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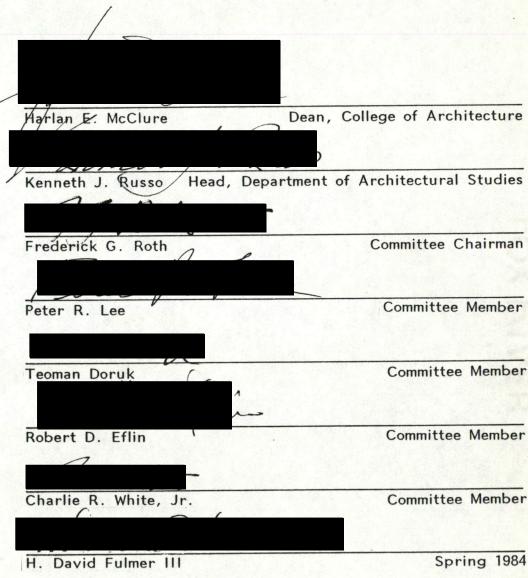
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Camp Carolina

A terminal project submitted to the faculty of the College of Architecture, Clemson University, in partial fulfillment of the requirements for the degree of Master of Architecture.

Outdoor Adventure Center



"A Bag of Tools"

Isn't it strange that princes and kings,

And clowns who caper in sawdust rings,

And common folk like you and me

Are builders for eternity?

Each of us is given a bag of tools,

A shapeless mass, and a book of rules;

And each - ere life is flown - must make it

A stumbling block or a stepping stone.

"Best Loved Poems" Richard L. Sharpe

Acknowledgements

I am indebted to many people in the completion of this terminal project and would like to make the following acknowledgements:

Committee members from the College of Architecture, Fritz Roth, Peter Lee, Teoman Doruk, and Bob Eflin, for their guidance throughout the project.

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Mr. Nath Thompson, co-owner and director of Camp Carolina, for his concern and support for the project as well as for allowing me many valuable and enjoyable summers working at Camp Carolina.

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Dale Marshall

Katherine Mullen Kris Oburg Bandele Oguntomilade Charlie Piper Greg Sullivan Rhonda Turner Rut Workman

Dedication

This terminal project is dedicated to my father, whose architecture provided my inspiration and support allowed my education.

I would also like to dedicate this project to Camp Carolina, which year after year continues to touch the hearts and souls of its campers and staff.

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PROBLEM STATEMENT

Camp Carolina is a privately owned summer resident camp for boys situated in the Blue Ridge Mountains just outside of Brevard, North Carolina. After operating on the same site since 1924, increasing land prices and commercial growth prompted the sale of the old property for development. Most of the camp buildings and equipment from the old site were moved to an adjacent 224 acre the farmstead where camp successfully opened for the 1983 summer season. The new property, a largely wooded valley enclosed by mountains and bordering the Pisgah National Forest, is admirably suitable to support a substantial outdoor experience for campers and to nurture the camp goals of simplicity of life, self-reliance, and human relations. The purpose of this terminal project is to prepare a design proposal for Camp Carolina using the new site as it existed prior to the move of the camp. The design shall camp goals and philosophy into incorporate the programming, site planning, and architecture, explore new year-round uses for the facilities, and provide an ideal camping experience for the clientele.

CAMPING

Role in Society



Today's youth is experiencing the increased pressures of a fast paced, urbanized society. New technology and industry has resulted in greater prosperity for the American family; however, development of intra-family relationships is being threatened by an increased concern for economic security. Both parents work in many families, thus depriving the child of certain traditional home influences. Divorce and the ever increasing numbers of single parents further exacerbates this situation. Instability characterizes many American homes with nearly half of this country's children having lived in more than one household by the time they are 18 years old. Today's population is also highly mobile, moving from place to place at frequent intervals. This creates less than ideal family environments and hinders the child's ability to cope with the stresses of schooling as well as social and family expectations. Camping serves as an effective means to answer these social dilemmas of youth. The back-to-nature attitude of camping offers children an escape from these problems. The stability and simplicity of the camping experience allow the child a chance to develop the confidence and social skills he needs to cope with society.

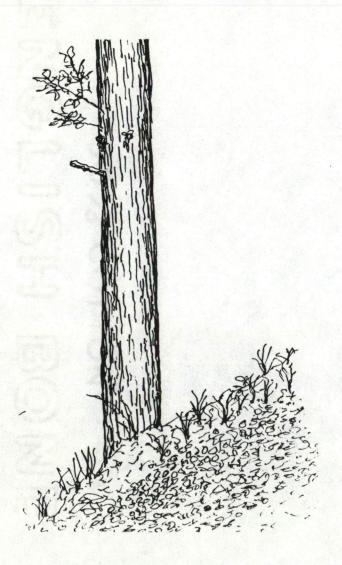
Current Trends

Camping can be traced back through the history of man. Since earliest time, man faced the elements of nature in search of food, clothing, and shelter. Long after survival in the wild was a physical necessity, man still pursues his urge to explore new territory and face new challenges of nature. Camping varies from solo and small family trips into the wilderness to organized group camping sponsored by youth agencies, churches, labor organizations, municipal authorities, and private sources. The organized camps are of various types such as day, resident, travelling, family, and specialist camps. 1

History

Frederick William Gunn and his wife founded the first organized camp in 1861 for the Gunnery School for Boys in Washington, D. C. An immediate success, this camp ran for 18 years.2 Other camps were soon organized - the first private camp in 1876 by Joseph T. Rothrock, the first church camp in 1880 by the Rev. George W. Hinckley at Gardners Island, R. I., Y.M.C.A. Camp Dudley in 1885 by Summer F. Dudley, and the first girl's camp in 1888 by Luther Gulick and his wife on the Thames River in Connecticut. Thomas Holding formed the forerunner of the Camping Club of Great Britain, whose presidents included the Antarctic explorer, Captain Robert Fallon Scott, and the founder of the Boy Scouts, Sir Robert Baden Powell. This club spurred others of its kind throughout Europe, while the Boy Scouts, Campfire Girls, Girl Scouts, Y.M.C.A., Y.W.C.A., Boys Clubs of America, Girls Clubs of America, and 4-H clubs were taking root in the United States.4 Formed in 1910 the Camp Director's Association evolved into the American Camping Association, an important professional organization continuing today to be dedicated to the betterment of camping.

Scope of Camping



Today, camping is truly an international experience. Canada has similar programs as the United States. Swedish youth and adult camps are sponsored by municipalities, and French camps are supported by industry and government. 5 Government sponsored camping in the Soviet Union allows 80% of its youth to enjoy an extended camping experience. 6

CAMP CAROLINA

History



Camp Carolina was founded and directed for 25 years by Professor D. Meade Bernard of Jacksonville, Florida. Following him as director was his son, Dr. Richard R. Bernard, professor at Davidson College. Many men from the field of education played key roles in the operation of the camp such as Dr. Taliaferro Thompson of Union Theological Seminary; Dr. J. M. McConnell, Dean of the Faculty at Davidson; Leonard W. Dick, athletic director from Woodberry Forest School; Coach Hoke Sloan and A. W. "Rock" Norman of Clemson University; and M. B. Chafin, tennis coach at the University of Florida. In 1953 Camp Carolina was purchased by Mr. and Mrs. Joseph McConnell. The camp property consisted of a 384 acre site on the outskirts of Brevard, North Carolina. It contained ample flat valley land for sports activities and an eight acre lake for water sports, while wooded mountain acreage and a close proximity to the Pisgah National Forest supported overnight camping and nature oriented activities. However, encroaching commercial development and rising land values prompted the 1981 sale of the camp property by Mr. McConnell to developers. Mr. Nath Thompson, the director of Camp Carolina since 1961, and Mr. Jerry Stone, a prior program director of the camp, decided to start a new camp elsewhere. They purchased the camp name, equipment, and buildings from Mr. McConnell and arranged to run the camp one more season on the old property for the 1982 summer. At that time the 224 acre Meese farm, adjacent to the old camp property, was offered for sale. A beautiful valley site surrounded by mountain ridges and bordering the Pisgah National Forest, this farm offered an ideal camping location that was more secluded than the old property and offered adequate open fields and wooded mountain terrain for camp operation. Mr. Thompson and Mr. Stone acquired this property in late 1981 and proceeded to move cabins and various other buildings from the old camp over the mountain ridge to the new property after the 1982 camp season. in addition to these relocated buildings, a new dining hall, gymnasium, and barn were constructed, and the new camp, Camp Carolina Backcountry, was ready for the 1983 camping season.

Present Operation

Camp Carolina continues to follow the same general policies of its foundation after the move to the new site. Its campers consist of 8 to 16 year old boys from the southeastern United States and other areas of the nation as well as a few foreign countries. In the summer the camp operates two four-week sessions, of approximately 200 boys and 50 staff members each. A two-week session for younger boys is also planned to start in 1984 in an effort to extend the summer season. The campers of each session are divided by age into one of four tribal units, within which they live and go to daily activities together. In addition to these four camper groups is a smaller group of counselor assistants. These older fifteen to sixteen year old campers share some part-time counselor responsibilities along with their regular activities. Most of the camp staff is composed of cabin counselors. There are two counselors in a cabin of six boys for the youngest age group and one counselor in a cabin of seven boys for the other age groups. The cabin counselor's primary responsibility is the general welfare of his cabin, from eating and sleeping with his cabin to special activities with his campers. Other staff members are administrative, medical, kitchen, and maintenance personnel along with a few program specialists for outing trips and the horseback riding program. Activities offered at Camp Carolina include land sports, water sports, nature oriented programs, and out of camp tripping programs into the surrounding national forests and state parks. A typical day of activities is scheduled as follows: breakfast and cabin cleanup, three onehour activity periods, free time, lunch, rest hour, two more activity periods, free time, supper, twilight games, evening program, and finally, lights out. Special cabin and tribe acivities occur Wednesday afternoons and evenings as well as Saturdays and Sunday afternoons. Sunday mornings are reserved for Sunday school and free time. Whole-camp activities include Friday night campfires, Sunday evening vespers, and occasional all-camp games.

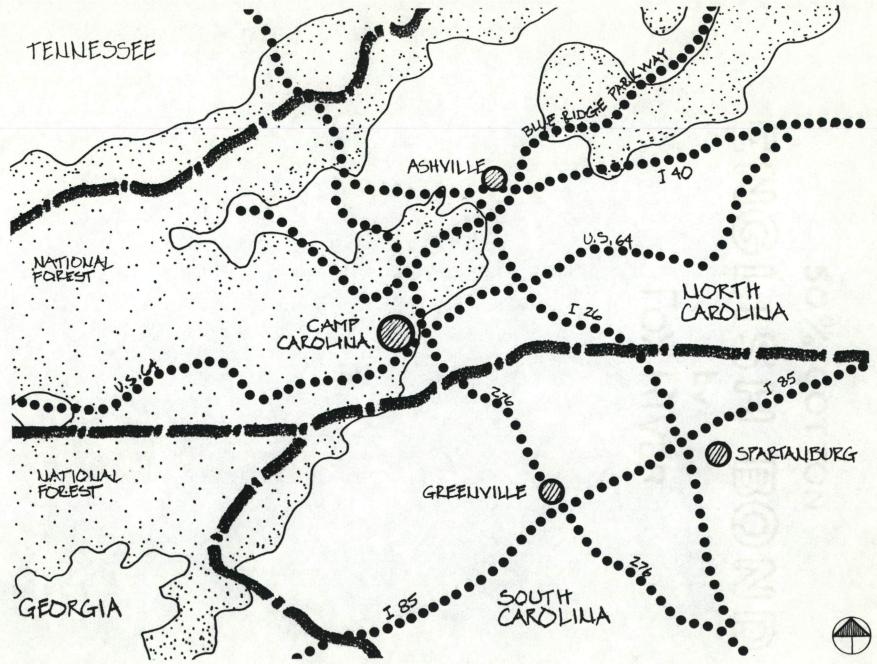
Future Goals

Presently, Camp Carolina lies dormant when not in session for the short ten-week summer season. However, the camp owners have expressed interest in a year-round operation to better utilize the camp facilities. Winterization of certain buildings would allow for such uses as conferences, family retreats, sports camps, church retreats, and industry personnel training workshops. Also, summer camps can be used as outdoor education centers for local school districts. In such cases, school teachers get an opportunity to work with their students in a non-classroom environment. Journals of learning experiences may be kept for an English course while math and science might be applied to real experiments involving the natural elements of the camp's surroundings. These future uses could allow Camp Carolina to be a full year-round outdoor adventure center.

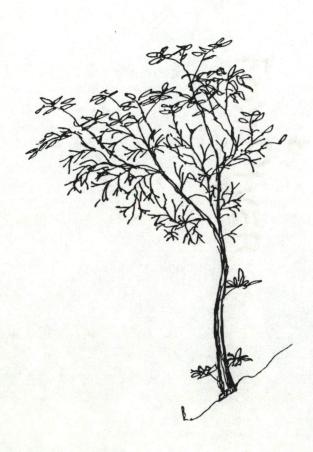
SETTING

Region

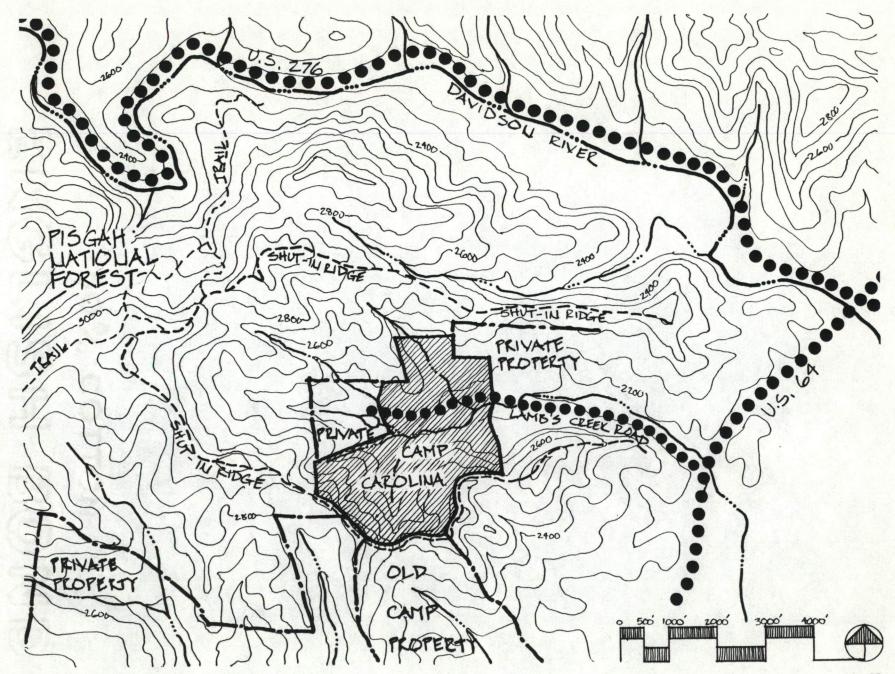
Camp Carolina's use as an outdoor adventure center is greatly enhanced by its location in the western North Carolina mountains. Just outside of Brevard, it is located between Ashville, N. C. and Greenville, S. C. with less than an hour's drive to either city. The camp's hiking and overnight tripping program takes advantage of the nearby Pisgah National Forest, Nantahala National Forest, Shining Rock Wilderness, Great Smoky Mountains National Park, Linville Gorge Wilderness Area, and Mount Mitchell State Park. Also, the canoeing program utilizes the Mighty Mills, French Broad, Green, Tuckasegee, Nantahala, and Chattooga rivers. A twenty minute drive to the Blue Ridge Parkway provides more scenic overlooks, hiking, and tripping areas.



Vicinity



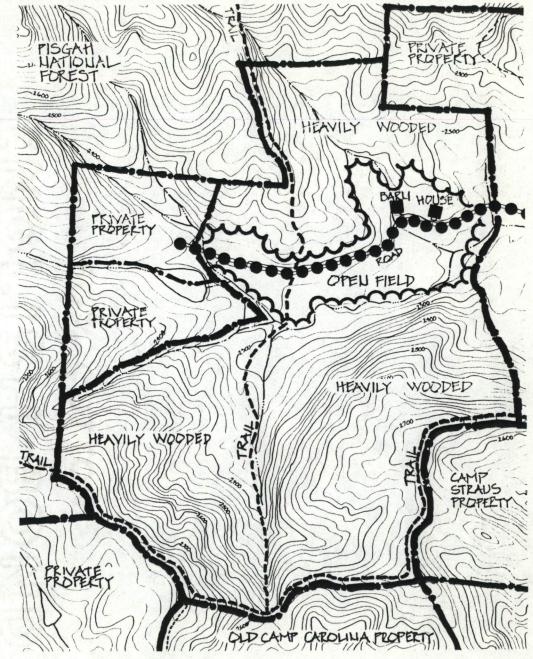
Bordering the Pisgah National Forest, horseback rides and hikes have use of many trails out of camp and into the wilderness. The Davidson River is within easy hiking distance, and overnight cabin trips are often made to favorite swimming holes and campsites. The mountain ridge separating Camp Carolina from the old site also secludes it from the commercial growth of Brevard. Lamb's Creek Road, the entrance to the new site, is a quiet gravel road that follows Lamb's Creek through a pastoral valley, serving as a welcome transition from the busy four lane U.S. 64 highway. Some of the local points of interest to the camp include the Brevard Music Festival, a fish hatchery, Sliding Rock, Looking Glass Falls, and the Cradle of Forestry.

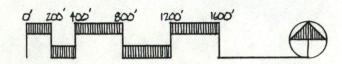


Land Use

The following diagram explains the various land uses affecting the site. The eastern border with the Pisgah National Forest is interrupted by two small residential properties. They are partially visible from the camp property, and their access is a small gravel road running through the heart of the site. Other neighboring properties are heavily wooded and largely hidden from view. The old Camp Carolina properly lies over the ridge to the south. Over the southeast ridge lies Camp Stauss, a recreation facility for employees of the Olin Corporation. Trails from camp lead into the Pisgah National Forest.

Land Use



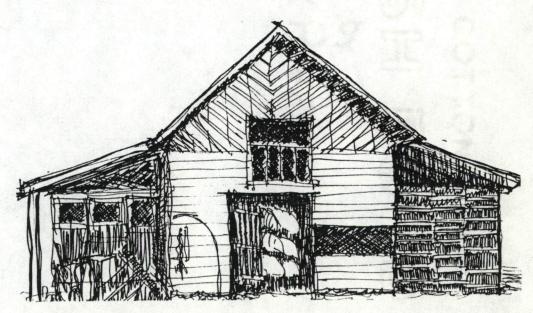


Existing Buildings

Two interesting structures remain from the old farmstead, a small farmhouse and a rustic old barn. The frame construction farmhouse has bedrooms upstairs, living and kitchen areas downstairs, and steep roof pitches that express a mountain vernacular. It is in good condition and could serve well as a caretaker's residence.



The old barn is in fair condition and has a simple, straightforward post and beam construction. The large, open hayloft upstairs could serve as a meeting area while the stalls below could be openned up for storage and work areas. The barn serves as an important reminder of the past history of the site, and reconstruction is recommended.



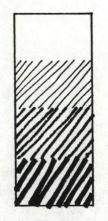
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July average daily maximum temperature	83 ° F
July average daily minimum temperature	60° F
January average daily maximum temperature	38° F
January average daily minimum temperature	16° F
Annual precipitation	68 inches
Annual days of snow coverage	5 days

Topography

The site topography is expressed in the following diagrams of slope, elevation, and hydrology. The steepest slopes occur in the southern portion of the site in which the property line follows the mountain ridge. The highest elevations are also found here, just short of 2800 feet above sea level. The flattest areas are the open fields of the valley. Several bold streams flow through camp property and empty into Lamb's Creek.

Slope

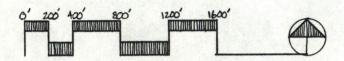


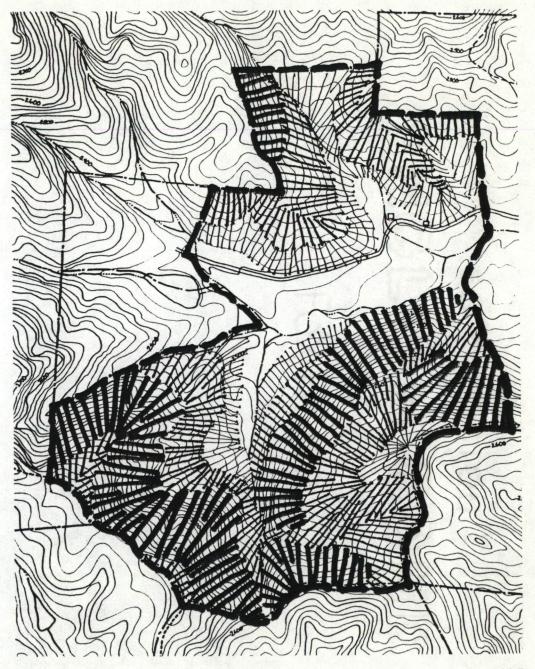
0 - 20%

20% - 40%

40% - 60%

60% - OVER





Elevation, Hydrology



2200'- 2300'

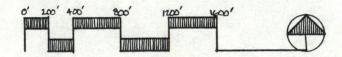
23000 - 24000'

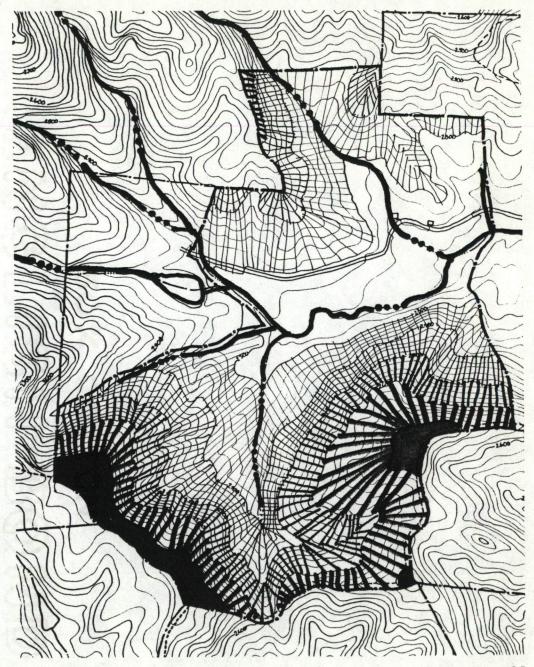
2400' - 2500'

2500' - 2600'

2600' - 2700'

2700' - 2800'





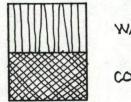
Sensory Qualities

The following sensory qualities diagram expresses the aspects of the site that relate to the human senses. Good views are located on the northern ridges overlooking the open field to the mountains beyond. Ridge lines form visual boundaries around the valleys that give the site a sense of isolation. The central flat valley land tends to be warm in the summer time since it is open fields, while the wooded valleys tend to be cooler. Predominant summer winds flow through the valley from the southeast and winter winds flow from the northeast, though winds are variable in the mountains.

Sensory Qualities

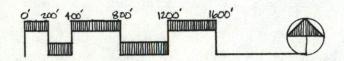


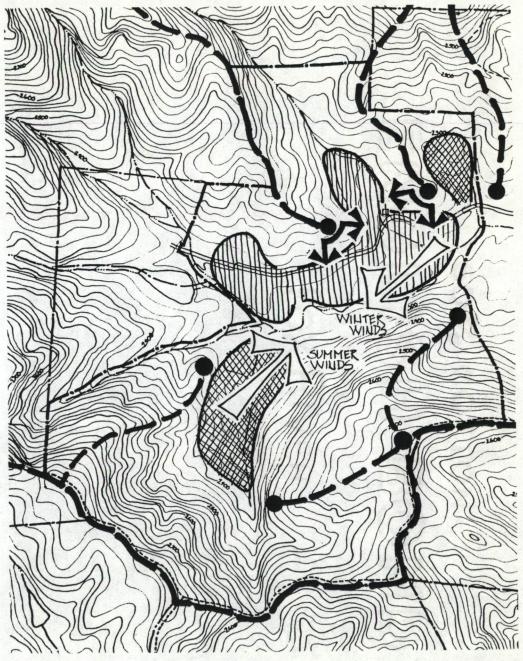




WARM, OPEN FIELD

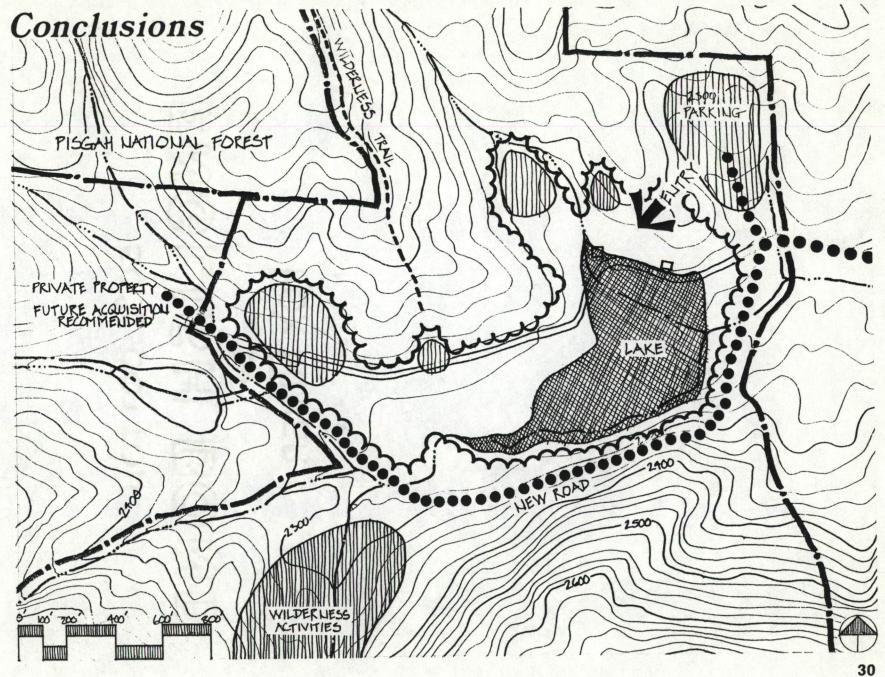
COOL, WOODED VALLEY





Conclusions

The preceding site analysis diagrams lead to the following site analysis conclusions diagram. Major consideration is given to the two private properties that require access through the camp property. If future acquisition is not possible, then relocation of the existing access road is suggested along the southern edge of the valley. Here against the steep slope of the mountain and hidden behind trees, the road would interfere less with camper life than if it were placed on the more moderately sloped northern edge, which is better suited for camper activities. In keeping with the camp goals and objectives, parking for camp is located in the isolated northeastern valley near the entrance to camp. The pedestrian access from the parking area enters through a gap where the visitor is greeted with a grand view of a camp wilderness setting free of cars and parking lots.



Simplicity of Life

The philosophy of Camp Carolina is centered around the goals of simplicity of life, self-reliance, and human relations. Simplicity of life is expressed in the rustic setting and back-to-nature attitude of camp life. Supplied only with the basic physical necessities of shelter, food, and clothing, the campers are able to escape urban pressures and concentrate on a valuable camping experience. The outdoors becomes the classroom, the playfield displaces the street, and the cabin unit replaces the family.

Self - reliance

Simplicity of life at camp also helps nurture the goal of self-reliance. With less distractions the camper is given a chance to discover himself. Camping is education - the camper learns his role in nature through his wilderness experiences. Being away from home he has added responsibilities to take care of himself and his cabin. New activities offer exciting challenges for his personal development. All of these factors help give the camper a sense of purpose and contribute to his self-reliance.

Human Relations

The final camp goal is human relations. Camplife offers abundant opportunities for new friendships. Campers live in small cabin units within a larger tribal group for ample group living experiences. Different ages and varied backgrounds of the campers allow for expanded horizons over the summer. Living, working, and playing together, the campers are constantly engaging in human relations with their peers and counselors, an important factor in their personal development.

Needs of Children

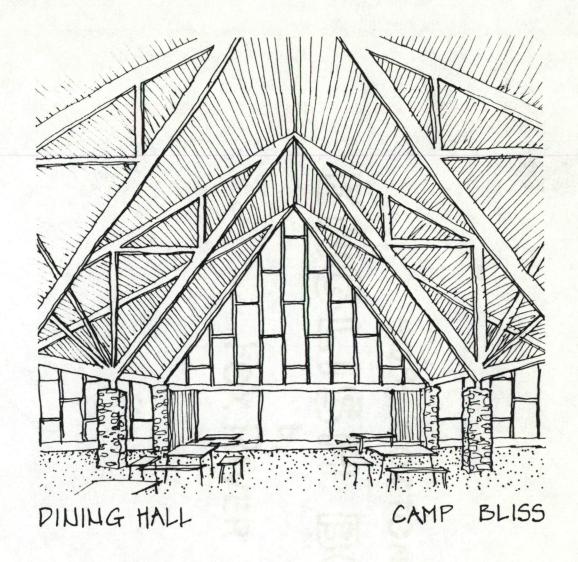
Physical needs of food, clothing and shelter are easily provided by summer camp. More challenging is fulfilling a child's emotional needs - those of love and acceptance by parents and peers, security and protection, independence, faith or a belief in morals and human values, and guidance and control by having good examples to follow. Camp Carolina's goals and objectives intend to fulfill these needs in hopes of creating a positive camping experience.

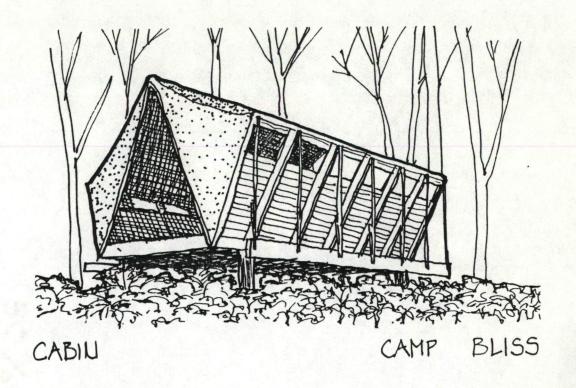
Case Studies

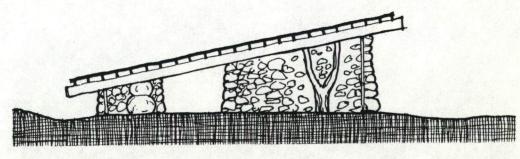
Architectural design is an important means of fulfilling camp goals and objectives and children's needs. In keeping with the simplicity of life of a wilderness setting, respect for the environment calls for as little disturbance as possible to the natural landscape. Buildings must blend into the site in terms of location, scale, form, and materials. Site planning determines a circulation hierarchy that ranges from public areas such as the dining hall and administration areas to the secluded cabins tucked away into the wilderness. Community groupings of cabins play an important role in human relations. Even selfreliance is promoted by tent-like cabin structures that require assembling by campers before they are ready for use. Following are two case studies by Edward Larrabee Barnes that explain his approach to integrating the total design with a camp philosophy.

Camp Bliss

Camp Bliss, financed by the New York Herald Tribune's Fresh Air Fund, allows disadvantaged city children a chance to relations in outdoor environment. human an develop Imaginative building forms in cabins, village halls, and the dining facility are used by Ed Barnes to achieve a friendly and welcoming feeling for city children who are not used to the wilderness. Lightweight and airy buildings open up to nature and replace the oppressive, enclosed "log cabin" forms of many Cabins are tarpaulin covered tent-like traditional camps. structures on top of wooden platforms. Village halls and the dining facility contain similar building forms and have an airy appearance due to the use of glass and lightweight structural connections. Contrasting the dynamic form of the camper oriented buildings are the modest service buildings. Simple, flat roofed structures serve as an administration building, bathhouses, an infirmary, and staff living quarters.8







DIVING HALL SECTION

CAMP HAYDEN

Camp Hayden

Camp Hayden, another New York Herald Tribune Fresh Air Fund camp by Ed Barnes, expresses a hierarchy of building types through the use of materials and form. The same lightweight, airy tent-like cabins of Camp Bliss are used here also, but they are contrasted by the village halls and dining facility. These larger scale buildings still relate to the natural environment through their use of stone and a simple earthy structure, but they take on a much heavier and more permanent appearance than the cabins. The cave-like dining hall opens to the lake and makes use of a large boulder and a cut off tree as structural supports. The hierarchy of building types is further expressed in the site planning. Cabins are scattered around village halls in groups of four to create villages which in turn form the camp community.9

PROGRAM

Activity Evaluation

The following evaluation of camper program activities chart assesses how well specific activities support the camp goals of simplicity of life, self-reliance, and human relations. establishing a priority for these activities as to whether or not they should be included in the camp's program, a fourth factor of "uniqueness to camp setting" was considered. For this category, activities such as canoeing and horseback riding, that are more unique to the camp setting and offer new challenges to the camper's personal growth and development, are considered more important than activities that are easily achieved in the camper's home environment. Current program activities are listed along with two new activities - a ropes course and camper work projects. The evaluation conclusions suggest that nature and special camp activities fulfill more of the camp's goals and objectives and are more appropriate for the camp setting than most of the organized team sports and individual sports activities.

Activity	Simplicity of Life	Self - Reliance	Human Relations	Unique to Camp	Priority
Backpacking	•	•	•	•	high
Hiking	•	0	0	0	high
Swimming	•	0	•	0	high
Canoeing	•	•	•	•	high
Nature	•	0	0	0	high
Horseback Ridir	ng •	•	0	•	high
Rappelling	•	•		•	high
Pioneering	•	0	0	•	high
Ropes Course	•	•	0	•	high
Arts and Craft	s O	0	0	0	high
Football		0	•		low
Baseball		0	•		low
Basketball		0	•		low
Soccer .		0	•		low
Volleyball		0	•		low

Activity	Simplicity of Life	Self - Reliance	Human Relations	Unique to Camp	Priority
Riflery	0	0	0	•	high
Archery	0	0	0	•	high
Golf		0		0	low
Tennis		0	0		low
Wrestling		0	0		low
Gymnastics		0	0		low

Twilight Games	0	0	•	0	high
Evening Program	•	•	•	•	high
Vespers	•	•	0	•	high
Campfire	•	0	•	•	high
All-camp Activities		0	•	0	high
Cabin Day Activiti	es O	0	•	•	high
Work Projects	•	•	•	•	high
					44

Activity Needs

All activities occurring at camp require needs to a greater or lesser degree. Whereas simple Conversation can be held anywhere, hiking requires trails in the forest, feeding 250 people creates a need for a dining hall, and administrative functions require an administration building. The following chart lists the basic activities that occur at camp and their needs. The first group, camper program needs, is based on the preceding evaluation of camper program activities. No facilities were recommended for golf and tennis due to their low priority rating. A gymnasium was recommended for sports activities despite their low priority rating due to its multiple use for those activities as well as rainy day activities. Following the camper program needs, other camp needs include camper living needs, support needs, and future year-round needs.

Camper Program

Backpacking	storage, trails
Hiking	trails
Swimming	lake, swimming docks
Canoeing	lake, canoe docks
Nature	shelter, woods, trails
Horseback Riding	stables, pasture, riding ring, trails
Rappelling	storage
Ropes Course	course area
Arts and Crafts	arts and crafts facility
Team Sports	gymnasium, fields
Riflery	storage, range
Archery	storage, range
Golf	no facilities recommended
Tennis	no facilities recommended
Wrestling	gymnasium
Gymnastics	gymnasium

Camper Living

Support

Food Service

Medical Service

Staff Living

Staff Relaxation

Maintenance

Administration

administration building
dining hall, kitchen
infirmary, direct access
living quarters
staff lodge
maintenance facility, parking

Future Needs

Administration

Eating

Living

Meeting

winterized administration building
winterized dining hall, kitchen
winterized staff living quarters
winterized meeting room, dining hall

Area Requirements

Area requirements arise from the preceding description of camp activity needs. Following are lists of requirements for camper program areas, camper living areas, support areas, and an area requirements summary. Square footages listed in the right column represent actual building square footage required.

AREA

square feet

Camper Program

WILDERNESS AREA

Use of the camp's wooded area and the Pisgah National Forest for backpacking, hiking, canoeing, nature, rappelling, pioneering, and ropes course

LAKE

10 acres for swimming, fishing, and canoeing Swimming Dock Canoe dock

OPEN FIELDS

Use of open fields for games and sports without disruption of landscape

GYMNASIUM	6,200
Meeting, sports, and rainy day activities Storage of activity equipment	6,000 200
COUNCIL FIRE	
Isolated area in woods for campfires and vespers	
OUTING TRIP STORAGE	300
Backpacking, hiking, rappelling, and canoeing	
NATURE LODGE	300
Sheltered meeting area Storage	250 50
Specimine cages	
ARTS AND CRAFTS	350
Work area	250 100
Storage	,,,,
RIFLERY	650
Range Sheltered shooting gallery	600
Secured storage	50
	49

A	R	EA

HORSEBACK RIDING FACILITIES	2,950
14 stalls at 12' by 12' each	2,000
Tack room	150 150
Feed room Hay storage	300
Bedding storage	150
Pasture	
Riding ring	
Trails around camp property, forest	200
Groom's quarters	200

Camper Living

CAMPER CABINS		12,200
4 groups of 7 cabins each 2 counselor assistant cabins		(28) 400 (2) 500
LODGES		2,800
1 lodge per cabin group		(4) 700
BATH FACILITIES		3,000
1 bathhouse per cabin group	Andrew State	(4) 700
		50

Support

ADMINISTRATION	2,630
Director's office	250 300
Open plan offices	300
Secretary	250
Work area	250
Lounge	500
Meeting	600
Loggia	50
Toilet	50
Mechanical	100
Storage	

DINING HALL	6,000
Dining	4,400
Toilets	350
Office	100
Lounge	150
	150
Dry storage Food preparation	300
	250
Cooking	100
Serving	150
Dishwashing	50
Mechanical	50
	51

INFIRMARY	1,700
Waiting	100
Examination	200 50
Bath	500
Sick ward	100
Isolation Nurse's bedrooms	(2) 200
Living and office	250
Kitchen	50
Bath	50

STAFF LIVING	2,400
6 units of 2 persons each, including the Chaplain, program director, horseback riding head, and overnight tripping staff	
bedroom, living, kitchen, bath	(6) 400

STAFF LODGE	800
Lounge Kitchenette Toilet	700 50 50
Tollet	52

MAINTENANCE FACILITY	1,050
Garage	600
Tools and work room Storage	300 150

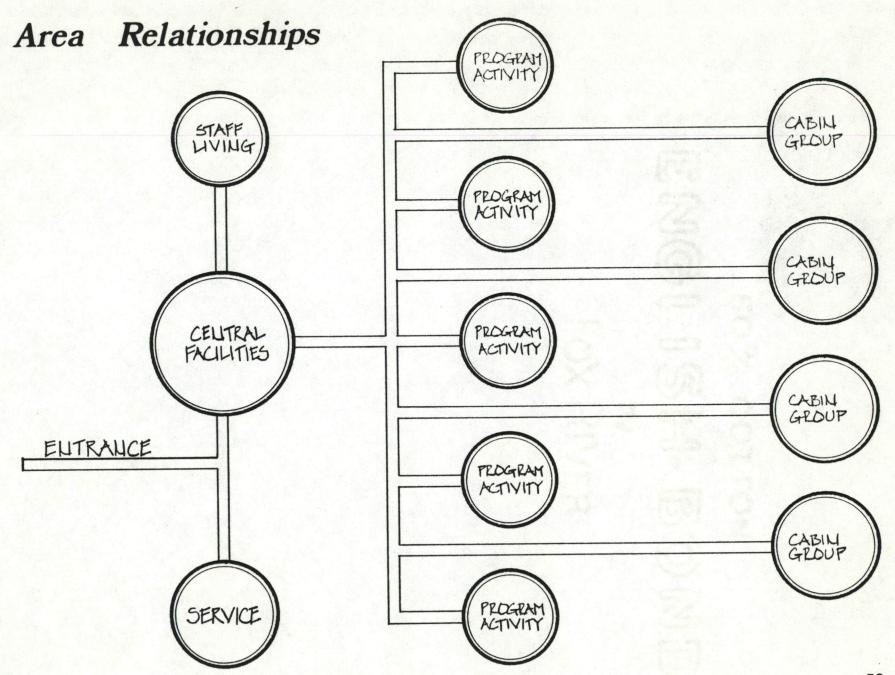
CARETAKER'S HOME

Suggested relocation of old farmhouse

CAMPER PROGRAM AREA	10,750
Cymposium	6,200
Gymnasium	300
Outing trip storage Nature lodge	300
Arts and Crafts	350
	650
Riflery Horseback riding	2,950
Horseback riding	
CAMPER LIVING AREA	18,000
Cabins	12,200
	2,800
Lodges Bathhouses	3,000
SUPPORT AREA	14,600
Administration	2,650
Dining Hall	6,000
Infirmary	1,700
Staff Living	2,400
Maintenance Facility	1,050

Area Relationships

Area requirements of camp should be organized along a public to private relationship. The most public areas are the central facilities of the dining hall and administration buildings, which need a close relationship to the camp entrance. Also related to the entrance are the service requirements. Staff living quarters and camper program activity areas are more private than the central facilities, while the camper cabin groups are isolated in the very private wilderness area.



DESIGN SOLUTION

Concept

As stated in the site analysis conclusions, the entrance road to the private properties west of camp is well suited against the southern mountain side of the open valley. The more moderately sloped northern edge and the valley itself are hearby left free for camper program activities, living units, and support facilities. Respect for the wilderness calls for autos and service vehicles to be isolated from the main camp property and placed in a separate valley close to the camp entrance. The pedestrian entrance opens through a small gap to recieve a grand view of a lake placed in the lower valley and the mountains beyond. Activity areas are placed among the trees in natural nodes on the northern perimeter of the field so as not to interfere with the natural landscape. Higher up on the mountain ridges cabin groups overlook camp. Wilderness activities are placed in the heavily wooded southern valley, and trails lead from camp into the forest.

Site Planning

A central circulation spine wraps around the lake and northern perimeter of the open fields to connect activity areas. The swimming area acts as a terminus at one end of the spine, while the horseback riding facility anchors the other end. Along this lie the central facilities area (camp entrance, administration building, and dining hall), the infirmary, the arts and crafts building (the relocated old barn), canoe docks, and gymnasium. Sports activities take place in the open fields with as little disturbance as possible to the natural landscape. Winding trails lead up from the public circulation to cabin clusters on the ridges. Here backed by wilderness area and overlooking camp, the cabins are afforded the privacy and setting required by the camp goals and objectives.

Central Facilities

The entrance pavillion through the gap into camp is flanked by the administration building and dining hall. Both buildings feature simple, clean cut plans with views overlooking camp. The architecture is organic in its use of stone, wood, and glass. Tapered stone piers with steel pipe connections to the roof give the appearance of mass resting above rocks. Tiered stone levels visually anchor the buildings into the hillside. Exposed laminated wood beams allow for a straightforward construction system of simple trapezoidal forms. Clerestories open the interior to light. Both buildings are winterized for year-round use.

Cabin Groups

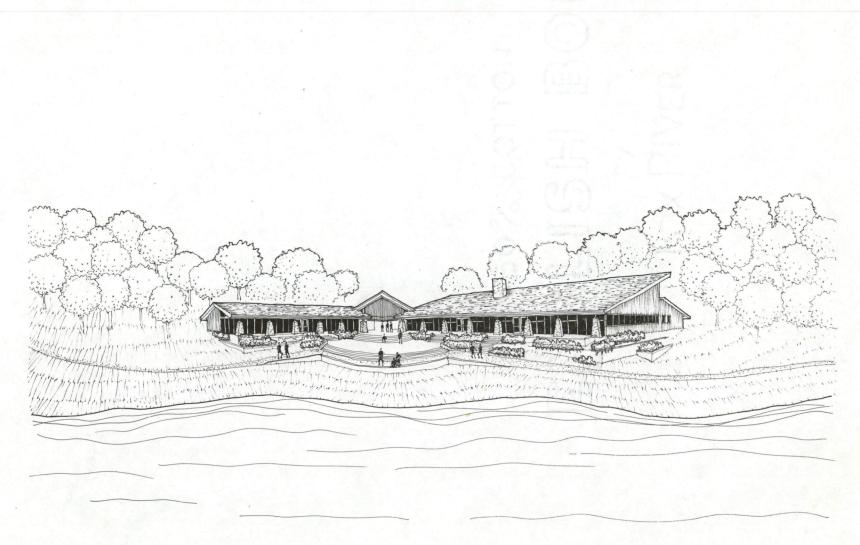
Each age group of cabins is situated on its own ridge above the valley. A lodge forms the central focus for each group with a meeting area above and central bathrooms below. The lodge form, reminiscent of the entry pavilion to camp, opens up to the wilderness. Similar to the tent-like cabins used by Ed Barnes at Camp Bliss and Camp Haystack, cabins wrap around the ridge below the lodge and have their own private porch overlooking camp below. Each session, campers take part in constructing their own cabins by placing wooden side panels and a canvas roof on top of a permanent wooden platform, thereby encouraging the camp goal of self-reliance.

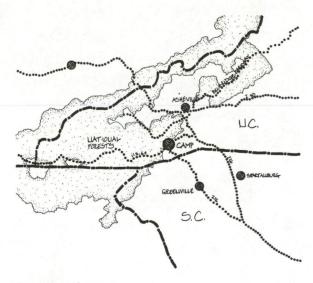
Living Quarters

The staff living quarters and infirmary utilize the same basic building forms as the dining hall and administration buildings, and their exposed post and beam construction is similar to the laminated wood beam construction of the latter buildings. Clerestories once again open the interior to the outside environment by allowing light to flow in. The staff living quarters houses the counselors who do not have cabin responsibilities while the infirmary houses two nurses and sick campers during the camp sessions. Both buildings are winterized to accommodate visiting groups. The infirmary floor plan is flexible enough to clear out the treatment and examination rooms for a meeting space, and the sick ward serves as dormitory style sleeping quarters.

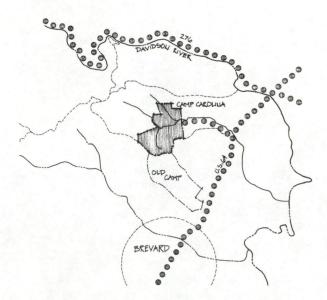
CAMP CAROLINA OUTDOOR ADVENTURE CENTER

h david fulmer III spring 1984

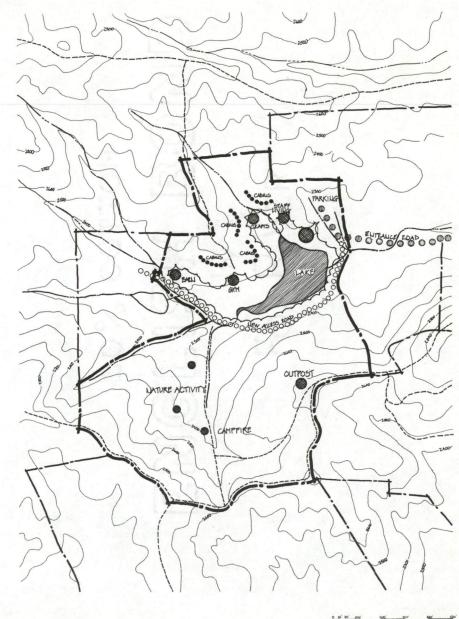




location

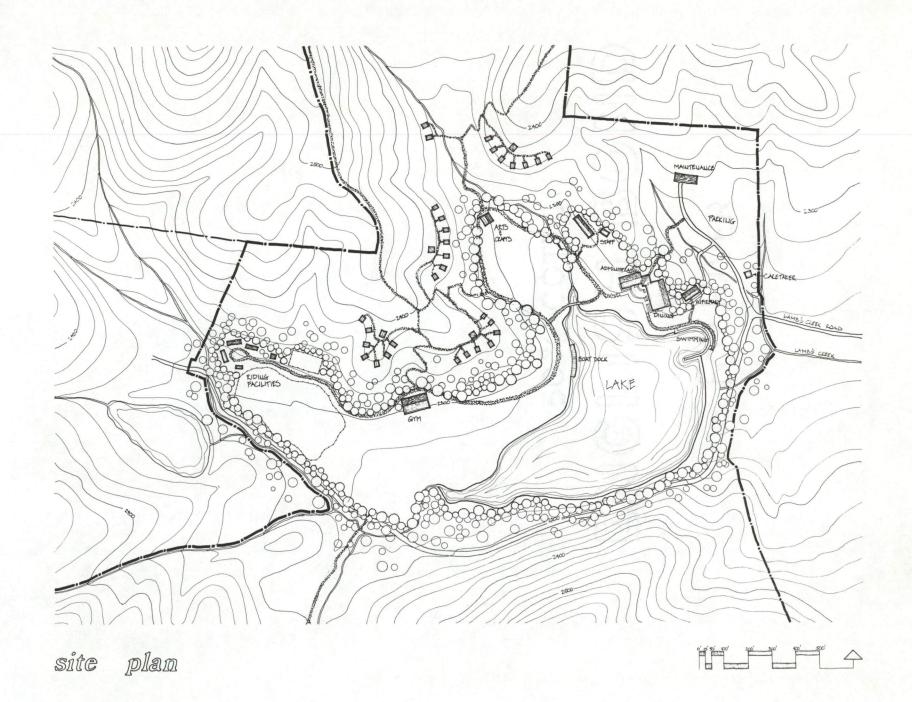


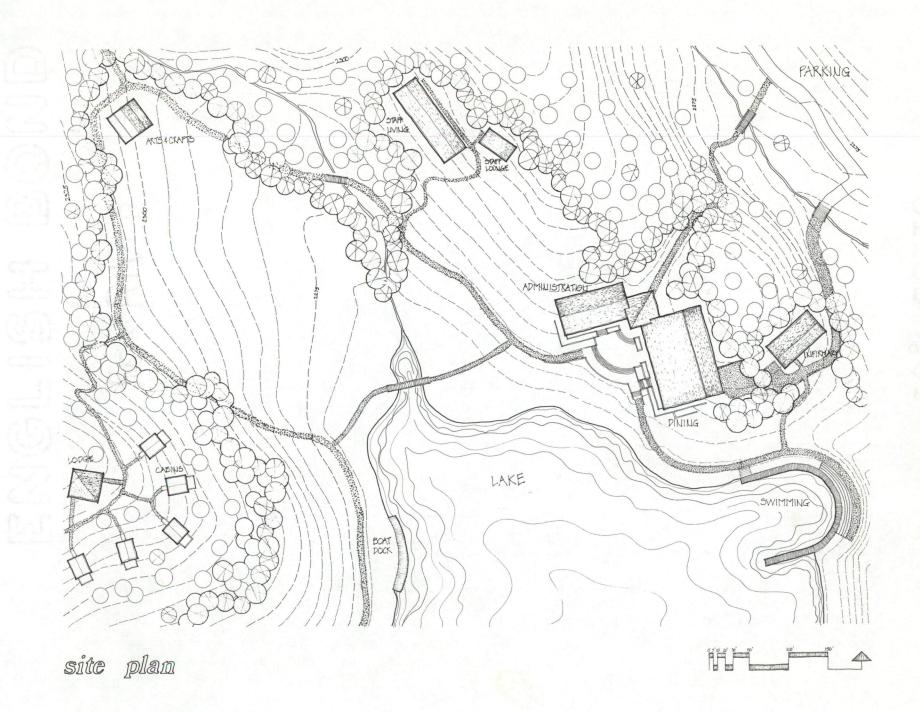
vicimity

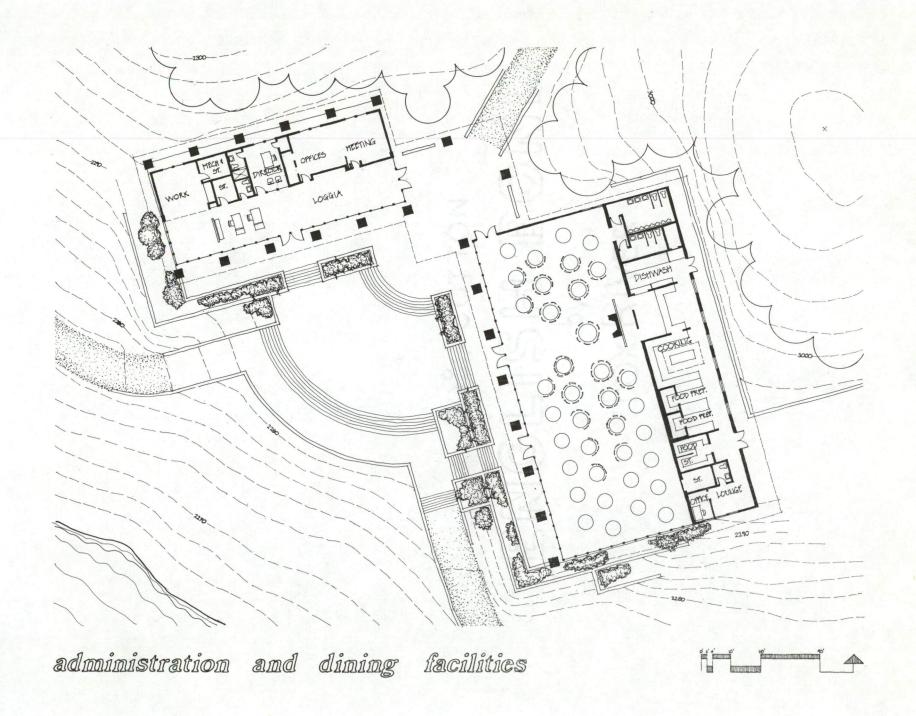


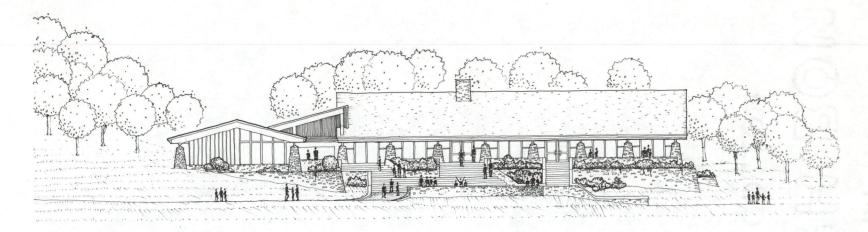
concept



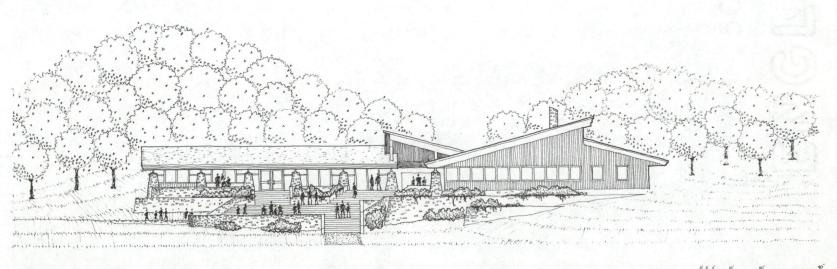






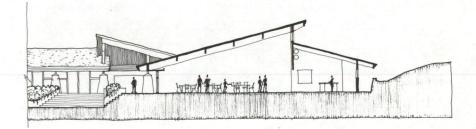


west elevation

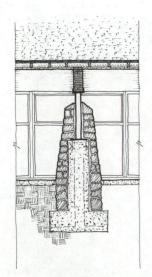


south elevation

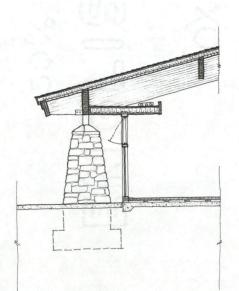


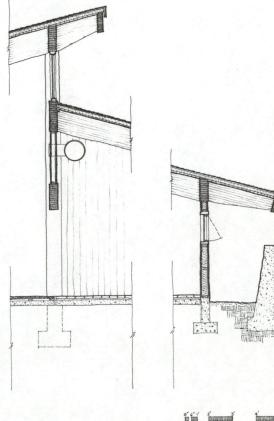


sections

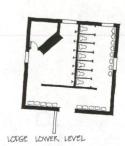






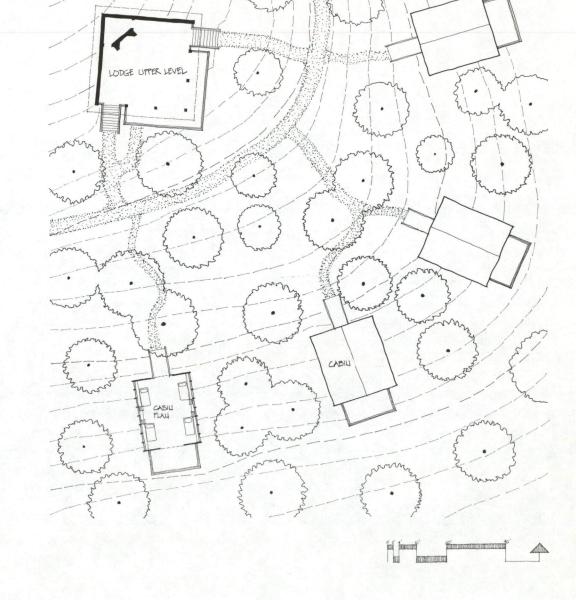




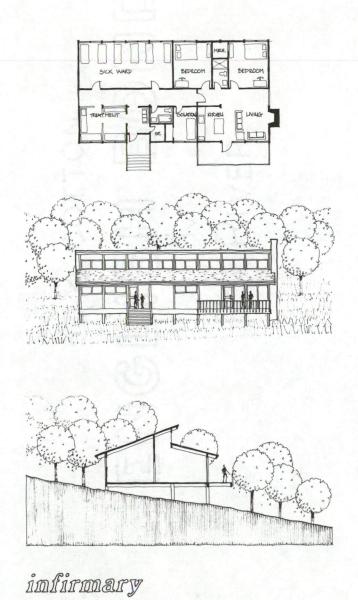




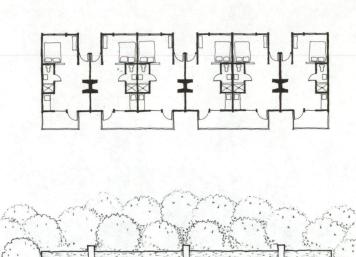




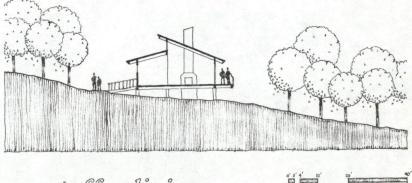
cabin groups

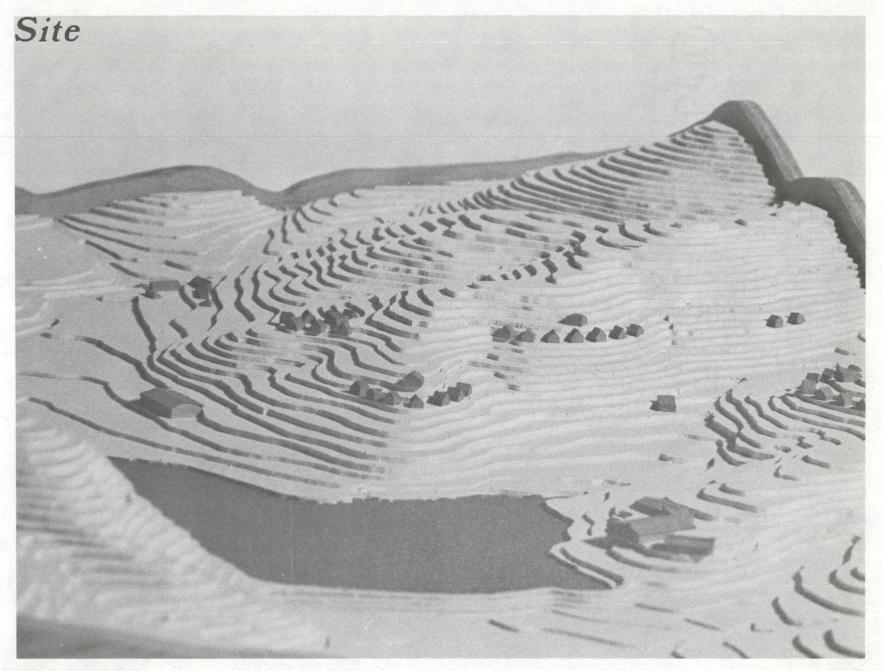


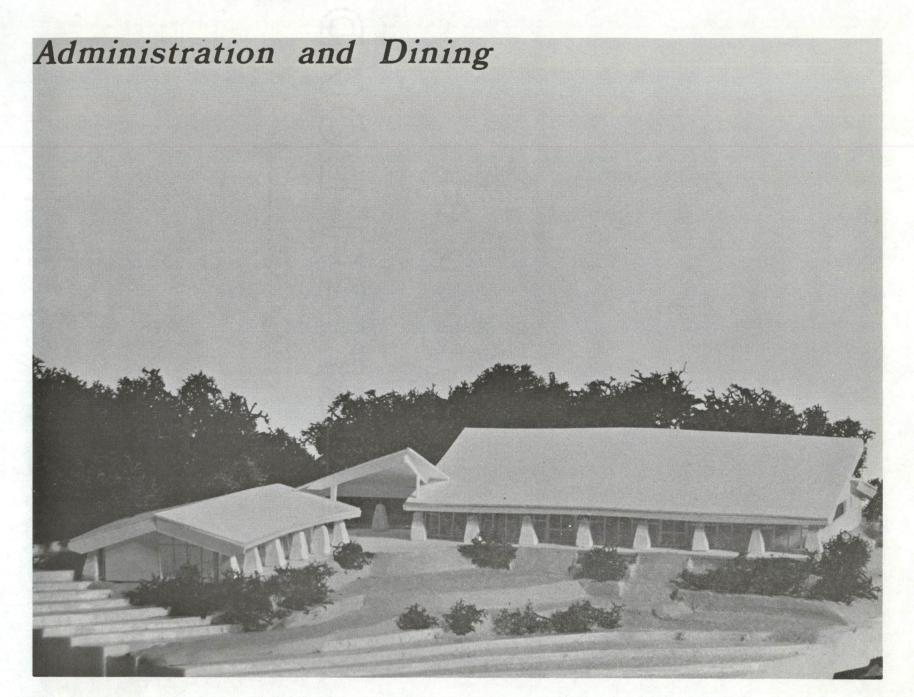












Footnotes

- 1"Camping," Encyclopaedia Britannica, 1983.
- 2 Ibid.
- 3 Ibid.
- 4 Ibid.
- 5 Ibid.
- 6 From a speech "Future Trends and needs in Camping" made by Charles Kujawa at the 1983 Southeast Regional American Camping Association Conference held at the Outdoor Laboratories of Clemson University.
- 7 What Every Child Needs (New York: National Association for Mental Health, 1969).
- 8 "Architecture in the Rough," <u>Architectural</u> <u>Forum,</u> October 1957, pp. 120-123.
- 9"Two Camps Designed for Summer Fun," Architectural Forum, July 1962, pp. 91-95.

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