Montana Law Enforcement Academy

by

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An undergraduate thesis submitted in
partial fulfillment of the requirement
for the degree
of

BACHELOR OF ARCHITECTURE

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Montana State University
Bozeman, Montana
June, 1985
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Signed: ____________________________________________________________

Date: ______________________________________________________________
This book is dedicated to my parents, Evangeline and Dean, and my brothers, James, Dean Dee, and Spiro.

I also want to thank my advisor, Jim Mitchell, for his moral support and enthusiasm that kept me "a float!"
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Montana law enforcement, as it is known to date, has evolved from the lawlessness that existed during the frontier period nearly two centuries ago. Social stability has been dependent upon the increasing awareness of pressures evident in an ever changing society. From the "every man for himself" attitude of the fur trading era, to the present day evolution of police professionalization, law enforcement has evolved to meet the changing needs of an ever changing society; and Montana should be no exception to the rule.

Montana was first discovered, about the time of the American Revolution, by anonymous French and/or Spanish fur traders or explorers. Lewis and Clark were the first explorers to officially record their discovery in 1805. At this time, there were no permanent settlements "per say"; fur traders from Canada would venture into the area, trap their goods, and return home. Every man fended for himself against the elements and Indians and provided his own law enforcement against villians.

The first temporary settlements were erected by Canadian fur traders in the far northwest region of Montana in 1808. The fur frontier provoked intensive exploration and geographic mapping of Montana, but the population was so sparse, the enforcement of law presented no problems. Montana's existence was initiated by the fur frontier. But in the late 1850s the fur trading industry began to fade and the conquest for gold reattracted explorers. The quest for gold made Montana what it is today. The discovery of gold east of Drummond in 1858 spurred the onset of settlements in Montana. Many gold camps sprouted up throughout west central Montana during the middle and late 1860s. Population increased . . . and with it, crime.

The mining profession tended to draw a diverse conglomeration of individuals together. Frontier miners were transients. Never in one location for an extended
period, they cared only about gold, little about their neighbors background or status and enforced the law by their own means.

Frontier miners, usually moving ahead of federal or local authority, had to improvise when it came to law and law enforcement. When a gold camp originated, miners would organize a "mining district" or "mining court" to provide basic laws. These local laws dealt mainly with mining claims. The mining camp lawman enforced rules mainly pertaining to claim jumping, ore stealing, and assault and battery.6

This casual, democratic form of government proved inadequate over time. Mining camps attracted large numbers of thieves, cutthroats, and fast buck artists who preyed upon gold shipments, stagecoaches, and individual travelers. The mining communities that were once anonymous were now beginning to become civilized and they were not going to tolerate this lawlessness any longer... vigilantees and lynch laws surfaced.

Vigilantees were organized because...

"swift and terrible retribution is the only preventative of crime while society is organizing in the far west and that the positively awful expense and delay of established law and order could not be tolerated."7

The Vigilante enforcement system operated until regular courts, in Montana, began to function in 1864.

Montana territories' first official court was opened by Judge Hezekiah L. Hosmer in Virginia City in 1864. He stated:

"Let us give to every man, how aggravated soever his crime, the full benefit of the freeman's right—an impartial trial by jury. Vigilantees
and courts—and all good men can cooperate in fulfilling the grand purpose of the criminal law; that of bringing offenders to justice, without violating any of its provisions; but the very first element in such a warfare against crime, must be the general recognition of courts of law, as the great conservator of peace and safety.\textsuperscript{8}

Stability, civilization, and a standard form of law enforcement had come to Montana territory.

As the pursuit for gold dwindled, settlements increased, and cattle and farming became prime industries. The law enforcement officers (i.e. the Sheriff or Marshall) had a more "glamorous" job now, because there were range wars, stagecoach robberies, and gunfights. Once the "boom-period" passed, the problems of lawlessness declined and the basic principles of law enforcement originated as we know them today.

Throughout the 19th century and even into the 20th century, brute force and on-the-job experience formed the backbone of the law enforcement philosophy. Apprenticeship, as in other professions, was the first type of formal training in police service.

August Vollmer, originated the first formal police training school in the United States in 1907.\textsuperscript{9} He concluded that the principle problem of all police departments was inefficiency resulting from ignorance, and that the only solution was formal training.

In 1909, the New York City Police Department established a formal academy.\textsuperscript{10} The formal program provided recruit training in firearms, rules and regulations of the Department, police procedures, and criminal law. By 1930, the New York City Police Academy was the most recognized "police" school.
In the decade from 1920 to 1930, more than 20 state law enforcement agencies were created; and by 1940 only Wisconsin was without a state police or highway patrol force.11 From 1935 to W.W.II, most local inservice training programs were short; lasting from 30 - 50 days in length. By the late 1930s, many colleges and universities participated in police inservice training by offering two or four year degrees. Presently, most states offer a higher education program for law enforcement officers.

Society is changing and greater demands will be faced by law enforcement officers. The trend in the United States is moving toward increasing specialization of professional occupations; the field of law enforcement should be no exception.

Montana's law enforcement methods, like those in the rest of the United States, have changed as Montana has evolved over the years. The need for a higher education program, in the field of law enforcement, is evident. It is time Montana "joined the ranks" and provided a formal police training facility. Such a facility, with an intense program geared toward the betterment of all policing professions, would benefit not only Montanans in particular, but also society in general. Times have changed. Police professionalization is no longer an option; it is a reality to be seriously considered for maintaining social stability in today's unpredictable society.
INTENT

Society has changed considerably over the past two centuries. The United States has been transformed from a rural to an urban society. Tremendous social pressures have resulted not only from the changing nature of metropolitan areas, but also from such things as population explosion, the effects and pressures of automation and technological advancement and the growing pressure for education beyond the high school level.

In view of changing conditions, today's law enforcement officer is required to associate with all kinds of people, and to confront a wide spectrum of situations. These reasons alone help to support the need for higher education. The trend toward higher education is inevitable, and Montana's law enforcement personnel are no exception!

The intent of this thesis is to create a law enforcement training facility. This facility shall respond, not only to the needs of Montana's law enforcement personnel, but also to the needs of Montana, as a whole.

This facility will make an important architectural statement, both by its character and physical existence. It will emphasise the importance of higher education by providing a highly specialized and intense learning environment. This learning environment will further develop the knowledge and critical analysis capacity of Montana's law enforcement officers. These officers will then have a greater capacity with which to maintain social stability, not only on the local, Montana level, but also in today's complex, ever-changing society.
HIERARCHY OF BUILDING COMPONENTS/ZONES

The law enforcement facility is separated, programmically, into six components. These components, or zones, are: Administrative, educational, training, dormitory, support areas and site development. Each of these components has a generic internal quality that must be successfully internmeshed with the other five components. Various scales and proportions of spaces must be carefully dealt with, both in plan and 3-dimensionally, so as not to overwhelm a human observer. Symbolism and adjacencies of zones are important to the success of the design.
CLIMATE ANALYSIS

Bozeman, located at the base of the western slope of the Bridger Mountain Range, experiences a mountain valley climate. Bozeman is essentially surrounded with mountains. Summers are generally pleasant; warm days, with a high percentage of possible sunshine, and cool nights. Hot and humid weather conditions are infrequent. Rarely does the maximum temperature exceed 90° F. Summer precipitation falls mostly as showers, sometimes accompanied by thunder and lightening. Hail has occurred, but has been relatively light and caused no extensive damage. Winters are relatively cold. Occasionally temperatures may drop below zero, but generally, mild winter weather can be expected with the average low temperature never less than 10° F. Most winter precipitation falls as snow. Winter storms prevail from the northwest with occasionally harsh winds prevailing from the east. Bozeman's weather may seem extreme at times, but rarely ever considered harsh. Bozeman's climate provides a comfortable environment in which to live.
SUN ANGLES

JULY 21: NOON
10:00 AM/2:00 PM

SUMMER

8:00 AM/4:00 PM

DEC. 21: NOON
10:00 AM/2:00 PM

WINTER

8:00 AM/4:00 PM
- TEMPERATURE -

- PRECIPITATION (INCHES) -

- SNOWFALL (INCHES) -
SITE CONTEXT

The 26 acre site is situated along the western edge of one of the latest residential growth areas within Bozeman city limits. There is a "modge-podge" of older single family dwellings amongst many newer four-plex apartments, townhouses, condominiums, and small office complexes. The site is within 15-minutes walking distance of Montana State University and 7-minute walking distance of a major shopping center. The main entry to the site is from the west off South Nineteenth Avenue. South 19th is a major north-south artery connecting Bozeman with M.S.U. and outlying southern subdivisions and farms. Auxiliary access can be obtained from the south on South 16th Avenue off College Street.

Presently, the site has a new 43-bed correctional facility, located in the northeast corner, and a converted high school building, that houses the Gallatin County Law and Justice Center (to be removed). A fire station is situated at the northwest corners of the site and the newly constructed, post-modern, Farm Bureau Professional Office complex is located just south of the fire station. If Bozeman continues to grow in this present direction, this site will be at the geographic center of the city within the next five to ten years; a prime site for such a symbolic and important facility as a law enforcement academy.
EDGES

The site is very clearly defined and contained on all four sides. These characteristics are:

NORTH:

Presently the site is open along the southern side of Koch Street. Across the street is a fairly dense development of condominiums and apartment complexes. The Gallatin County Correctional Facility creates a barrier boundary at the northeast corner of the site.

SOUTH:

The southern edge is clearly defined by tall evergreens and cottonwoods scattered amongst residential and office structures, physically bound by College Street.

EAST:

The eastern edge is explicitly defined by a dense growth of cottonwood trees interspersed with evergreens and backed by older single family dwellings.

WEST:

The western edge of the site is bound by South 19th Avenue. This is the most "outwardly open" extreme of the site. Entrance onto the site shall be gained from this edge.
SITE CHARACTER

The site is relatively flat, sloping gently from the south to the northwest corner. The center area is virtually open. Stands of cottonwoods, interspersed with evergreens, form the physical and visual boundaries to the south and east. Along the western edge is a seasonal drainage canal that, when running, creates a nice undertone to the site, but dry, poses interesting design considerations.

The soil is classified as Huffine Silty Clay loam. It is well drained soil with a thick, dark brown or black layer of top soil. Beneath it is a layer of clay and lime supported on a loose gravelly and sandy substrates, that is essentially free of any silt or clay. This soil structure provides a solid foundation for building. Vegetation on the site can be characterized as essentially, wild grass.
VIEW. VISTA. FOCUS

The views from the site are limited. To the south, interspersed amongst the tall evergreen trees and cottonwoods are office complexes and apartment complexes. Looking east, there is a stand of cottonwood trees fronting single family and apartment dwellings, with a view of the Bridger Mountains in the background. To the north, there are apartment complexes of every variety and to the west there are more residential units facing east, towards the site, along South 19th Avenue. The site has no outstanding vistas. Completely surrounded by residential and small office units, there are no real "vistas." The facility will have to create inward focusing vistas, by path and approach along with a symbolic hierarchy of form and experiences. The facility will promote an inward focus upon itself. It will represent the stability of society not only in Bozeman, but Montana, as a whole. A physical focus will be created for the observer as they approach the facility, by means of landscaping, hierarchy of approach experiences and proportions and scale of the built environment.
Utilities to the site are provided by the city of Bozeman. Electricity, water, and sewer are buried beneath Koch and South 19th Avenue. Grey water and sewage is pumped to the water treatment facility. Fire hydrants are located across the street at the northwest corner and at four locations within the site.
PROGRAMMING

NOTE:

The estimated assignable square footage areas do not include walls, circulation, and mechanical and electrical equipment. A Gross Building Factor (GBF) of 20 percent shall be added to the total assignable area of the building to account for this factor.

AREA:

BUILDING:

- 66,680 sq. ft. Gross Building
- 13,336 sq. ft. Circ./Walls
- 80,016 sq. ft.

PARKING:

- 57,000 sq. ft.

TOTAL AREA:

- 137,016 sq. ft.
ENTRY/LOBBY

AREA: 1,200 sq. ft.

THEORY:
Entry is essentially the act of penetrating an "implied" or "real" vertical plane that distinguishes and separates "here" from "there", exterior from interior.

CHARACTER:
The entry/lobby "introduces" the realm penetrated. It is a space of orientation, confrontation, and invitation as well as introduction. The entry is a nucleus that generates various circulation paths to and from other building realms. It promotes movement and/or conversation and visiting, while providing an area of security and control. The entry/lobby is the circulation "heart" of the building realm.

GOALS:
° To provide general circulation to various areas of building.
° To provide easily discernable thresholds between public and private circulation paths.
° To provide a warm, inviting, and comfortable area for waiting (i.e. finishes, conversation areas, artwork).
° To provide a physical environmental barrier between interior and exterior climate change.
° To provide a sheltered exterior waiting area.
° To establish a visually intriguing view from the entry/lobby to the exterior.
° To develop a distinct concept of transition from approach and path to physical entry.
RECEPTION AREA

AREA: 200 sq. ft.

THEORY:
The act of greeting; the process of receiving or of being received and accepted.

CHARACTER:
The reception area receives callers. It is a space of favorable surroundings that puts a visitor at ease upon entering the building. This area operates as a control point that separates visitors from staff and students and provides controlled entry to administration area.

GOALS:
° To provide a strategic location for visitor control of public and private circulation paths.
° To create a comfortable space, both physically and mentally.
° To provide natural light, views, ventilation, and a well-lit work area.
° To provide an efficient area to serve Administrative personnel.
ADMINISTRATIVE OFFICES

AREA: 600 sq. ft.
3 @ 200 sq. ft.
(Director, Adm. Officer, & Program Director)

THEORY:
Administration is the authority vested in a person or individuals to exercise management of an institution's affairs.

CHARACTER:
The administrative offices represent the realm of authority. All decisions governing operations of the institution are developed by the individuals occupying these spaces. The architecture of the offices should imply the image of authority, while at the same time, be inviting and comfortable for carrying on daily office work.

GOALS:
- To provide controlled circulation to administrative offices via receptionist.
- To design an area that is authoritative, yet inviting and comfortable.
- To provide natural lighting, ventilation, and views.
- To provide a sufficient space to comfortably seat 4 - 5 people for conferences.
- To provide shelves and storage for materials.
- To locate offices adjacent with receptionist and central secretary area.
**FACULTY OFFICES**

**AREA:** 1,040 sq. ft.

8 @ 130 sq. ft.
(5 permanent, 3 extra)

**THEORY:**
A private space; an escape from daily activities. A secure area for private reference materials and personal possessions. A space that promotes not only individuality and further knowledge, but also contemplation and relaxation.

**CHARACTER:**
The faculty offices shall be flexible in design to accommodate both permanent and part-time staff personnel. Staff offices shall be designed to allow easy student access from education area while retaining privacy from unwanted intrusions. The offices shall be designed with adequate space for storage and preparation of lesson materials, and assisting students on an individual basis. Natural lighting and views are highly desirable. Immediate adjacency to central secretary is essential.

**GOALS:**
° To provide natural light and ventilation.
° To be situated adjacent to central secretarial area.
° To provide views to exterior.
° To provide shelves and storage for material.
° To provide some circulation control to offices via secretary or receptionist.
° To provide sufficient space to seat staff member and one or two visitors.
° To provide waiting area for offices.
CENTRAL SECRETARY AREA

AREA: 500 sq. ft.

THEORY:
To perform a vast variety of tasks while maintaining absolute secrecy (i.e. "secret"aty).

CHARACTER:
The central secretarial area shall have three secretaries to serve staff. Area shall be sound isolated and easily accessible to staff personnel. Teletype and word processor/printer will be incorporated into the general design. Layout shall be organized, simple and unobtrusive to general circulation pattern to offices.

GOALS:
°To design a flexible layout to accommodate printer and computer expansions.
°"U"-shaped secretary stations.
°To provide an area for verticle files, and storage of materials.
°To provide natural lighting, ventilation, and views.
°To design for easy access of staff personnel.
°To adequately sound isolate area to prevent unwanted noise transmission to offices.
DUPLICATING

AREA: 900 sq. ft.

THEORY:
Space where knowledge is copied, duplicated, and passed on to others, for the furtherment of themselves.

CHARACTER:
Centralized area easily accessible and controlled by secretarial staff. Activities include photocopying, dittos, and collation of handout materials for instructors and various paperwork for administration. Limited access by students allowed, but controlled and monitored by secretaries.

GOALS:
° To provide both standing and sitting height work tables.
° To provide open storage shelves for stock and printed materials.
° To provide storage for office supplies.
° To provide wall and base cabinets for storage of miscellaneous materials.
° To be located directly adjacent to central secretarial area.
° To provide extra ventilation and cooling.
STAFF CONFERENCE ROOM  
AREA: 250 sq. ft.

THEORY:
A private, isolated space where knowledge and "enlightenment" are exchanged among occupants. A place for meeting and conferring about theories and ideas for the betterment of educational purposes.

CHARACTER:
The conference room is a comfortable, isolated meeting place for the entire staff. Activities such as class scheduling, private meetings, and conferences take place in this space.

GOALS:
° To be located near receptionist.
° To be sound isolated when door is closed.
° To be of appropriate size to accommodate a large conference table and twenty "+" chairs.
° To provide adequate light and ventilation. Natural light desirable but not absolutely necessary.
° To provide cabinet for material and refreshment storage.
° To furnish room with black board and recessed projection screen.
° To provide storage for materials and coat rack for visitors.
STAFF LOUNGE
AREA: 200 sq. ft.

THEORY:
A space that promotes relaxation and escape from the realms of "everyday" hustle and bustle. A place of conversation, refinement, and rest.

CHARACTER:
The staff lounge is an area for rest and relaxation. The space will be utilized for coffee breaks, lunches, and general "bull" sessions. It is an area of light to moderate usage and should be equipped to comfortably seat twelve. The space should be warm, inviting, comfortable, and isolated to provide an "escape" from daily activities.

GOALS:
° To create a comfortable, relaxing "escape" for the "hardworking."
° To provide cabinets, counters, sink, and refrigerator.
° To provide seating for 12 at a table plus miscellaneous lounge chairs.
° To provide natural lighting, ventilation, and views (if possible).
° To be immediately accessible to exterior area.
STAFF TOILETS
AREA: 220 sq. ft.

THEORY:
An area specifically designed for "freshening-up" and answering "Mother Nature's call"!

GOALS:
° To be privately located within easy access of staff.
° To be designed for ease of maintenance and cleaning.
° To provide adequate lighting and ventilation (natural light a possibility, but maintain privacy).
50 STUDENT TIERED CLASSROOM AREA: 2,450 sq. ft. 
2 @ 1,225 sq. ft.

THEORY:
An atmosphere of learning. An environment where knowledge is expressed and absorbed. A space where by the experience and application of theories and concepts enables personal growth and advancement in society.

CHARACTER:
These large lecture rooms shall be designed for maximum flexibility and favorable learning conditions. Acoustics and visibility are of the utmost importance. These classrooms shall be equipped for audio/visual presentations as well as daily class activities. Traffic in these areas will be heavy, and the classrooms shall be designed accordingly.

GOALS:
°To provide a comfortable learning environment.
°To be designed for heavy usage.
°To provide adequate ventilation and lighting for numerous capacity possibilities.
°To be equipped for audio/visual systems.
°To provide easy access and exit.
°To be designed visually and acoustically sound for lecture and projection potential.
°To provide a waiting/conversation area immediately adjacent to classrooms.
°To provide storage space for miscellaneous items.
64 STUDENT CLASSROOM
(EXPANDABLE)

AREA: 1,120 sq. ft.

CHARACTER:
Smaller scale, more individual learning environment. Designed to expand to 94 person capacity by means of a movable wall. Equipped with audio/visual system. Space of moderate to heavy use and should be designed accordingly. Flexible layout for activities from classes to city meetings and conventions.

GOALS:
° To be expandable—flexible in size and capacity.
° To be equipped with audio/visual capabilities.
° To be acoustically and visually sound.
° To provide storage for more miscellaneous equipment.
° To provide ample entrances and exits.
° To accommodate a comfortable learning environment that allows for set-up flexibility.
° To provide natural lighting, views, and ventilation. (If designed with natural light, provide room darkening capabilities for movie and slide projection.)
° To provide cabinet storage and counter display areas.
30 STUDENT CLASSROOM

AREA: 570 sq. ft.

CHARACTER:
Immediately adjacent to 64 student classroom. Small scale classroom; allows for a "one on one" student teacher relationship. Moderate to heavy use when used to expand 64 student classroom. Flexible layout. Comfortable, inviting learning area.

GOALS:
°To accommodate flexible layout possibilities.

°To be acoustically sound.

°To provide natural light, views, and ventilation.

°To provide storage and display areas.
SEMINAR ROOM

AREA: 450 sq. ft.

THEORY:
A more intiment learning atmosphere. Smaller in scale and greater in comfort to promote the exchange of knowledge and individuality.

CHARACTER:
Small capacity, small scale lecture/conference room designed to comfortably seat 12 - 16 people. Used by both students and staff as a lecture room to show slides or as a meeting room. Minimal use expected, so can be designed as a more exclusive classroom area. Provide storage area for audio/visual equipment (mainly slides).

GOALS:
°To maximize space and provide a comfortable "conference room-like" atmosphere.
°To be sound isolated.
°To be located adjacent to crime lab (occasionally may be used in conjunction with crime lab).
°To be equipped with recessed projection screen and light-dimming system.
°To provide shelving for book storage and displays.
**CRIME SCENE LAB**

**AREA:** 450 sq. ft.

**THEORY:**
An environment for "hands-on" learning; re-enactment and visual learning environment. Atmosphere flexible to activities and individual educational capabilities relative to idea being expressed.

**CHARACTER:**
Small scale conference room atmosphere equipped with audio/visual equipment, cabinets for storage, and counter space for display. Sound isolated. Activities performed in this space include crime scene situations and re-enactments. Medium to moderate usage.

**GOALS:**
- To provide adequate display and storage space for miscellaneous items.
- To be equipped with a sink.
- To provide audio/visual capabilities.
- To be sound isolated.
- To provide adequate chalkboard and tack board space.
FILM ROOM

AREA: 200 sq. ft.

CHARACTER:
Relatively cool, dark, and dry 35mm. reel storage area. Immediately located within convenient reach of audio/visually equipped classrooms. Limited access and use.

GOALS:
° To provide an area for cool, dark, and dry storage of film materials.
° To be conveniently located.
° To maximize limited area.
° To be located adjacent to print room.
PRINT ROOM

AREA: 350 sq. ft.

THEORY:
Cool, dark space where secrets are revealed; questions are asked, and answers are discovered.

CHARACTER:
Film processing area to include dark room and lab facilities for three people. Activities include slide and print film developing, and photo enlargement.

GOALS:
°To provide an efficient layout plan.
°To be equipped with 3 darkroom stations.
°To provide sufficient cabinet storage and counter space.
°To be within immediate vicinity of crime scene lab and classrooms.
°To provide a safety entry to prevent unwanted film exposures.
LIBRARY

AREA: 1,200 sq. ft.

THEORY:
A place of stored and documented knowledge enhanced with an atmosphere to promote learning and research of information for the further development of knowledge. A relatively quiet, uninterrupted and intense learning space with a relaxing, inviting uninhibited character.

CHARACTER:
Warm, inviting, resource area. Individual carousels and study tables comfortably arranged around and within stack areas. Located in conjunction with classroom area. Natural light and ventilation desirable in study areas. Centralized control and check out area.

GOALS:
° To create an inviting area to do research and study.
° Sound isolated.
° Carefully controlled natural lighting and ventilation.
° Individual study carousels for 10 - 15 students plus work tables.
° Stack area for approximately 200 linear feet of shelving.
° Librarian office and repair room.
TOILETS

AREA: 250 sq. ft.

GOALS:
° To be located adjacent to heavy circulation paths.
° To be adequately ventilated.
° To provide natural lighting while maintaining privacy.

STORAGE

AREA: 100 sq. ft.

CHARACTER:
A space accessible to staff for secure storage of whatever items deemed necessary.

GOALS:
° To provide secure area for storage of materials.
° To be conveniently located for easy access and use.
MULTI-PURPOSE GYMNASIUM

AREA: 5,260 sq. ft.

THEORY:
An indoor area for excessive physical activities generally performed out of doors but inside because of weather conditions. Facilitates numerous activities and provides shelter from the elements.

CHARACTER:
Typical gymnasium layout equipped to do physical training for 50 students. Activities include running laps, defense-arrest and night stick procedures, basketball and volleyball. Movable seating to accommodate spectators and possibly allow public use of facility.

GOALS:
° To provide a physical training facility to accommodate all aspects of police training.

° To be designed for flexibility and control to allow public to utilize space.

° To be separate from areas for sound control.

° To provide adequate ventilation.

° To provide sufficient storage of equipment (i.e. balls, nets, mats, etc.).

° To be furnished with a physical education office, strategically located, for control of training area, by training instructors and for first aid materials.
**MEN'S LOCKER ROOM**  
**AREA:** 600 sq. ft.  
**CHARACTER:**  
Typical locker room layout based on 60 lockers. To be used by both students and staff. Immediately adjacent to gymnasium, training tank (swimming pool) and weight room.  

**GOALS:**  
° To be easily accessible from the pool, weight room, and gym.

**WOMEN'S LOCKER ROOM**  
**AREA:** 320 sq. ft.  
**CHARACTER:**  
Same as men's locker room but size based on 15 lockers.

**TRAINING TANK**  
(indoor swimming pool)  
**AREA:** 3,000 sq. ft.  
**CHARACTER:**  
20' X 40' lap pool adjacent to locker rooms.  

**GOALS:**  
° To provide pool treatment room.  
° To provide pool equipment storage.  
° To be adequately ventilated.
WEIGHT ROOM

AREA: 640 sq. ft.

THEORY:
To provide an atmosphere to physically improve the endurance and strength of the human body.

CHARACTER:
Well ventilated weight training area with 2 - 16 station universal weight system (no free weights). Easily accessible by both male and females.

GOALS:
°To be adjacent to locker rooms.
°To be sound isolated.
°To be well ventilated.
°To provide storage area.

INDOOR FIRING RANGE

AREA: 6,360 sq. ft.

THEORY:
An environment to learn and practice a method of self-defense.

CHARACTER:
Fifteen lane firing range for rifle and pistol stationery target practice. Size based on class size of fifteen or less. Located within physical training area of academy.

GOALS:
°Adjacent to physical training area.
°Sound isolated.
°Equipped with an ammo vault and spectator area.
°Centralized control officer area.
DORMITORY
DORMITORY ROOMS

(DOUBLE OCCUPANCY)

AREA: 22,500 sq. ft.

75 @ 300 sq. ft.

THEORY:
A private space of isolation and individualism. A place to unwind and relax or study. A space to call "home."

CHARACTER:
A relatively "homey" atmosphere for living at the Academy. Provide 75 double occupancy rooms complete with toilet, sink, and shower to allow housing flexibility of both genders. Rooms should be comfortable and inviting and flexible enough to allow for occupant individuality. Dorm areas should include telephone alcoves, typing room, and student laundry facility.

GOALS:
° To provide a comfortable, warm, and inviting space.
° To provide views, natural light, and ventilation.
° To provide privacy and isolation from intrusion.
° To be located a convenient distance to cafeteria.
° To provide centralized storage area for use of all occupants.
° To provide laundry facilities for student use.
° To provide a sound isolated typing room.
° To provide centralized cleaning and garbage area.
° To provide linen storage and distribution (assume laundry is contracted out).
° To provide loading dock or centralized garbage collection area.
° To provide visitor control.
° To provide centralized mail boxes for occupants.
T.V. ROOM/GAME ROOM

AREA: 1,700 sq. ft.

THEORY:
An area of relaxation. A communal space of lounging, playing games, and conversation. An atmosphere that creates a constant, informal contact among occupants.

CHARACTER:
Lounge and relaxation area for dormitory occupants. Furnish with ping pong table, T.V., individual game tables, pool table, etc. Provide comfortable chairs and "roomy" atmosphere to allow occupant to become secluded if desired. Natural lighting and ventilation would add to the "homey, relaxing" feel.

GOALS:
°To provide flexibility.
°To be designed with relaxation and comfort as main factors.
°To provide choices of activities to try and accommodate most individuals.
°To separate and sound isolate T.V. room.
°To provide natural light and ventilation; explore possibility of indoor/outdoor flexibility.
°To locate tangent to circulation path to create interest and interaction of passers-by.
<table>
<thead>
<tr>
<th>Facility</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Storage</td>
<td>150 sq. ft.</td>
</tr>
<tr>
<td>Typing Room</td>
<td>150 sq. ft.</td>
</tr>
<tr>
<td>Student Laundry</td>
<td>250 sq. ft.</td>
</tr>
<tr>
<td>Linen Storage and Distribution</td>
<td>350 sq. ft.</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>450 sq. ft.</td>
</tr>
</tbody>
</table>
DINING ROOM

AREA: 2,000 sq. ft.

THEORY:
A common gathering space for sharing a feast. Eating together provides a bond, a sense of friendship and a deep spiritual meaning. It represents family togetherness, and life.

CHARACTER:
Cafeteria style dining area with flexibility to seat 150 to 200 people. Capable of being rearranged and utilized as a banquet room for graduation banquet. Heavily used area nicely furnished.

GOALS:
° To provide main food service to students (and staff).
° To accommodate a capacity of 200 and flexibility to serve banquets of this size.
° To provide an inviting, relaxing atmosphere.
° To be easily accessible from dormitory.
° To provide natural heating and ventilation.
° To be immediately adjacent to outdoor picnic area.
KITCHEN/SERVING AREA

AREA: 1,600 sq. ft.

THEORY:
Space where food, the substainer of life, is prepared.

CHARACTER:
A highly efficient, easily maintained space where the food preparative functions may be carried out with ease. Circulation and workspace layouts are of great importance in the efficiency of food preparation. Flexibility to prepare and serve at various capacities is of vital importance. Area should be clean, uncluttered, and conducive to food preparation.

GOALS:
°To provide a clean, efficient food preparation area.
°To provide a flexible layout capable of serving capacities of 50 to 200.
°To provide ample ventilation and lighting.
°To provide food storage.
**AUDITORIUM**

**THEORY:**
A social space of entertainment and celebration. A space that draws together a conglomeration of individuals to focus on a particular point of interest.

**GOALS:**
- To provide an acoustically sound area for various activities for large numbers of people.
- To provide a comfortable, invigorating space conducive to activity and enlightenment.
- To provide a space where the central focus is easily seen from any area in the space.

**AREA:** 5,000 sq. ft.
AMMUNITION BUNKER

AREA: 100 sq. ft.

CHARACTER:
Storage of 150 - 300 cases of ammunition located by shooting range. Explosion proof design with vault door.

EMERGENCY GENERATOR

AREA: 200 sq. ft.

CHARACTER:

GOALS:
°To provide emergency power for emergency lighting, exits, phones, and fire alarm.
MECHANICAL ROOM(S)  
AREA: 2,400 sq. ft.

GOALS:
° To provide electrical distribution for complex.
° To provide H.V.A.C. and plumbing for building.
° To provide heat recovery for exhaust from firing range.

GENERAL BUILDING STORAGE  
AREA: 400 sq. ft.

GOALS:
° Storage of anything and everything!
PARKING

°20 visitor spaces.
°20 staff spaces.
°100 student spaces.
°Loading and service area.
°Landscaping.

AREA: 57,000 sq. ft.

2. Ibid., p. 3.

3. Ibid., p. 3.

4. Ibid., p. 50.

5. Ibid., p. 61.


8. Ibid., p. 64.


10. Ibid., p. 7.

11. Ibid., p. 11.

SELECTED BIBLIOGRAPHY


