOSET**

<b>Description/ Usage</b>	See Table 3-1 for Service-specific toilet requirements. These are separate male and female toilets for use by adult staff and visitors. <b>Navy</b> provides multiple unisex toilets that are shared by Teens, staff, and visitors—see Table 4-9.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Epoxy or enamel painted, moisture-resistant gypsum wall board with a ceramic tile wainscot. Consider full ceramic tile walls. <b>Floor.</b> Ceramic tile. <b>Ceiling.</b> Painted, moisture-resistant gypsum board. None needed for janitor's closet.
<b>Plumbing</b>	Provide wall-hung water closets, wall-hung urinals, and lavatories based on the applicable code for the calculated occupancy. Provide a floor drain.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum. Ventilate to the exterior per code.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 lux (50 fc).
<b>Communication</b>	<b>CCTV.</b> None required. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> None required. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> Provide lockable doors. Provide a vision panel in the door.
<b>Casework</b>	Solid-surface countertop with either underhung or integral sink. Solid composite toilet and urinal partitions. Not necessary for <b>Navy</b> unisex toilets.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Toilet accessories: toilet paper dispensers, paper towel dispenser with integral trash receptacle, robe hooks, grab bars, and soap dispensers. Mirror.
<b>Special Requirements</b>	Provide a Janitor's closet associated with or in proximity of these toilets. This closet includes a mop sink with hot and cold water, a floor drain, and storage for pails, mops, vacuums, and related cleaning supplies and equipment. Include a lockable door, (which can be opened from the inside) with a vision panel. Provide lockable cabinets for cleaning supplies. Provide exhaust ventilation directly to the outside.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	



TABLE 4-3.6. OPTIONAL LAUNDRY

<b>Description/ Usage</b>	This optional Laundry Room may be used for washing sports uniforms or other items associated with the operation and maintenance of a Youth Center. It is sized in one of two modules: a one-washer room or a two-washer room. The <b>Navy</b> normally does not provide laundry without justification.
<b>Min. Ceiling Ht.</b>	2.74 m (9 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Painted water-resistant gypsum wallboard. <b>Floor.</b> VCT or seamless vinyl. <b>Ceiling.</b> None or Acoustical Ceiling Panels. Consider washable and humidity resistant panels. Gypsum wallboard ceiling may also be used.
<b>Plumbing</b>	Hot and cold water to each of the washing machines and one laundry sink. Floor drains. Provide recessed plumbing cabinets for each utility connection to the machines.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum. Provide separate vents to the outside for the dryers. Provide adequate dehumidification as part of the building systems.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3. Note requirement for 1-hour rated construction and 45 min.-rated door with self closer.
<b>Power</b>	Provide outlets per code. Provide power to each washer and dryer.
<b>Lighting</b>	540 lux (50 fc) general ambient lighting.
<b>Communication</b>	<b>CCTV.</b> None required. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide one speaker. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> Provide a vision panel in the door.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Large, high capacity washers and dryers—provide one more dryer than washer (either one washer and two dryers, or two washers and three dryers). Provide for storage of laundry supplies. Consider providing a folding table and hanging rack.
<b>Special Requirements</b>	Provide easy access to rear of dryers to allow easy maintenance and cleaning of vents (see HVAC).
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-4.1. SAC ACTIVITY ROOMS**

<b>Description/ Usage</b>	These rooms accommodate a variety of activities and program options for youth in the SAC program. These rooms may be used for multiple activities such as arts/crafts, hobbies, performing arts/drama, science, and study. The room should be able to accommodate multiple activities at the same time. <b>Note:</b> the Services vary on how they configure these rooms; see floor finishes below for more information.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum and (12 ft.) maximum.
<b>Finishes</b>	<b>Walls.</b> Gypsum wallboard—first 1.22 m (4 ft.) with a protective wall covering wainscot and paint above 1.22 m (4 ft.). <b>Floor.</b> Provide 100% hard surface flooring (prefer vinyl composition tile) and the use of area carpets to allow flexibility of room configuration. Vinyl or rubber base. <b>Air Force</b> requires 50% carpet (in clean area), 50% seamless, impervious, non-skid, non-textured hard-surface flooring (in play area). Vinyl or rubber base. Navy will allow stained concrete for hard-surface flooring. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	Provide one two-compartment sink with hot and cold water. To facilitate arts and crafts activities, consider making this a deep sink. To prevent scalding of youth, limit water temperature to 43 C (110 F). Provide a floor drain.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide duplex outlets at 2.44 m (8 ft.) on center at perimeter walls; provide at least one GFI duplex above countertop; provide duplex outlets for TV (near cable outlet), refrigerator, and microwave.
<b>Lighting</b>	540 lux (50 fc) minimum. Consider providing as much as 750 lux (70 fc) to accommodate arts and craft activities.
<b>Communication (in each room)</b>	<b>CCTV.</b> Provide minimum one outlet. Consider the shape of the room and the panning range of the camera to determine if additional outlets will be necessary. <b>CATV/Internal Video.</b> Provide one outlet. <b>Navy</b> does not support CATV in this space. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Provide one line with internal two-way communication. <b>Data.</b> Consider providing at least two outlets. <b>Security.</b> Do not create corners or “nooks” not visible from other areas of the room.
<b>Casework</b>	Provide lockable base and wall cabinets with adjustable shelves. Solid surface countertops are required where water is present and preferred elsewhere.
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	Tables, chairs, soft seating areas, computers, tack board, and marker board. Consider age-appropriate dimensions for all furniture and fixtures. Consider providing undercounter refrigerator and microwave for life skills training. Provide storage for each youth. Consider individual lockers.
<b>Special Requirements</b>	Provide tackable surfaces on the walls. Include vision panels in interior doors and large windows in the interior walls. Provide exterior doors to outside activity area. <b>Army</b> requires exterior doors to be alarmed. Navy does not require exterior doors. Provide a dedicated storage closet (the space for this has been included in the space program) with hanging rods and/or shelves for each SAC Activity Room.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	Room. Storage Closet.


**TABLE 4-4.2 OUTDOOR ACTIVITY AREA**

<b>Description/ Usage</b>	The Outdoor Activity Area should be designed to meet the requirements for NSACA accreditation. It should be conducive to creative play and must include three zones: hard-surface area, shaded area, and an open area. A certified playground safety inspector should be involved in the design of the Outdoor Activity Area or, at a minimum, the design review.
<b>Min. Ceiling Ht.</b>	N/A
<b>Finishes</b>	<b>Walls.</b> N/A <b>Floor.</b> Hard-surface Areas—cast-in-place concrete over well-compacted sub-grade is generally the most durable, low-maintenance surface material. Consider color additives or surface finishes to improve the appearance and reduce glare. Avoid smooth steel trowel finishes, which can become slippery when wet. Use Zones—Use zones are the areas under and around playground equipment and are defined by ASTM 1487. Use surface materials that meet the shock absorbency criteria recommended by CPSC and ASTM guidelines. Generally, poured-in place resilient safety surfaces are the best option. <b>Ceiling.</b> N/A
<b>Plumbing</b>	Provide a keyed, tamper-resistant hose bibb. Consider providing misters in hot, dry climates—connect to potable water system and provide code-compliant back-flow prevention. Consider providing an irrigation system—consider safety factors such as tripping hazards and the use zones in the design.
<b>HVAC</b>	N/A
<b>Fire Protection</b>	N/A
<b>Power</b>	N/A
<b>Lighting</b>	Provide security lighting on a timer for after-hours activation and on a switch for staff control.
<b>Communication</b>	<b>CCTV.</b> None required. The <b>Army</b> provides outdoor camera coverage. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide speakers for adequate coverage. Speakers to be outdoor type. Consider outdoor noise levels when spacing speakers. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> Do not create blind spots or hidden areas.
<b>Casework</b>	Provide an enclosed, weather-tight, vandal-proof storage shed for outdoor equipment. It should be readily accessible to the major play zones and be architecturally or thematically compatible with the Youth Center, including the roof design. Ventilate the storage shed and provide concrete floors sloped to the door for drainage. Provide visibility into the shed and eliminate blind spots created by the shed for child-abuse concerns. Locks must be selected to operate at the exterior of the door but not allow children to be trapped inside the structure.
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	CPSC-compliant, age-appropriate play equipment. Consider other items such as sports equipment, balls, outdoor tables and chairs, etc.
<b>Special Requirements</b>	Per paragraph 3-7, comply with ADAAG Amendment 15.6 for play areas. It includes technical provisions for ground level and elevated play components, accessible routes, ramps and transfer systems, ground surfaces and soft contained play structures.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-5.1. COMMONS**

<b>Description/ Usage</b>	<p>This is the “heart” of the facility. It is the space that connects the basic components of a youth center such as the activity rooms, computer room, teen room, multipurpose room, and the SAC area. The area should be open and inviting and offer defined areas where smaller groups of youth can gather for such activities as eating, gaming, and group conversations. The Commons should naturally “grow” out of the Lobby. The entrances to the other youth center components should be well defined and act as “portals” to these other areas.</p> <p>The game area, snack bar/eating area, and vending area could be sub areas within the Commons. The <b>Navy</b> normally does not provide a vending area.</p> <p>The Commons should also provide access to the outdoor activity areas but not the Teen Patio.</p>
<b>Min. Ceiling Ht.</b>	2.4 m (8 ft.) minimum with 3.66 m (12 ft.) recommended; up to 5.49 m (18 ft.) may be considered. Consider varying the ceiling heights to provide interest and variety of scale.
<b>Finishes</b>	<p><b>Walls.</b> Painted gypsum wallboard or vinyl wall covering.</p> <p><b>Floor.</b> VCT with vinyl or rubber base. If budget allows, consider stained concrete, terrazzo tile, or some other natural stone tile.</p> <p><b>Ceiling.</b> Along with the height, vary the ceiling finishes to help define the sub areas of the Commons. Consider painted gypsum board or decorative finishes.</p>
<b>Plumbing</b>	None required. Consider providing a drinking fountain.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code. Additional outlets are required in the game area and for the CCTV and CATV system. Also consider other additional outlets for special events held in this space, e.g. like a dance.
<b>Lighting</b>	215 to 430 Lux (20 to 40 ft. candles) general ambient lighting. Provide a variety of other accent and task lighting fixtures to create interest. Provide dedicated fixtures over the pool and gaming tables. Consider providing dimming in some areas.
<b>Communication</b>	<p><b>CCTV.</b> Provide sufficient quantity to allow adequate coverage.</p> <p><b>CATV/Internal Video.</b> One or two outlets.</p> <p><b>PA/Audio.</b> Provide at least one speaker.</p> <p><b>Telephone.</b> None required.</p> <p><b>Data.</b> None required.</p> <p><b>Security.</b> None required.</p>
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Tables, chairs, soft and padded furniture, and television(s). Additional specific furniture requirements are described in the associated areas.
<b>Special Requirements</b>	<p>This space will be greatly enhanced by skylights or clerestory windows. <b>Army</b> requires the exterior doors to be alarmed.</p> <p>A general Youth Program storage closet is programmed and generally provides storage for the Commons and Game Area. It is likely located off of the Commons. If it is a separate room, provide a vision panel in the door.</p>
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	Area. <span style="float: right;">Storage Closet.</span>

**TABLE 4-5.2. GAME AREA**

<b>Description/ Usage</b>	<p>This area is used for table games such as pool, ping pong, foosball, or air hockey. May also be used for board and video games. The Game Area may be a part of the Commons, but some passive separation should be provided to give this area a unique feel.</p>	
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum. Provide at least 3.35 m (11 ft.) above pool tables.	
<b>Finishes</b>	<p><b>Walls.</b> Painted gypsum wallboard or vinyl wall covering. Provide a wainscot if budget permits.</p> <p><b>Floor.</b> Consider varying floor finishes to help define zones within the game area. Consider VCT with vinyl or rubber base and carpet for acoustical protection.</p> <p><b>Ceiling.</b> ACP or painted gypsum board ceiling may be used to help define this area from the Commons.</p>	
<b>Plumbing</b>	None required.	
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.	
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.	
<b>Power</b>	Provide outlets per code and for games that require electricity.	
<b>Lighting</b>	Provide lighting levels appropriate to the individual games.	
<b>Communication</b>	<p><b>CCTV.</b> Provide sufficient quantity to allow adequate coverage.</p> <p><b>CATV/Internal Video.</b> One or two outlets.</p> <p><b>PA/Audio.</b> Provide at least one speaker.</p> <p><b>Telephone.</b> None required.</p> <p><b>Data.</b> None required.</p> <p><b>Security.</b> None required.</p>	
<b>Casework</b>	Consider providing a game cabinet. If provided, consider its location with respect to how it may limit the flexibility of the room.	
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	<p>Table games such as pool, ping pong, foosball, or air hockey.</p> <p>Board games and video games.</p> <p>Chairs, tables, and stools.</p>	
<b>Special Requirements</b>	Consider the acoustics of this area as games can get noisy.	
<b>For use during project execution by the appropriate Service agency</b>		
<b>Occupancy</b>	Staff. Patrons/Youth.	
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>		

**TABLE 4-5.3. SNACK BAR/EATING/VENDING AREA**

<b>Description/ Usage</b>	<p>This area provides the snack and beverage service for the center. It may have various configurations depending on the Service branch, size of facility, and types of programs offered.</p> <p>The snack bar is a service counter that offers a limited menu such as chips, sandwiches, and sodas.</p> <p>Vending supports the snack area with a limited selection of food and beverages. There are usually no more than three vending machines in a youth facility. The <b>Navy</b> normally does not provide a vending area.</p> <p>The eating area is directly adjacent to these functions and is part of the Commons. Seating should be comfortable and easily arranged. Consider two- and four-top tables.</p>
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum with the eating area complying with the requirements of the Commons.
<b>Finishes</b>	<p><b>Walls.</b> Ceramic wall tile or other hard surfaces approved for the snack bar to a minimum of 1.22 m (4 ft.) from finished floor.</p> <p><b>Floor.</b> Provide hard-surface flooring such as VCT, seamless vinyl, or quarry tile or other durable material.</p> <p><b>Ceiling.</b> ACP or painted gypsum board.</p>
<b>Plumbing</b>	Two-compartment countertop sink with hot and cold water supply. Floor drain. If an ice-maker is desired, provide a cold-water connection
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide dedicated outlets for the vending machines and countertop height convenience outlets for microwave and other equipment as required.
<b>Lighting</b>	430 lux (40 fc) general ambient lighting. Provide task lighting. Consider accent fixtures and lighting to provide special ambience.
<b>Communication</b>	<p><b>CCTV.</b> Provide sufficient quantity to allow adequate coverage.</p> <p><b>CATV/Internal Video.</b> None required.</p> <p><b>PA/Audio.</b> Provide a speaker and intercom connection.</p> <p><b>Telephone.</b> None required.</p> <p><b>Data.</b> Provide one outlet.</p> <p><b>Security.</b> None required.</p>
<b>Casework</b>	Countertop with base and wall cabinets at the front opening. Behind the service corridor, provide base and wall cabinets. Countertop at sink area to be solid-surface. Drink rail.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	<p>Under cabinet or counter microwave, refrigerator, freezer, and other small appliances as required. Also provide a menu board.</p> <p>Vending machines.</p> <p>Tables and chairs/stools in the eating area.</p> <p>Consider an icemaker.</p>
<b>Special Requirements</b>	Provide a roll-up door for the snack bar.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	Snack Bar. Eating Area.

**TABLE 4-6. OPTIONAL KITCHEN**

<b>Description/ Usage</b>	This optional area provides a commercial-grade kitchen with an adequate cooking battery and storage for both cold and dry goods. The kitchen is generally used to prepare refreshments for day-to-day consumption by patrons and for special events. There are two size options: a small kitchen generally adequate for preparing ad hoc meals for day-to-day patrons, and a larger kitchen capable of preparing a planned menu for a larger group of people. The <b>Navy</b> normally does not provide a kitchen.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Ceramic wall tile or hard surfaces approved for kitchen to a minimum of 2.44 m (8 ft.) from finished floor. <b>Floor.</b> Quarry tile or other non-slip, durable material. <b>Ceiling.</b> Water and mildew resistant lay-in panels or painted gypsum wall board.
<b>Plumbing</b>	As necessary to support the cooking and cleaning battery designed for the kitchen, including an ice machine. Floor drains must also be provided that comply with all local building and health codes.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum. Provide exhaust.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3. Provide commercial hood and duct system and listed fire suppression system for the range.
<b>Power</b>	Provide outlets per code and dedicated circuits for the specified kitchen equipment.
<b>Lighting</b>	540 Lux (50 ft. candles).
<b>Communication</b>	<b>CCTV.</b> None required. The <b>Army</b> provides camera coverage for both the kitchen and the dry storage area. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Provide one line with internal two-way communication. <b>Data.</b> None required. <b>Security.</b> None required.
<b>Casework</b>	Design the counters and cabinetry with consideration of the overall kitchen design and equipment selection.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Commercial-grade, stainless steel equipment for the preparation, cooking, and cleaning areas, and may include the following: frozen and refrigerated food cabinets, three-compartment dish table, dish wash spray assembly, baking and convection oven, minimum four-burner cook top, storage racks, dishwashers, ice machine, and prep-tables.
<b>Special Requirements</b>	Consider providing a pass-through window to the snack bar.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-7.1. COMPUTER ROOM**

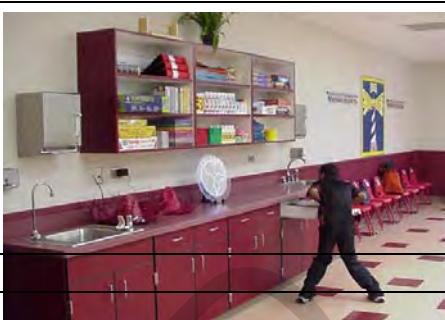
<b>Description/ Usage</b>	<p>This area serves primarily for computer use by SAC, youth, and teens.</p> <p>Consider that computer use must be monitored for appropriate use.</p> <p>Provide direct visual access into this room from public areas to highlight this room as a showcase. In <b>Air Force</b> facilities, the area should also provide an area designated for homework. Air Force prefers this space to be more private for study activities.</p>
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.).
<b>Finishes</b>	<p><b>Walls.</b> Painted gypsum wallboard or vinyl wall covering.</p> <p><b>Floor.</b> Anti-static carpet with vinyl or rubber wall base.</p> <p><b>Ceiling.</b> ACP.</p>
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum with 24/7 operation.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	As necessary to support all the equipment in this room. Locations of outlets should be specific to the layout of the room and may include recessed, flush, floor-mounted junction boxes. Provide an Isolated Ground Panel Board.
<b>Lighting</b>	430 lux (40 fc) general ambient indirect lighting. Provide fixtures designed for use in computer environments to reduce glare and reflections.
<b>Communication</b>	<p><b>CCTV.</b> Provide at least one outlet.</p> <p><b>CATV/Internal Video.</b> Provide one outlet. <b>Navy</b> does not allow CATV in this space.</p> <p><b>PA/Audio.</b> Provide a speaker.</p> <p><b>Telephone.</b> Provide one line with internal two-way communication.</p> <p><b>Data.</b> Provide one outlet for each computer and additional outlets, as required, for other equipment and printers.</p> <p><b>Security.</b> Lockable doors. Provide a vision panel in the door.</p>
<b>Casework</b>	<p>Consider built-in countertops for computers, monitors, printers, etc. If counters are provided, ensure access to power and data outlets.</p> <p>Consider ergonomically correct seating heights for the range of ages that will be using the computers when considering built-in counters.</p>
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	<p>Tables, chairs, computers, printers, tack boards, and marker boards. Consider modular computer workstations.</p> <p>Consider providing lockable storage.</p> <p>Consider ergonomically correct seating heights for the range of ages that will be using the computers when selecting the furniture. Height-adjustable furniture may be required.</p>
<b>Special Requirements</b>	If exterior windows are provided, equip with shading devices.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	<p>Staff.</p> <p>Patrons/Youth.</p>
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	



**TABLE 4-7.2. ARMY HOMEWORK ROOM**

<b>Description/ Usage</b>	<p>Only the <b>Army</b> provides a dedicated homework room. This area provides a private, dedicated space that is conducive to study and completion of homework. In small facilities, the Army combines this with the Computer Room.</p> <p>The Navy and Marine Corps accommodate this function in the activity rooms and the Air Force accommodates this function in the Computer Room.</p>
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.).
<b>Finishes</b>	<p><b>Walls.</b> Painted gypsum wallboard or vinyl wall covering.</p> <p><b>Floor.</b> Carpet with vinyl or rubber base.</p> <p><b>Ceiling.</b> ACP.</p>
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	Provide 540 lux (50 fc) general ambient lighting.
<b>Communication</b>	<p><b>CCTV.</b> Provide at least one outlet.</p> <p><b>CATV/Internal Video.</b> Consider providing one outlet.</p> <p><b>PA/Audio.</b> Provide a speaker.</p> <p><b>Telephone.</b> Provide one line with internal two-way communication.</p> <p><b>Data.</b> Consider providing at least two outlets.</p> <p><b>Security.</b> Provide a vision panel in the door and wall.</p>
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Consider items such as the following: tables, chairs, desks, soft and padded furniture for reading, tack boards, and marker boards.
<b>Special Requirements</b>	If exterior windows are provided, equip with shading devices.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-7.3. GENERAL ACTIVITY ROOM**

<b>Description/ Usage</b>	This shared activity room should be versatile and open to allow for a variety of indoor activities for up to 30 youth. As with all of the activity rooms, it is sized as a basic module to afford flexibility in use. This space allows youth to socialize during group games, hold club meetings, do homework, theater/drama, and receive instruction in topics like arts and crafts and the sciences.	
<b>Min. Ceiling Ht.</b>	3.05 m (10 ft.) clear.	
<b>Finishes</b>	<p><b>Walls.</b> Gypsum wallboard—first 1.22 m (4 ft.) with a protective wall covering wainscot and paint above 1.22 m (4 ft.).</p> <p><b>Floor.</b> Provide durable, low-maintenance hard surface flooring such as VCT (consider seamless or moisture-resistant flooring in wet/crafts areas). Consider area carpets or rugs. Vinyl or rubber base.</p> <p><b>Ceiling.</b> ACP.</p>	
<b>Plumbing</b>	Provide a sink with hot and cold water and a floor drain.	
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.	
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.	
<b>Power</b>	As a minimum, provide duplex outlets at 2.44 m (8 ft.) on-center and provide one duplex outlet at each CATV outlet. Consider additional duplex outlets depending on intended usage. Outlets at the sink must be GFI and comply with all codes.	
<b>Lighting</b>	Provide 540 Lux (50 ft. candles) in game/play areas. Consider providing dimmable lighting and down lights at individual activity areas. Coordinate fixture locations so lights are not obstructed or shadows cast.	
<b>Communication</b>	<p><b>CCTV.</b> Provide at least one outlet.</p> <p><b>CATV/Internal Video.</b> Consider providing one outlet. <b>Navy</b> does not permit CATV in the General Activity Room.</p> <p><b>PA/Audio.</b> Provide a speaker.</p> <p><b>Telephone.</b> Provide one line with internal two-way communication.</p> <p><b>Data.</b> Consider providing at least two outlets.</p> <p><b>Security.</b> Do not create corners or “nooks” that are not visible from other areas of the room. Provide vision panels in interior doors and large windows in the interior walls to corridor and/or Commons.</p>	
<b>Casework</b>	Provide solid-surface countertop with base cabinets. Also consider providing wall storage cabinets for arts and craft supplies and projects.	
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	Consider items such as the following depending on intended usage: tables, chairs, soft and padded furniture, bookshelves, large pillows, area rugs, television, video games, table games, tack board, dry-erase board, easels.	
<b>Special Requirements</b>	<p>Provide tackable surfaces on the walls.</p> <p>Provide exterior doors to outside activity area. <b>Army</b> requires exterior doors to be alarmed. The <b>Navy</b> does not require exterior doors.</p> <p>Provide a dedicated storage closet (included in the space program) with hanging rods and/or shelves.</p> <p>Consider providing a folding room partition. The <b>Navy</b> does not recommend folding partitions.</p>	
<b>For use during project execution by the appropriate Service agency</b>		
<b>Occupancy</b>	Staff. Patrons/Youth.	
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	Room. Storage Closet.	

**TABLE 4-7.4. SPECIAL ACTIVITY ROOM**

<b>Description/ Usage</b>	This shared activity room is designed to be versatile and open to allow for a variety of indoor activities. As with all of the activity rooms, it is sized as a basic module to afford flexibility in use. The primary difference between this room and the General Activity Room is that it is designed for more active functions such as dance, yoga, or martial arts instruction. However, this room is not intended to accommodate team sports.
<b>Min. Ceiling Ht.</b>	3.05 m (10 ft.) clear.
<b>Finishes</b>	<b>Walls.</b> Painted concrete masonry unit (CMU) wall or impact-resistant gypsum wallboard (GWB) or high-density polyethylene (HDPE). <b>Navy and Air Force</b> do not permit CMU in these spaces. <b>Floor.</b> Varies depending on intended functions, but may include hard-wood dance floor, athletic flooring, etc. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum. Consider the active functions with regard to air changes and humidity control.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 lux (50 fc).
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Provide one line with internal two-way communication. <b>Data.</b> Consider providing at least two outlets. <b>Security.</b> Do not create corners or “nooks” that are not visible from other areas of the room.
<b>Casework</b>	Varies depending on intended functions, but may include a segmented, height-adjustable dance (ballet) bar; full-height, shatter-proof mirrors; etc.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Varies depending on intended functions, but may include resilient athletic flooring, martial arts equipment, and other specialized equipment to suit the selected function.
<b>Special Requirements</b>	Include vision panels in interior doors and large windows in the interior walls. Provide exterior doors to outside activity area. <b>Army</b> requires exterior doors to be alarmed. The Navy does not require exterior doors. Provide a dedicated storage closet (included in the space program). Consider acoustical requirements for these active function rooms. Consider providing a folding room partition.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-7.5. OPTIONAL MUSIC/MULTIMEDIA ROOM**

<b>Description/ Usage</b>	This optional room is smaller than the basic activity room module and is used for musical instrument instruction for one to two students or as a video and/or photography lab.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.).
<b>Finishes</b>	<b>Walls.</b> Painted CMU or other material with consideration for acoustical separation from adjacent spaces. <b>Navy</b> and <b>Air Force</b> do not permit CMU in these spaces. <b>Floor.</b> VCT or Carpet with vinyl or rubber base. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 Lux (50 ft. candles).
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> None required. <b>Army</b> requires one line with two-way internal communication. <b>Data.</b> None required. <b>Security.</b> Provide a vision panel in the door.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	May include chairs, music stands, etc.
<b>Special Requirements</b>	Integrate equipment storage spaces with the design of these rooms. Music rooms require acoustical separation from the remainder of the facility. Provide soundproof walls from floor to roof deck. Consider providing an acoustical vestibule at the entrance to this room or, at a minimum, a door with sound gaskets on all edges. Provide a vision panel in the door.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-7.6 OPTIONAL PARENT WAITING AREA**

<b>Description/ Usage</b>	This optional space is in addition to the lobby waiting area and provides a comfortable area for family and friends to view youth participating in the individual programs. This area should have visual access at a minimum into the Special Activity Rooms. <b>Navy</b> does not permit this optional area.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.).
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wallboard or vinyl wall covering. <b>Floor.</b> Carpet with vinyl or rubber base. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 Lux (50 ft. candles).
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> None required.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Soft padded furniture for seating/waiting area, tables, magazine-rack.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-8. SAC/YOUTH/TEEN TOILETS**

<b>Description/ Usage</b>	See Table 3-1 for Service specific toilet requirements. Separate toilets for male and female youth. These toilets are not for use by adults. <b>Navy</b> Youth toilets are shared with the SAC youth, but not the teens while the center is occupied by pre-teens—see Table 4-9 for Navy Teen (unisex) toilet criteria.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Epoxy or enamel painted, moisture-resistant gypsum wallboard with a ceramic tile wainscot. Provide full-height ceramic tile on wet walls; consider full-height ceramic tile on all walls. <b>Floor.</b> Ceramic tile. <b>Ceiling.</b> Painted, moisture-resistant gypsum board.
<b>Plumbing</b>	Provide water closets, urinals, and lavatories based on the applicable code for the calculated occupancy. To prevent scalding of youth, limit water temperature to 43 C (110 F). Provide a floor drain. Provide a keyed hose bibb. Consider providing a drinking fountain outside this room. Provide wall-hung water closets and urinals. The <b>Navy</b> requires floor-mounted urinals.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum. Provide at minimum 4 – 6 air changes per hour. Ventilate to the exterior per code.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 lux (50 fc).
<b>Communication</b>	<b>CCTV.</b> None required. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> None required. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> Ensure entrance can be audibly and visually monitored from Check-in.
<b>Casework</b>	Solid-surface countertop supported at both ends with either underhung or integral sink. Phenolic or solid composite toilet and urinal partitions secured at floor and ceiling.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Toilet accessories: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe hooks, grab bars, and soap dispensers. Mirror.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-9. NAVY TEEN/STAFF/VISITOR TOILETS**

<b>Description/ Usage</b>	Navy provides multiple (as needed) unisex toilets for use by Teens, Staff and visitors. Quantity of toilets is based on the applicable code for the calculated occupancy. The other Services do not use unisex toilets. See Table 3-1 for Service-specific toilet requirements.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.) minimum.
<b>Finishes</b>	<b>Walls.</b> Epoxy or enamel painted, moisture-resistant gypsum wallboard with a ceramic tile wainscot. Provide full-height ceramic tile on wet walls; consider full-height ceramic tile on all walls. <b>Floor.</b> Ceramic tile. <b>Ceiling.</b> Painted, moisture-resistant gypsum board.
<b>Plumbing</b>	One wall-hung water closet and lavatory. Provide a floor drain.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum. Ventilate to the exterior per code.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 lux (50 fc).
<b>Communication</b>	<b>CCTV.</b> None required. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> None required. <b>Telephone.</b> None required. <b>Data.</b> None required. <b>Security.</b> Lockable door.
<b>Casework</b>	Solid-surface countertop supported at both ends with either underhung or integral sink. A wall-hung lavatory is also acceptable. Wall-hung water closets.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Toilet accessories: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe hooks, grab bars, and soap dispensers. Mirror.
<b>Special Requirements</b>	This room must be ADA-compliant.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-10.1. TEEN ROOM/LOUNGE**

<b>Description/ Usage</b>	This space allows teens to socialize during group games as well as have access to more independent activities like computers or watching television in a home-like environment. Consider an irregular shaped room that can be zoned for different activities. However, do not create blind spots. This room must feel private but still connected to the rest of the center. Consider visual access from the Check-in. <b>Navy</b> requires visual access from Check-in.
<b>Min. Ceiling Ht.</b>	2.4 m (8 ft.) minimum with 3.66 m (12 ft.) recommended. Consider varying the ceiling heights and finishes to provide interest and a variety of scale. If a pool table is included, provide at least 3.35 m (11 ft.) over the table.
<b>Finishes</b>	<b>Walls.</b> Gypsum wallboard—first 1.22 m (4 ft.) with a protective wall covering wainscot and paint above 1.22 m (4 ft.). <b>Floor.</b> VCT, seamless vinyl, or carpet with vinyl or rubber base. Also see Special Requirements below. <b>Ceiling.</b> Primarily ACP with painted gypsum board used to help define other areas.
<b>Plumbing</b>	None required.
<b>HVAC</b>	20 C (68 F) minimum, 26 C (78 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	As a minimum, provide duplex outlets at 2.44 m (8 ft.) on-center. An area within the Teen Room/Lounge should provide duplex outlets at 1.22 m (4 ft.) on-center for video games and provide one duplex outlet at each TV cable outlet. Also provide outlets at counter height for portable electronic devices such as CD players and laptops. Provide power at data outlet locations.
<b>Lighting</b>	215 to 430 lux (20 to 40 fc) general ambient lighting. Provide a variety of accent lighting fixtures to create interest. Consider providing dimming in some areas.
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet. <b>CATV/Internal Video.</b> Provide at least one outlet. <b>PA/Audio.</b> Provide a speaker. <b>Telephone.</b> Provide one line with internal two-way communication. <b>Data.</b> Provide at least two outlets. <b>Security.</b> Provide vision panels on all doors. Do not create corners or “nooks” that are not visible from other areas of the room.
<b>Casework</b>	Consider counter and base cabinets.
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	Tables, chairs, stools, soft and padded furniture, lamps, bookshelves, coffee table, television, stereo, CD player, computers, video games, table games (foosball, pool), and tack board.
<b>Special Requirements</b>	Provide tackable surfaces on the walls. Consider large windows in the interior walls, but avoid putting the Teens “on display” to other patrons. Interior windows work best in walls common with staff areas for supervision. Provide lockable exterior doors to patio. <b>Navy</b> requires that exterior doors are visible from Check-in. Provide a dedicated storage closet (included in the space program) with hanging rods and/or shelves. For <b>Navy</b> facilities, provide an eating area with hard-surfaced floor (consider stained concrete) and two- and four-top tables and chairs. Consider providing a separate pass-through from the Snack Bar into the Teen Room/Lounge.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	





**TABLE 4-11.1 MULTIPURPOSE ROOM**

<b>Description/ Usage</b>	This room serves as a large activity room and will be used for skill building, sports, fitness activities, gymnastics, basketball, volleyball, theatrical plays, dances, in-line/roller skating, and other large area activities.
<b>Min. Ceiling Ht.</b>	7.62 m (25 ft.) clear height below structure and lights.
<b>Finishes</b>	<b>Walls.</b> CMU with glazed wall coating or heavy-duty epoxy up to 3.66 m (12 ft.). Above 3.66 m (12 ft.), use semi-gloss enamel and consider acoustic panels. <b>Floor.</b> Multipurpose, resilient, athletic flooring. <b>Ceiling.</b> Exposed, painted structure. Provide acoustical banners.
<b>Plumbing</b>	None required. Consider access to drinking fountains and bathrooms.
<b>HVAC</b>	18 C (65 F) minimum, 26 C (78 F) maximum; 15 cfm/person outside air, with CO <sub>2</sub> sensors or other type of energy conservation system; 10 air changes/hour.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3. Provide protection for sprinkler heads, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or raise it above 1.83 m (6 ft.) for safety considerations. Provide 1-hour fire separation from core areas of building.
<b>Power</b>	Provide outlets per code. Provide power for a scoreboard and a high, wall-mounted clock. Consider power requirements for other activities like stage sound and lighting.
<b>Lighting</b>	Metal halide, 540 lux (50 fc), with perimeter compact fluorescents multi-level switched for non-sport activities. Provide keyed light switches. Provide protection for all fixtures. Do not locate fixtures directly above basketball backboards.
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet in each divided space. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide speakers with proper spacing. <b>Telephone.</b> Provide one line with internal two-way communication. <b>Data.</b> None required. <b>Security.</b> Provide large, shatter-resistant vision panels in the doors.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equip. (FF&amp;E)</b>	Protective wall mats, moveable stage, stage seating, scoring table and chairs.
<b>Special Requirements</b>	Provide 3.05 m (10 ft.) minimum safety distance between “out of bounds” line and nearest walls and bleachers. Acoustical control is required through the use of sound baffles, banners, acoustical materials, etc. <b>Built-in equipment:</b> Provide retractable basketball nets/backboards at two per half court or six per full court. Nets and backboards should be adjustable from 2.44 m to 3.05 m (8 to 10 ft.) for two opposite goals on the half court. Consider floor inserts for volleyball and gymnastics standards. Motor-operated, vertical-acting divider curtain with manual override. Electronic scoreboard—provide control for scoreboard and divider curtain on side of room opposite of bleachers (if bleachers are provided). Bleachers. Provide game lines on flooring for full- and half-court basketball and volleyball. Provide exterior double doors with removable latch post for equipment access.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-11.2 MULTIPURPOSE ROOM STORAGE/GEAR ISSUE**

<b>Description/ Usage</b>	This area is used to store athletic equipment and tables and chairs for the center. It should be divided into two areas: one for sports equipment and one for tables and chairs. The sports equipment area should include space for the equipment monitor's desk.
<b>Min. Ceiling Ht.</b>	2.44 m (8 ft.). 3.5 m (10 ft.) is desirable.
<b>Finishes</b>	<b>Walls.</b> CMU or painted gypsum wall board. <b>Floor.</b> Sealed concrete. <b>Ceiling.</b> None required.
<b>Plumbing</b>	None required. Consider providing a connection for an icemaker and a floor drain.
<b>HVAC</b>	18 C (65 F) minimum, 29 C (85 F) maximum.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3.
<b>Power</b>	Provide outlets per code. Provide two duplex outlets by the desk.
<b>Lighting</b>	215 lux (20 fc).
<b>Communication</b>	<b>CCTV.</b> Provide at least one outlet. <b>CATV/Internal Video.</b> None required. <b>PA/Audio.</b> Provide speakers with proper spacing. <b>Telephone.</b> Provide one line with internal two-way communication. <b>Data.</b> None required. <b>Security.</b> None required.
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	Shelving and storage cabinets, one desk, one chair, and one file cabinet.
<b>Special Requirements</b>	Area must be accessible from both interior and exterior through lockable double doors with kick-plates. Consider providing "dutch" doors at interior for equipment issue. <b>Navy</b> does not permit dutch doors. Provide ramp at exterior door to facilitate equipment issue/delivery, if necessary. The area must be at least 2.44 m (8 ft.) wide.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Patrons/Youth.
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

**TABLE 4-11.3 SMALL MULTIPURPOSE ROOM**

<b>Description/ Usage</b>	<p>This space is optional for the Army and Navy and provides an active function room slotting in size between the Special Activity Room and the smallest Multipurpose Room option. It also generally has less sophisticated equipment than the Multipurpose Room.</p> <p>It is used for a variety of activities including four-square, dances, martial arts, movies, and dance classes.</p>
<b>Min. Ceiling Ht.</b>	3.66 m (12 ft.). Generally, 4.88 m (16 ft.) is the maximum ceiling height, but consider the intended usage of the room.
<b>Finishes</b>	<p><b>Walls.</b> Impact-resistant painted gypsum wallboard.</p> <p><b>Floor.</b> VCT or consider synthetic athletic flooring or rubber tile.</p> <p><b>Ceiling.</b> Exposed, painted structure or ACP with hold-down clips.</p>
<b>Plumbing</b>	None required.
<b>HVAC</b>	18 C (65 F) minimum, 26 C (78 F) maximum; 15 cfm/person outside air, with CO <sub>2</sub> sensors or other type of energy conservation system; 10 air changes/hour.
<b>Fire Protection</b>	Provide system per paragraph 3-5.3. Provide protection for sprinkler heads, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or raise it above 1.83 m (6 ft.) for safety considerations. Provide 1-hour fire separation from core areas of building.
<b>Power</b>	Provide outlets per code.
<b>Lighting</b>	540 lux (50 fc), provide dual-level lighting for games and dances, fluorescent fixtures, multi-level switched, and dimmable compact fluorescent for multiple light levels. Provide protection for all fixtures.
<b>Communication</b>	<p><b>CCTV.</b> Provide at least one outlet.</p> <p><b>CATV/Internal Video.</b> None required.</p> <p><b>PA/Audio.</b> None required.</p> <p><b>Telephone.</b> Provide one line with internal two-way communication.</p> <p><b>Data.</b> None required.</p> <p><b>Security.</b> None required.</p>
<b>Casework</b>	None required.
<b>Furnishings Fixtures &amp; Equipment (FF&amp;E)</b>	None required.
<b>Special Requirements</b>	<p>Provide at least one pair of doors to the interior of the building.</p> <p>Translucent wall panels or windows for natural lighting are desirable—provide suitable protection to windows from ball impacts.</p> <p>Provide good visual access into the room from public areas of the facility.</p> <p><b>Acoustics:</b> Anticipated peak noise level is 70-80 dBA. Preferred sound criterion is 35-45 dBA. Maximum reverberation time is 1.5 seconds. STC 55 minimum at perimeter walls and ceiling.</p>
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	<p>Staff.</p> <p>Patrons/Youth.</p>
<b>Min. net m<sup>2</sup> (ft<sup>2</sup>)</b>	

## APPENDIX A REFERENCES

### GOVERNMENT PUBLICATIONS:

- 29 CFR 1910.1048, *Formaldehyde Standard*, U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Ave, NW, Washington, DC, 20210, <http://www.osha.gov/>
- Air Force Interior Design Guide*, U.S. Air Force Center for Environmental Excellence, HQ AFCEE, 3300 Sidney Brooks, Brooks City-Base, TX, 78235-5112, <http://www.afcee.brooks.af.mil/afceehome.asp>
- Air Force Sustainable Facilities Guide*, U.S. Air Force Center for Environmental Excellence, HQ AFCEE, 3300 Sidney Brooks, Brooks City-Base, TX, 78235-5112, <http://www.afcee.brooks.af.mil/afceehome.asp>
- Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities* (ADAAG) (also 28 CFR Part 36), United States Access Board, 1331 F ST. NW, Suite 1000, Washington, DC, 20004-1111, (202)272-0080, TTY (202)272-0082, <http://www.access-board.gov/adaag/html/addag.htm>
- Architectural Barriers Act* (Public Law 90-780) of 1968, National Archives and Records Administration, 700 Pennsylvania Ave, NW, Washington, DC, 20408, (866)325-7208,
- DG 1110-3-122, *Interior Design Guide*, U.S. Army Corps of Engineers, ATTN: CEIM-IM-PD, 2803 52nd Ave, Hyattsville, MD 20781-1102, <http://www.usace.army.mil/usace-docs>
- DOD Instruction 6060.3, *School Age Care (SAC) Program*, Department of Defense, Washington Headquarters Service, Executive Services and Communication Directorate, Directives and Records Division, <http://www.dtic.mil/whs/directives>
- DOD Instruction 6060.4, *Youth Programs (YPS)*, Department of Defense, Washington Headquarters Service, Executive Services and Communication Directorate, Directives and Records Division, <http://www.dtic.mil/whs/directives>
- DOD School-age Program Inspection Checklist*, Department of Defense, Washington Headquarters Service, Executive Services and Communication Directorate, Directives and Records Division, <http://www.dtic.mil/whs/directives>
- Electric Current Abroad (1998), U.S. Department of Commerce, International Trade Administration, 14th & Constitution Ave, NW, Washington, DC, 20230, <http://www.ita.doc.gov/>
- ETL 00-06, *Air Force Carpet Standard*, U.S. Air Force Civil Engineer Support Agency, HQ AFCEA/CES, 139 Barnes Drive, Suite 1, Tyndall AFB, FL, 32403-5319, <http://www.afcesa.af.mil/>

*Handbook for Public Playground Safety*, Consumer Product Safety Commission, 4330 East-West Highway, Bethesda MD 20814-4408, <http://cpsc.gov/>

NAVFACINST 11010.45D, *Comprehensive Regional Planning Instruction*, Naval Facilities Engineering Command, Washington Navy Yard, Washington, D.C., <http://www.navfac.navy.mil/>

OPNAVINST 11010.20F, *Facilities Projects Manual*, SECNAV/OPNAV Directives Control Office, N09B15, Washington Navy Yard, Bldg 36, 720 Kennedy Street, SE, RM 203, Washington Navy Yard, DC 20374, <http://neds.nebt.daps.mil/isndirs.htm>

P-80, *Facility Planning*, Naval Facilities Engineering Command - Atlantic, 6506 Hampton Blvd, Norfolk, VA 23505-1278, <http://www.navfac.navy.mil/>

UFC 1-200-01, *General Building Requirements*

UFC 3-120--01, *Air Force Sign Standard*

UFC 3-400-01, *Energy Conservation*

UFC 3-400-02, *Engineering Weather Data*

UFC 3-410-02N, *Heating, Ventilating, Air Conditioning, and Dehumidifying Systems*, Naval Facilities Engineering Command

UFC 3-420-01, *Plumbing Systems*

UFC 3-520-01, *Interior Electrical Systems*

UFC 3-530-01, *Interior and Exterior Lighting and Controls*

UFC 3-580-10, *Navy and Marine Corps Intranet (NMCI) Standard Construction Practices*

UFC 3-600-01, *Engineering Fire Protection*

UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*

UFC 4-740-14, *Child Development Centers*

*Uniform Federal Accessibility Standards (UFAS)*, (also FED-STD-795), United States Access Board, 1331 F ST. NW, Suite 1000, Washington, DC, 20004-1111, (202)272-0080, TTY (202)272-0082, <http://www.access-board.gov/ifas/ufas.html/ufas.htm>

*USAF Landscape Guide*, U.S. Air Force Center for Environmental Excellence, HQ AFCEE, 3300 Sidney Brooks, Brooks City-Base, TX, 78235-5112, <http://www.afcee.brooks.af.mil/afceehome.asp>

USC Title 10, Section 1794, *Military Child Care*, National Archives and Records Administration, 700 Pennsylvania Ave, NW, Washington, DC, 20408, (866)325-7208,

WHOLE BUILDING DESIGN GUIDE (<http://www.wbdg.org/>), National Institute of Building Sciences, 1090 Vermont Ave, NW, Suite 700, Washington, DC, 20005-4905, <http://www.nibs.org/>

*Youth and School-age Care (SAC) Standards and Metrics Document*, Navy Personnel Command, PERS-659, 5720 Integrity Drive, Millington, TN, 38055, <http://www.mwr.navy.mil/>

*Youth Center Definitive Standard Design*, U.S. Army Corps of Engineers, ATTN: CEIM-IM-PD, 2803 52nd Ave, Hyattsville, MD 20781-1102, <http://www.usace.army.mil/usace-docs>

#### **NON-GOVERNMENT PUBLICATIONS:**

*AWI Quality Standards Illustrated*, Current Edition, Architectural Woodwork Institute, 1952 Isaac Newton Square West, Reston, VA, 20190, (703)733-0600, <http://www.awinet.org/>

ASTM-F-1487, *Standard Consumer Safety Performance Specification for Playground Equipment for Public Use*, ASTM International, 100 Bar Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959, (610)832-9585, <http://www.astm.org/>

BOYS AND GIRLS CLUBS OF AMERICA WEBSITE (<http://www.bgca.org/>), Boys and girls Clubs of America, 1230 W. Peachtree St. NW, Atlanta, GA, 30309, (404)487-5700

CARPET AND RUG INSTITUTE WEBSITE (<http://www.carpet-rug.com/>), The Carpet and Rug Institute, 310 Holiday Ave, Dalton, GA, 30720, (706)278-3176

*International Mechanical Code*, International Code Council, Headquarters, 5203 Leesburg Pike, Suite 600, Falls Church, VA, 22041, <http://www.iccsafe.org/>

MARYLAND POISON CENTER WEBSITE (<http://www.mdpoison.com/>), Maryland Poison Center, University of Maryland School of Pharmacy, 20 N. Pine St., Baltimore, MD, 21201, (410)706-2151, <http://www.pharmacy.umaryland.edu/>

*NAA Standards for Quality School-age Care*, National AfterSchool Association (NAA), 1137 Washington St., Dorchester, MA, 02124, (617)298-5012, <http://www.naaweb.org/>

NFPA 70, *National Electric Code*, 2002, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA, 02169-7471, (617)770-3000, <http://www.nfpa.org/>

NFPA 72, *National Fire Alarm Code*, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA, 02169-7471, (617)770-3000, <http://www.nfpa.org/>

NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA, 02169-7471, (617)770-3000, <http://www.nfpa.org/>

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA, 02169-7471, (617)770-3000, <http://www.nfpa.org/>

NFPA 101, *Life Safety Code*, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA, 02169-7471, (617)770-3000, <http://www.nfpa.org/>

*Park, Recreation, Open Space and Greenway Guidelines*, National Recreation and Park Association, 22377 Belmont Ridge Road, Ashburn, VA 230148-4501, (703)858-0784, <http://www.nrpa.org/>

LEED™ *Green Building Rating System*, The United States Green Building Council, 1015 18th St, NW, Suite 805, Washington, DC, 20036, <http://www.usgbc.org/>

CANCELLED



APPENDIX B SPACE PROGRAM DATA

B-1 SPACE PROGRAM DATA.

The data in Figures B-1 through B-5 are the bases for the Space Program Interactive Spreadsheet discussed in paragraph 2-2 and are provided here for reference only. Do not use these tables to program a Youth Center. The Interactive Spreadsheet combines this data in the correct manner and incorporates the necessary Service Exceptions—which may not be apparent from these Figures.

FIGURE B-1. SAC SPACE PROGRAM DATA

Functional Component	Space Allocation Standard			Single Room Standard									
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>							
<b>Building Army/Air Force/Marine Corps SAC</b>													
Activity Room	125.42	1,350	per room (2 ratio groups)	1	125.42	1350							
Storage	5.57	60	per room	1	5.57	60							
SAC toilets	4.18	45	per water closet/lav.	2	8.36	90							
<b>Total Building Net Area &amp; Support</b>					<b>139.35</b>	<b>1,500.00</b>							
<b>Circulation and Mechanical Building Factor @</b>				<b>14%</b>	<b>19.51</b>	<b>210</b>							
<b>Total Building Gross Area &amp; Support</b>					<b>158.86</b>	<b>1,710</b>							
<b>Building Navy SAC</b>													
Activity Room	97.55	1,050	per room (2 ratio groups)	1	97.55	1050							
Storage	2.79	30	per room	1	2.79	30							
SAC toilets			per water closet/lav.										
<b>Total Building Net Area &amp; Support</b>					<b>100.33</b>	<b>1,080.00</b>							
<b>Circulation and Mechanical Building Factor @</b>				<b>14%</b>	<b>14.05</b>	<b>151</b>							
<b>Total Building Gross Area &amp; Support</b>					<b>114.38</b>	<b>1,231</b>							
							<b>One OAA</b>	<b>Two OAA</b>	<b>Three OAA</b>				
<b>Site</b>	Outdoor Activity Area (OAA)	348.38	3,750	per OAA	1	348.38	3,750	2	696.75	7,500	3	1,045.13	11,250
	Storage for Outdoor Equip.	7.43	80	per room	1	7.43	80	1	7.43	80	2	14.86	160
<b>Total Site Support</b>					<b>355.81</b>	<b>3,830.00</b>		<b>704.18</b>	<b>7,580.00</b>		<b>1,059.99</b>	<b>11,410.00</b>	

FIGURE B-2.1. YOUTH SPACE PROGRAM DATA A (up to 90)

Functional Component	Space Allocation Standard			Up to 60 Youth			61 to 90 Youth			
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>	
Commons	sum of below + 10% factor				59.88	644.60		108.32	1166.00	
Game Area	32.52	350	per rec unit <sup>3</sup>	1	32.52	350	2	65.03	700	
Snack Bar					7.43	80		9.29	100	
Eating Area	1.11	12	per youth	8	8.92	96	15	16.72	180	
Snack Bar storage	1.86	20	per storage area	1	1.86	20	2	3.72	40	
Vending Area <sup>1</sup>	1.86	20	per machine	2	3.72	40	2	3.72	40	
<b>Shared Spaces</b>										
General or Special Activity Room	97.55	1,050	per room	1	97.55	1050	2	195.09	2,100	
Activity Room Storage	5.57	60	per room	1	5.57	60	2	11.15	120	
Activity Room Storage (Navy)	2.79	30	per room	1	2.79	30	2	5.57	60	
Homework/Computer Room <sup>2</sup>	48.77	525	per room	1	48.77	525	1	48.77	525	
Youth Toilets	4.18	45	per water closet/lav.	2	8.36	90	4	16.72	180	
General Storage	7.43	80	per storage room	1	7.43	80	1	7.43	80	
<b>Total Building Net Area &amp; Support</b>					<b>230</b>	<b>2,480</b>		<b>393</b>	<b>4,231</b>	
<b>Circulation and Mechanical Building Factor @</b>				<b>14%</b>	<b>32.25</b>	<b>347</b>	<b>14%</b>	<b>55.03</b>	<b>592</b>	
<b>Total Building Gross Area &amp; Support</b>					<b>262.60</b>	<b>2,827</b>		<b>448.09</b>	<b>4,823</b>	

<sup>1</sup> Navy does not permit Vending.

<sup>2</sup> Navy and Marine Corps provide a Computer Room and accommodate the homework function in the Activity Rooms. The Air Force combines the Homework function with the Computer Room. The Army provides a separate, dedicated Homework Room in the 61 to 90 Youth category.

<sup>3</sup> "Rec. Unit" equals the area of a standard gaming table (such a pool or foosball) and space around it that is required to play.

FIGURE B-2.2. YOUTH SPACE PROGRAM DATA B (91 to 155)

Functional Component	Space Allocation Standard			91 to 135 Youth			136 to 155 Youth		
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>
Commons			sum of below + 10% factor		164.53	1771.00		220.73	2376.00
Game Area	32.52	350	per rec unit <sup>3</sup>	3	97.55	1,050	4	130.06	1,400
Snack Bar					9.29	100		11.15	120
Eating Area	1.11	12	per youth	30	33.44	360	45	50.17	540
Snack Bar storage	1.86	20	per storage area	3	5.57	60	3	5.57	60
Vending Area <sup>1</sup>	1.86	20	per machine	2	3.72	40	2	3.72	40
Shared Spaces									
General or Special Activity Room	97.55	1,050	per room	3	292.64	3,150	4	390.18	4,200
Activity Room Storage	5.57	60	per room	3	16.72	180	4	22.30	240
Activity Room Storage (Navy)	2.79	30	per room	3	8.36	90	4	11.15	120
Homework/Computer Room <sup>2</sup>	48.77	525	per room	2	97.55	1,050	2	97.55	1,050
Youth Toilets	4.18	45	per water closet/lav.	6	25.08	270	8	33.44	360
General Storage	7.43	80	per storage room	2	14.86	160	2	14.86	160
<b>Total Building Net Area &amp; Support</b>					<b>620</b>	<b>6,671</b>		<b>790</b>	<b>8,506</b>
<b>Circulation and Mechanical Building Factor @</b>				<b>14%</b>	<b>86.76</b>	<b>934</b>	<b>14%</b>	<b>110.63</b>	<b>1,191</b>
<b>Total Building Gross Area &amp; Support</b>					<b>706.50</b>	<b>7,605</b>		<b>900.84</b>	<b>9,697</b>

<sup>1</sup> Navy does not permit Vending.

<sup>2</sup> Navy and Marine Corps provide a Computer Room and accommodate the homework function in the Activity Rooms. The Air Force combines the Homework function with the Computer Room. The Army provides a separate, dedicated Homework Room.

<sup>3</sup> "Rec. Unit" equals the area of a standard gaming table (such a pool or foosball) and space around it that is required to play.

FIGURE B-3.1. TEEN SPACE PROGRAM DATA A (up to 30)

Functional Component	Space Allocation Standard			Up to 15 Teens			16 to 30 Teens		
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>
Teen Room/Lounge	3.25	35	per teen	15	48.77	525	30	97.55	1,050
Storage	3.72	40	per room	1	3.72	40	1	3.72	40
<b>Total Building Net Area &amp; Support</b>					<b>52.49</b>	<b>565.00</b>		<b>101.26</b>	<b>1,090.00</b>
<b>Circulation and Mechanical Building Factor @</b>				<b>14%</b>	<b>7.35</b>	<b>79</b>	<b>14%</b>	<b>14.18</b>	<b>153</b>
<b>Total Building Gross Area &amp; Support</b>					<b>59.84</b>	<b>644</b>		<b>115.44</b>	<b>1,243</b>
Teen Patio	185.80	2,000	per Patio	1	185.80	2,000	1	185.80	2,000
<b>Total Site Support</b>					<b>185.80</b>	<b>2,000.00</b>		<b>185.80</b>	<b>2,000.00</b>

FIGURE B-3.2. TEEN SPACE PROGRAM DATA B (31 to 60)

Functional Component	Space Allocation Standard			31 to 45 Teens			46 to 60 Teens		
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>
Teen Room/Lounge	3.25	35	per teen	45	146.32	1,575	60	195.09	2,100
Storage	3.72	40	per room	2	7.43	80	2	7.43	80
<b>Total Building Net Area &amp; Support</b>					<b>153.75</b>	<b>1,655.00</b>		<b>202.52</b>	<b>2,180.00</b>
<b>Circulation and Mechanical Building Factor @</b>				<b>14%</b>	<b>21.52</b>	<b>232</b>	<b>14%</b>	<b>28.35</b>	<b>305</b>
<b>Total Building Gross Area &amp; Support</b>					<b>175.27</b>	<b>1,887</b>		<b>230.88</b>	<b>2,485</b>
Teen Patio	185.80	2,000	per Patio	2	371.60	4,000	2	371.60	4,000
<b>Total Site Support</b>					<b>371.60</b>	<b>4,000.00</b>		<b>371.60</b>	<b>4,000.00</b>

FIGURE B-4.1. ADMINISTRATIVE SPACE PROGRAM DATA A (small and medium)

Functional Component	Space Allocation Standard			Small Admin			Medium Admin			
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>	
Building	Lobby	1.39	15	per person (per code)	15	20.90	225	30	41.81	450
	Control/Check-in					6.97	75		11.61	125
	Break/Staff Training Room	2.04	22	per staff member	10	20.44	220	16	32.70	352
	Copy/file Room	16.26	175	per room	1	16.26	175	1	16.26	175
	Storage	5.57	60	per storage room	1	5.57	60	1	5.57	60
	Communications Room	5.57	60	per room	1	5.57	60	1	5.57	60
	Staff/Vis. Toilets (M/F) <sup>1</sup> /Jan. closet	4.46	48	per room	2	8.92	96	2	8.92	96
	<b>Total Building Net Area &amp; Support</b>					<b>84.63</b>	<b>911.00</b>		<b>122.44</b>	<b>1,318.00</b>
<b>Circulation and Mechanical Building Factor @</b>				<b>22%</b>	<b>18.62</b>	<b>200</b>	<b>22%</b>	<b>26.94</b>	<b>290</b>	
<b>Total Building Gross Area &amp; Support</b>					<b>103.25</b>	<b>1,111</b>		<b>149.38</b>	<b>1,608</b>	
Site	Staff Parking	41.81	450	per space	12	501.66	5400	16	668.88	7,200
	Patron Parking	41.81	450	per space	8	334.44	3600	14	585.27	6,300
	Pick-up/Drop-off/Bus Lane	74.32	800	per area	1	74.32	800	1	74.32	800
	Service Drive/Trash	69.68	750	per area	1	69.68	750	1	69.68	750
	Bicycle Racks	14.86	160	per 10-bike Rack	1	14.86	160	1	14.86	160
	<b>Total Site Support</b>					<b>994.96</b>	<b>10,710</b>		<b>1,413.01</b>	<b>15,210</b>

Note: Offices and workstations are not shown here; they are calculated on the Space Program Interactive Spreadsheet discussed in Section 2-2

<sup>1</sup> Navy provides unisex toilets for staff, visitors, and teens.

FIGURE B-4.2. ADMINISTRATIVE SPACE PROGRAM DATA B (large and ex. large)

Functional Component	Space Allocation Standard			Large Admin			Extra Large Admin			
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>	
Building	Lobby	1.39	15	per person (per code)	40	55.74	600	50	69.68	750
	Control/Check-in					16.26	175		18.58	200
	Break/Staff Training Room	2.04	22	per staff member	20	40.88	440	24	49.05	528
	Copy/file Room	16.26	175	per room	1	16.26	175	1	16.26	175
	Storage	5.57	60	per storage room	1	5.57	60	1	5.57	60
	Communications Room	5.57	60	per room	1	5.57	60	1	5.57	60
	Staff/Vis. Toilets (M/F) <sup>1</sup> /Jan. closet	4.46	48	per room	2	8.92	96	2	8.92	96
	<b>Total Building Net Area &amp; Support</b>					<b>149.20</b>	<b>1,606.00</b>		<b>173.63</b>	<b>1,869.00</b>
<b>Circulation and Mechanical Building Factor @</b>				<b>22%</b>	<b>32.82</b>	<b>353</b>	<b>22%</b>	<b>38.20</b>	<b>411</b>	
<b>Total Building Gross Area &amp; Support</b>					<b>182.02</b>	<b>1,959</b>		<b>211.83</b>	<b>2,280</b>	
Site	Staff Parking	41.81	450	per space	20	836.10	9,000	26	1,086.93	11,700
	Patron Parking	41.81	450	per space	20	836.10	9,000	26	1,086.93	11,700
	Pick-up/Drop-off/Bus Lane	74.32	800	per area	1	74.32	800	1	74.32	800
	Service Drive/Trash	69.68	750	per area	2	139.35	1,500	2	139.35	1,500
	Bicycle Racks	14.86	160	per 10-bike Rack	2	29.73	320	2	29.73	320
	<b>Total Site Support</b>					<b>1,915.60</b>	<b>20,620</b>		<b>2,417.26</b>	<b>26,020</b>

Note: Offices and workstations are not shown here; they are calculated on the Space Program Interactive Spreadsheet discussed in Section 2-2

<sup>1</sup> Navy provides unisex toilets for staff, visitors, and teens.

FIGURE B-5.1. OTHER OR OPTIONAL SPACE PROGRAM DATA A

Functional Component	Space Allocation Standard			Half Court w/o Bleachers			Half Court w/ Bleachers		
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>
Multipurpose Room <sup>1</sup>					355.62	3828		416.94	4,488
Equipment Storage	14.86	160	per storage room	1	14.86	160	1	14.86	160
Circulation and Mechanical Building Factor @				8%	30	319		35	372
<b>Multipurpose Rm Subtotal</b>					<b>400.12</b>	<b>4307.04</b>		<b>466.34</b>	<b>5019.84</b>
					<b>Small Kitchen</b>		<b>Large Kitchen</b>		
Kitchen <sup>2</sup>					11.15	120		41.81	450
Kitchen Storage (dry and cold)					7.43	80		16.72	180
Circulation and Mechanical Building Factor @				20%	4	40		12	126
<b>Kitchen Subtotal</b>					<b>22.30</b>	<b>240.00</b>		<b>70.23</b>	<b>756.00</b>
					<b>Other/Optional Spaces</b>		<b>Other/Optional Spaces</b>		
Laundry <sup>2</sup> (incl. 20% bldg fac)	10.22	110	per room	1	10.22	70	1	10.22	70
Parent Waiting <sup>2</sup> (incl. 20% bldg fac)	1.67	18	per person	10	16.72	180	10	16.72	180
Music/MM Room (incl. 20% bldg fac)	6.69	72	per room	1	6.69	72	2	13.38	144
Youth Outdoor Activity Area	11.61	125	per child	30	348.38	3750			
Storage	7.43	80	per storage room	1	7.43	80			
<b>Youth Outdoor Activity Subtotal</b>					<b>355.81</b>	<b>3830.00</b>			
Open Outdoor Area	10,730	115,500	per area	1	10729.95	115500			

<sup>1</sup> In addition to the other Multipurpose Room size options, the Army and Navy offer an option for a Small Multipurpose Room at 232.25 m<sup>2</sup> (2500 ft.<sup>2</sup>) plus 9.29 m<sup>2</sup> (100 ft.<sup>2</sup>) of storage space.

<sup>2</sup> Navy does not normally permit the Kitchen, Laundry, or Additional Parent Waiting options.

FIGURE B-5.2. OTHER OR OPTIONAL SPACE PROGRAM DATA B


Functional Component	Space Allocation Standard			Full Court w/ Bleachers			NCAA Full Court w/ Bleach		
	m <sup>2</sup>	ft. <sup>2</sup>	Standard	No.	m <sup>2</sup>	ft. <sup>2</sup>	No.	m <sup>2</sup>	ft. <sup>2</sup>
Multipurpose Room <sup>1</sup>					706.04	7,600		776.64	8,360
Equipment Storage	14.86	160	per storage room	2	29.73	320	2	29.73	320
Circulation and Mechanical Building Factor @					59	634		65	694
<b>Multipurpose Rm Subtotal</b>					<b>794.63</b>	<b>8553.60</b>		<b>870.88</b>	<b>9374.40</b>
					<b>Other/Optional Spaces</b>		<b>Other/Optional Spaces</b>		
Laundry <sup>2</sup> (incl. 20% bldg fac)	10.22	110	per room	2	20.44	130	2	20.44	130
Parent Waiting <sup>2</sup> (incl. 20% bldg fac)	1.67	18	per person	15	25.08	270	15	25.08	270
Music/MM Room (incl. 20% bldg fac)	6.69	72	per room	3	20.07	216			

<sup>1</sup> Navy, Air Force, and Marine Corps do not permit the "NCAA Full Court with Bleachers" size option. In addition to the other Multipurpose Room size options, the Army and Navy offer an option for a Small Multipurpose Room at 232.25 m<sup>2</sup> (2500 ft.<sup>2</sup>) plus 9.29 m<sup>2</sup> (100 ft.<sup>2</sup>) of storage space.

<sup>2</sup> Navy does not normally permit the Kitchen or Additional Parent Waiting options.

## APPENDIX C ILLUSTRATIVE DIAGRAMS

### C-1 ILLUSTRATIVE DIAGRAMS.

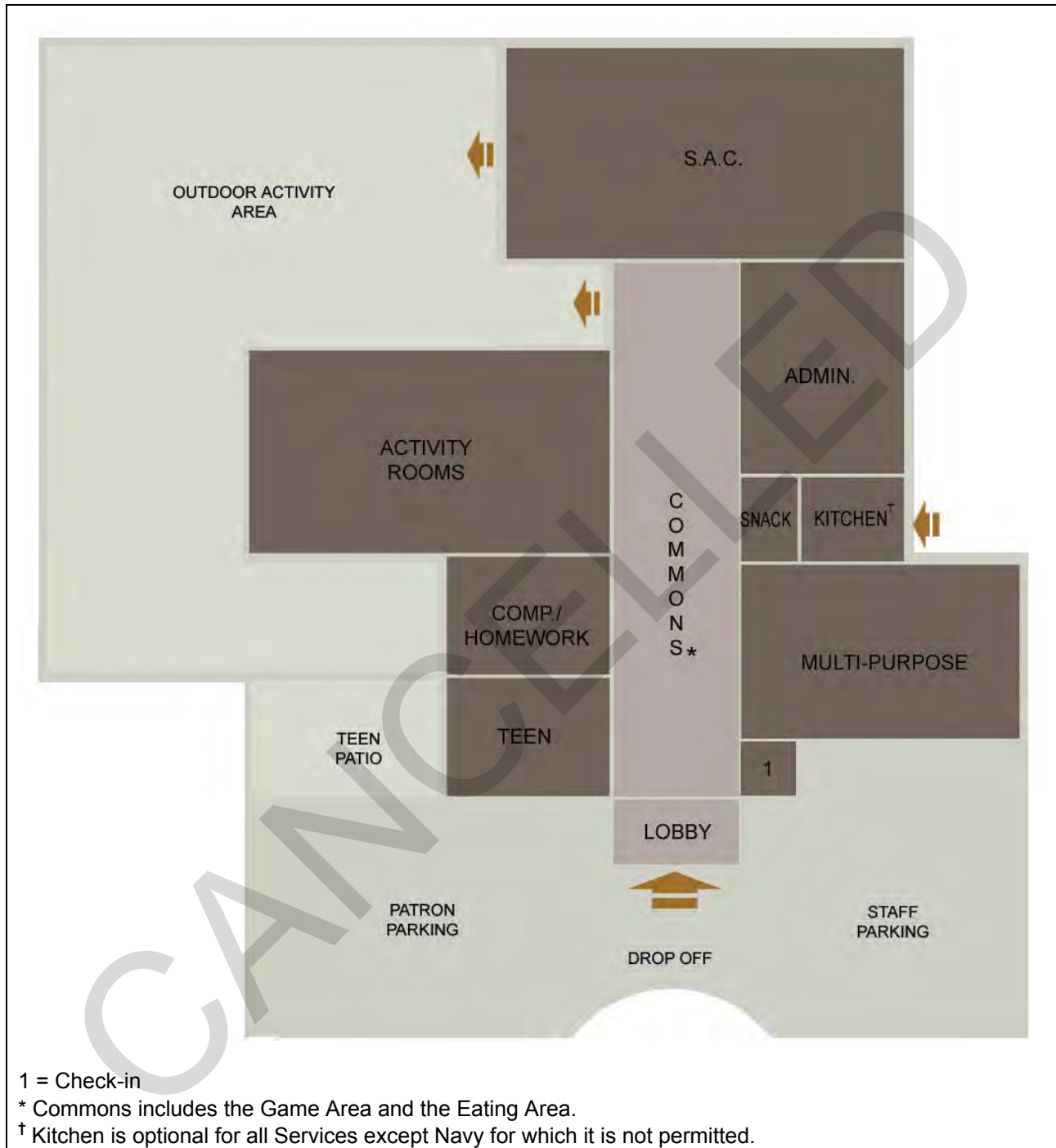
The illustrative diagrams include Figures C-1 through C-3. They do not represent mandatory or even suggested layouts but are provided to expand on the Figure 2-3 Bubble Diagram and convey a *possible means* to accommodate the needed adjacencies.  Note that Figure C-3 captures several critical Navy Service Exceptions and is the appropriate diagram for planning Navy facilities.

#### C-1.1 **Figure C-1.**

This diagram illustrates a potential layout with the Multipurpose Room located near the front of the facility. This layout precludes visitors from traveling through the Commons to get to events held in the Multipurpose Room. However, it does separate the Administrative Area from the check-in function, which is a desirable adjacency.

CANCELLED

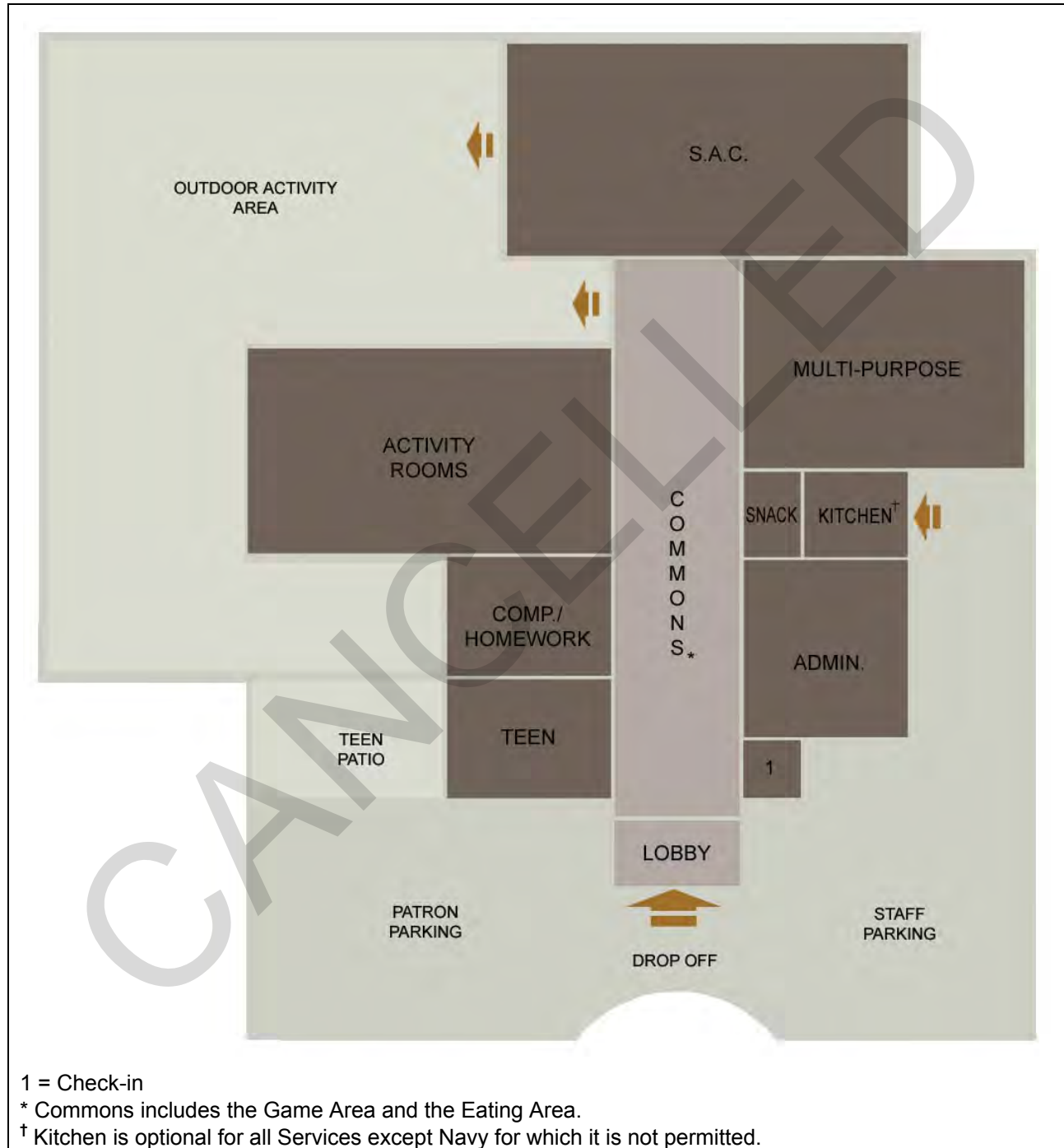
FIGURE C-1. ILLUSTRATIVE LAYOUT DIAGRAM A



C-1.2 **Figure C-2.**

This diagram locates the Administrative Area adjacent to the Check-in.

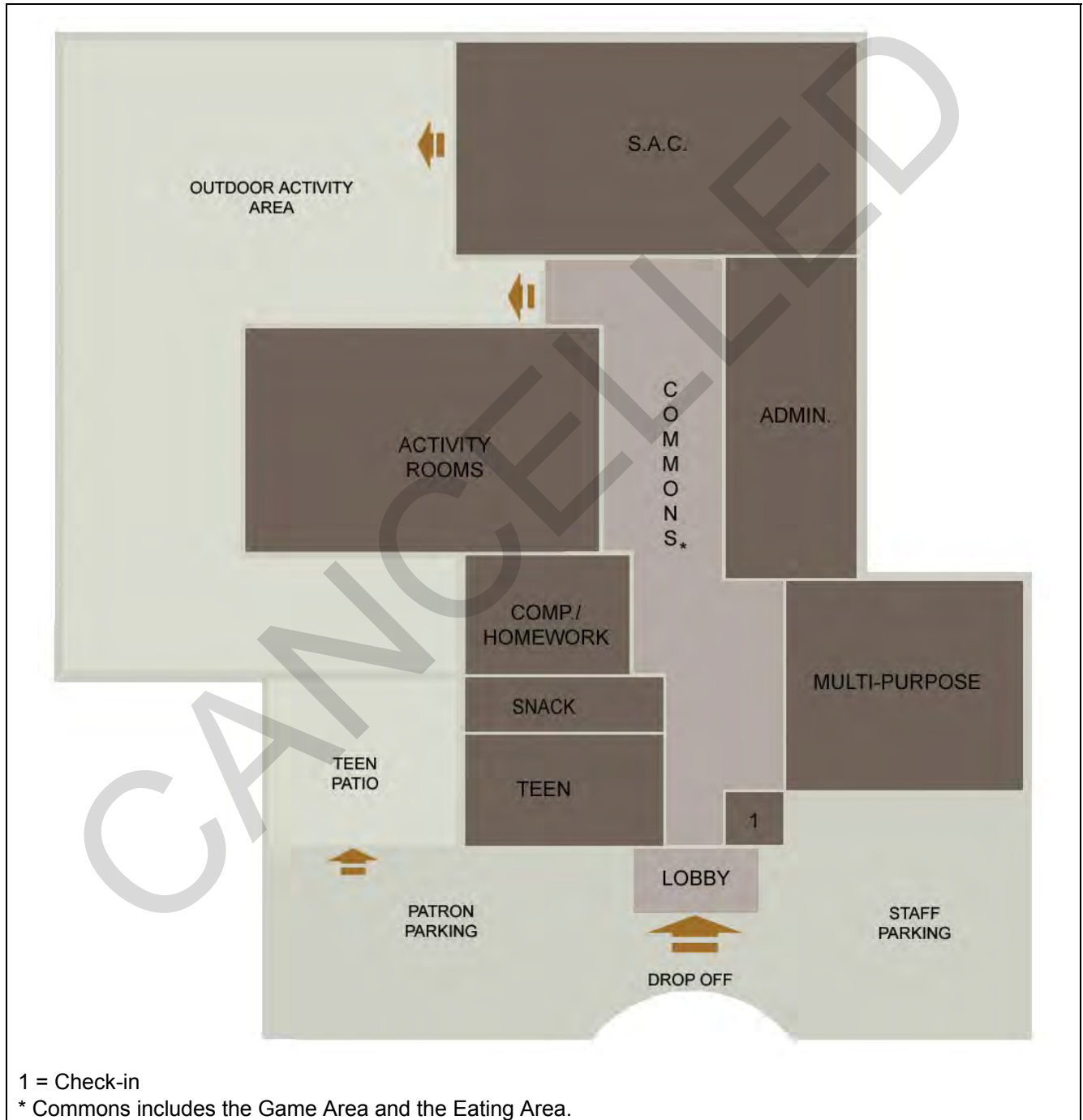
**FIGURE C-2. ILLUSTRATIVE LAYOUT DIAGRAM B**



C-1.3 **Figure C-3.**

As noted above, this diagram addresses several Navy concerns and desires, specifically the provision for a separate teen entrance through the patio and the snack bar located adjacent to the Teen room.

**FIGURE C-3. ILLUSTRATIVE LAYOUT DIAGRAM C**





APPENDIX D AIR FORCE FURNISHINGS, FIXTURES, AND EQUIPMENT  
SCHEDULE

D-1 AIR FORCE SCHEDULE OF FURNISHINGS, FIXTURES, AND  
EQUIPMENT.


 Table D-1 provides a schedule of furnishings, fixtures, and equipment (FF&E) for Air Force Youth Centers.

TABLE D-1. AIR FORCE FF&E LIST FOR YOUTH CENTERS					
Equipment Item	RP <sup>1</sup>	NRP <sup>2</sup>	Equipment Item	RP <sup>1</sup>	NRP <sup>2</sup>
<b>Kitchen FF&amp;E</b>			<b>Admin/Staff/Support FF&amp;E (cont'd)</b>		
Reach-in Refrigerator (not built-in)		X	Moveable Lockers		X
Reach-in Freezer (not built-in)		X	Lounge Seating & Tables		X
Built-in Refrigerator or Freezer	X		Built-in Counters/Cabinets/ Shelving	X	
Ice Machine	X		Moveable Cabinets & Shelving		X
Hand Sink	X		Cash Registers		X
Food Preparation & Pot Sinks	X		Fixed Tackboards	X	
Range		X	Interior & Exterior Signage	X	
Baking Oven/Convection Oven	X		Fire Extinguishers & Cabinets	X	
Microwave Oven		X	Built-in Display Cabinets	X	
Exhaust Hood w/Fire Suppression	X		Moveable Display Cabinets		X
Dishwasher and Booster Heater	X		Sound System Speakers & Wiring	X	
Dishwasher Hood	X		<b>Youth/School Age FF&amp;E</b>		
Garbage Disposal	X		Desks/Tables/Chairs		X
Dishwasher Tables	X		Lounge Seating		X
Toaster		X	Built-in Counters/Cabinets/ Shelving	X	
Food Mixer/Processor		X	Moveable Cabinets & Shelving		X
Preparation Tables		X	Fixed Dry Erase Boards	X	
Food Carts		X	Moveable Dry Erase Boards		X
Built-in Counters/Shelving	X		Moveable Tackboards		X
Mobile or Moveable Shelving		X	Sinks	X	
Other Loose Equipment		X	Drinking Fountains	X	
<b>Laundry/Janitor FF&amp;E</b>			Toilet Fixtures	X	
Clothes Washer & Dryer		X	Toilet Fixed Accessories	X	
Laundry Sink	X		Toilet Moveable Accessories		X
Built-in Counter & Shelving	X		Mirrors	X	
Moveable Counter & Shelving		X	Refrigerators		X
Janitor Mop Sink	X		Wall Clocks		X
Built-in Mop Rack	X		Games and Game Equipment		X
<b>Admin/Staff/Support FF&amp;E</b>			Retractable Basketball Backstops	X	

**TABLE D-1. AIR FORCE FF&E LIST FOR YOUTH CENTERS**

Equipment Item	RP <sup>1</sup>	NRP <sup>2</sup>	Equipment Item	RP <sup>1</sup>	NRP <sup>2</sup>
Desks & Chairs		X	Moveable Basketball Backstops		X
Systems Furniture		X	All Moveable Athletic Equipment		X
File Cabinets		X	Floor Mats		X
Computers/Printers/Scanners		X	Ballet Bar	X	
Telephone (instruments only)		X	Fixed Scoreboards	X	
Telephone (wiring/outlets)	X		Moveable Scoreboards		X
CCTV Circuiting, Cameras, Mon.	X		Fixed, Retractable Bleachers	X	
Fax Machines		X	Fixed Stage	X	
Copiers		X	Moveable Stage		X
CATV (television monitor only)		X	Theatrical Lighting	X	
CATV (cabling)	X		Fixed Wall Mats	X	
Intercom		X	Built-in Lockers	X	
Wall Clocks		X	Outdoor Handwashing Station	X	
Time Clocks		X	Outdoor Play Equipment	X	
Built-in or Fixed Lockers	X				

<sup>1</sup> RP = Real Property Installed Equipment (also "RPIE"). RPIE is purchased and installed with construction project funds.

<sup>2</sup> NRP = Non-Real Property Installed Equipment (also "Equipment"). "Equipment" is purchased with equipment funds and may be installed by the construction contractor or by the installation.

Note: Infrastructure to support all types of equipment, both RPIE and non-RPIE, should be included in the construction contract.