NATIONAL · OUTDOOR · LEADERSHIP · SCHOOL

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P . R . E . F . A . C . E

A New Campus for the...
National Outdoor Leadership School

A thesis paper submitted in partial
fullfillment of the requirements for
the degree of Bachelor of Architecture

sid scott

Montana State University
Bozeman, Montana
June 10, 1985

advisor: _____

director, School: _____
of Architecture

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signed: Sid Scot

date: 6/10/85

P.R.E.F.A.C.E

Dedication :

.... to my best friend Tess, who
makes it all worthwhile.....

C·O·N·T·E·N·T·S

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The laws of nature are really quite incredible. These laws have provided us with spectacular wonders, beauty & challenge which have intrigued mankind for centuries. I have serious doubts that anyone has totally understood them especially when you consider the ways in which we deal with nature. Man has tried to alter it, dominate it, destroy it, ignore it, imitate it, and, fortunately, sometimes just try and get along with it.

> "Our first goal should be living in harmony with nature, for the laws of Nature are fixed laws. They will never change, so we must adjust our lives in accordance with their demands." 1

I have been interested, and often concerned with the way man deals with nature. This has led me to explore the National Outdoor Leadership School (NOLS). It was founded in 1965 by

.a flamboyant visionary & controversial figure by the name of Paul Petzoldt who was determined to start a school which would train people to be outdoor leaders, competent in all aspects of outdoorsmanship. He had a vision: NOLS would be a training ground for a special group of outdoors leaders, a group of men & women who would act as a seed crop for the entire country, leading the way in educating people to enjoy and preserve the special relationship we share with nature. Many people have shared this vision as his idea has grown into a strong & growing program. With the growth has come change, but...

> "... one feature remains the same: a commitment to develop safe, competent outdoor leaders and to preserve wild areas."[2]

The last 20 years have seen over 23,000 students complete the program. Each one has had the

chance to learn by experience. The experience of an intense relationship with a special environment. Each one has been taught the skills people need to enjoy the wilderness fully, the minimum impact techniques which will preserve it, and the judgement which will allow them to teach & lead others through it without leaving their mark. They have learned to value nature & all it has to offer.

It is in the spirit of promoting & facilitating this ideal that I have chosen my thesis project; a facility for the National Outdoor Leadership School.

The aspirations that give direction to my project...

- create a facility to train outdoor leaders & to promote an understanding of our relationship with nature

- provide an environment to challenge & excite "outdoor athletes" to grow & develop

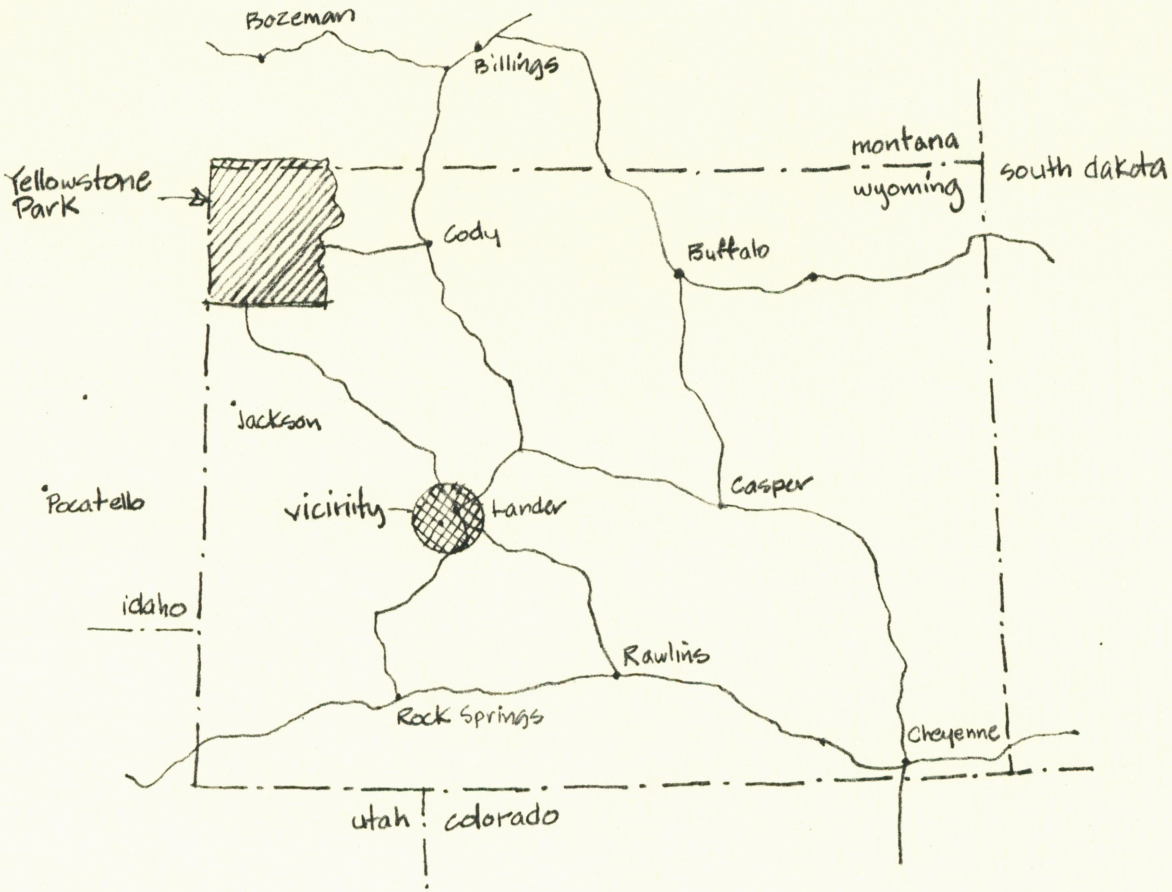
- create a place for interaction with both people & nature

- establish a special relationship between the built form and its setting

S I T E

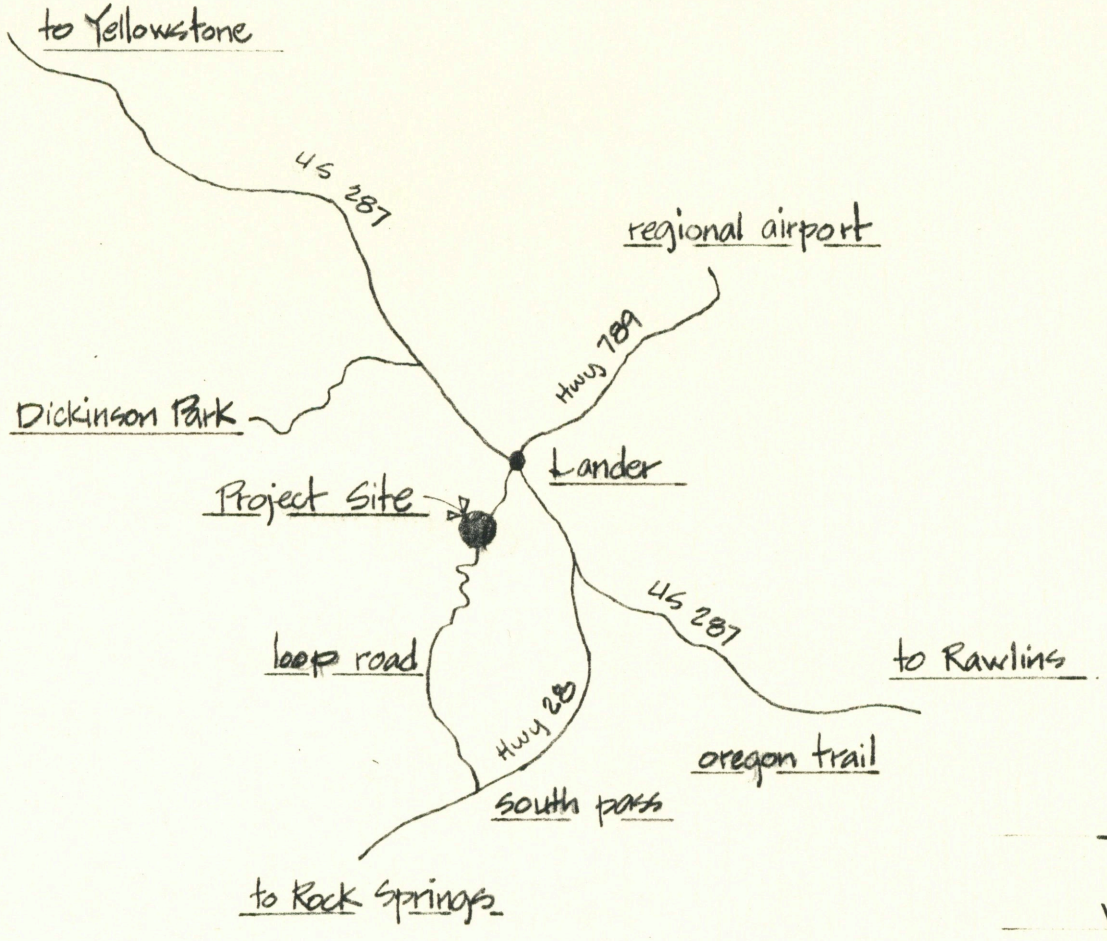
The site is located in the foothills of the Windriver Mountains of west central Wyoming. Lander, a community of about 8000 people, is about 15 miles away. It was selected for the following reasons:

- the rugged terrain provides for many of the activities that NOLS is involved in.
- such a variety of natural features will provide inspiration for the project
- it is easily serviceable from the city yet it maintains the feeling of being away from the urban areas & gives a strong feeling of nature



WYOMING

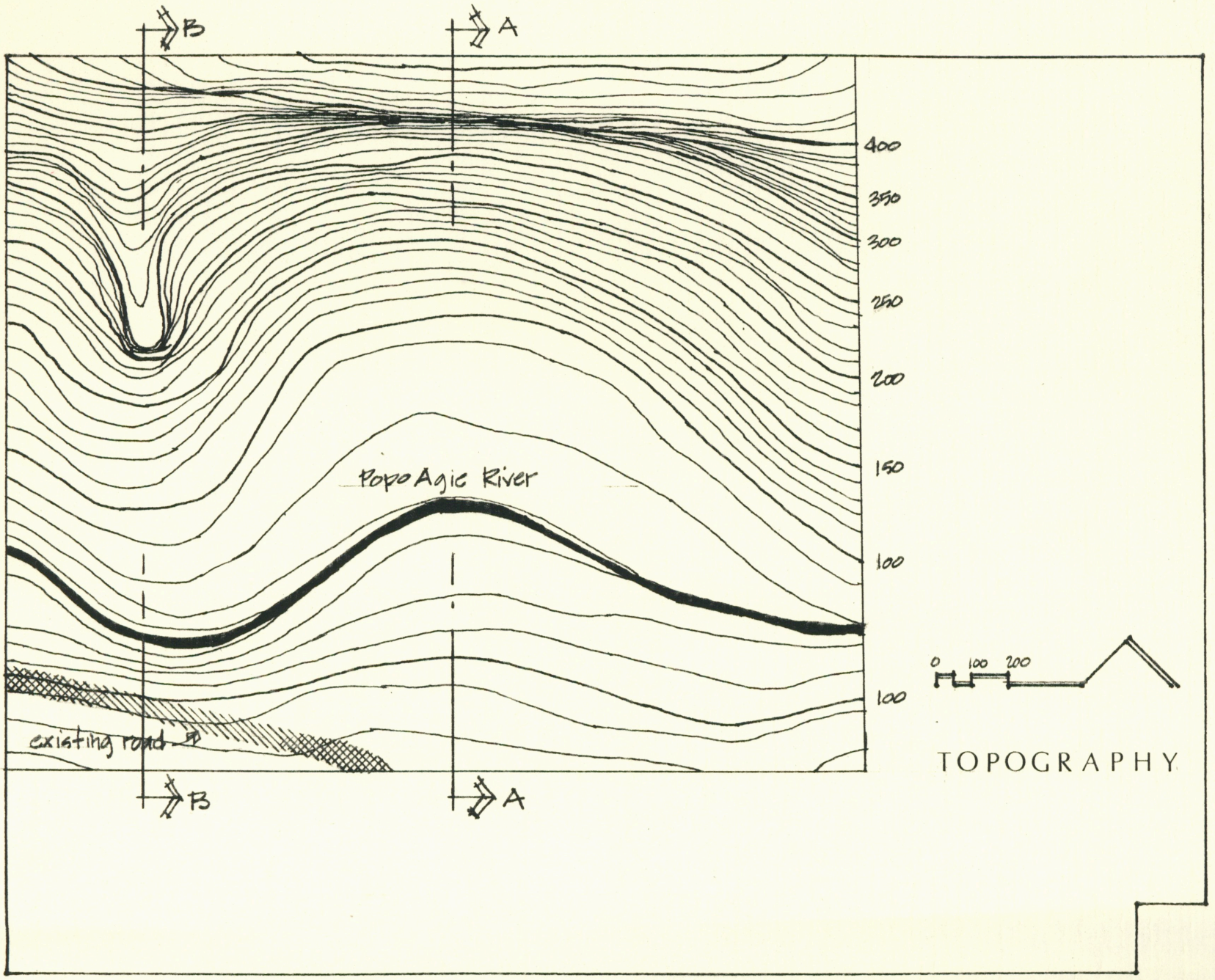
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VICINITY

S . I . T . E

8



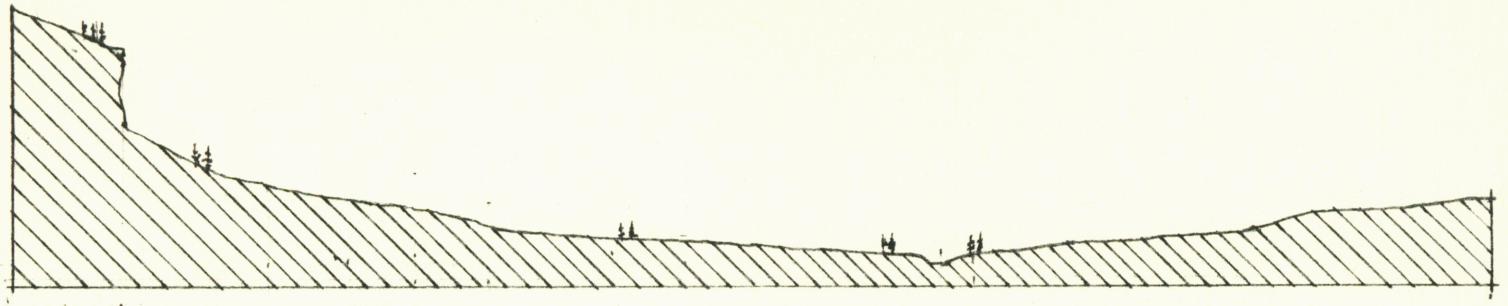
TOPOGRAPHY

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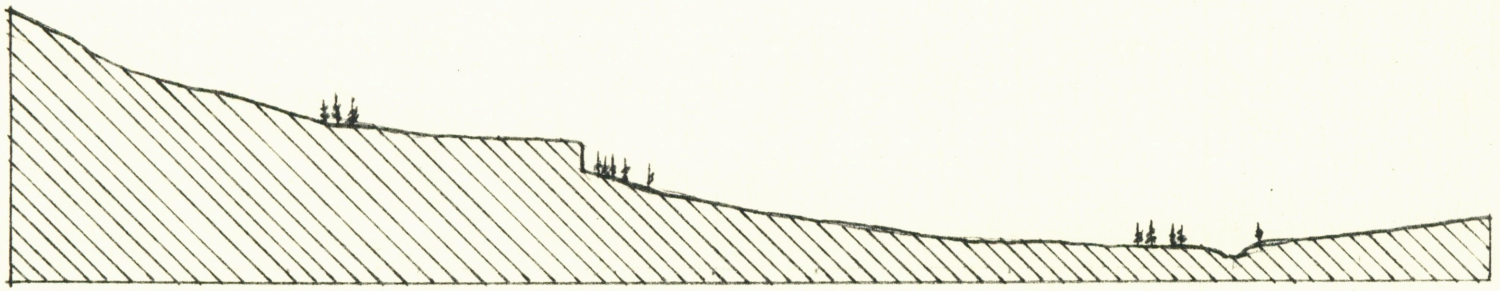
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Topography ...

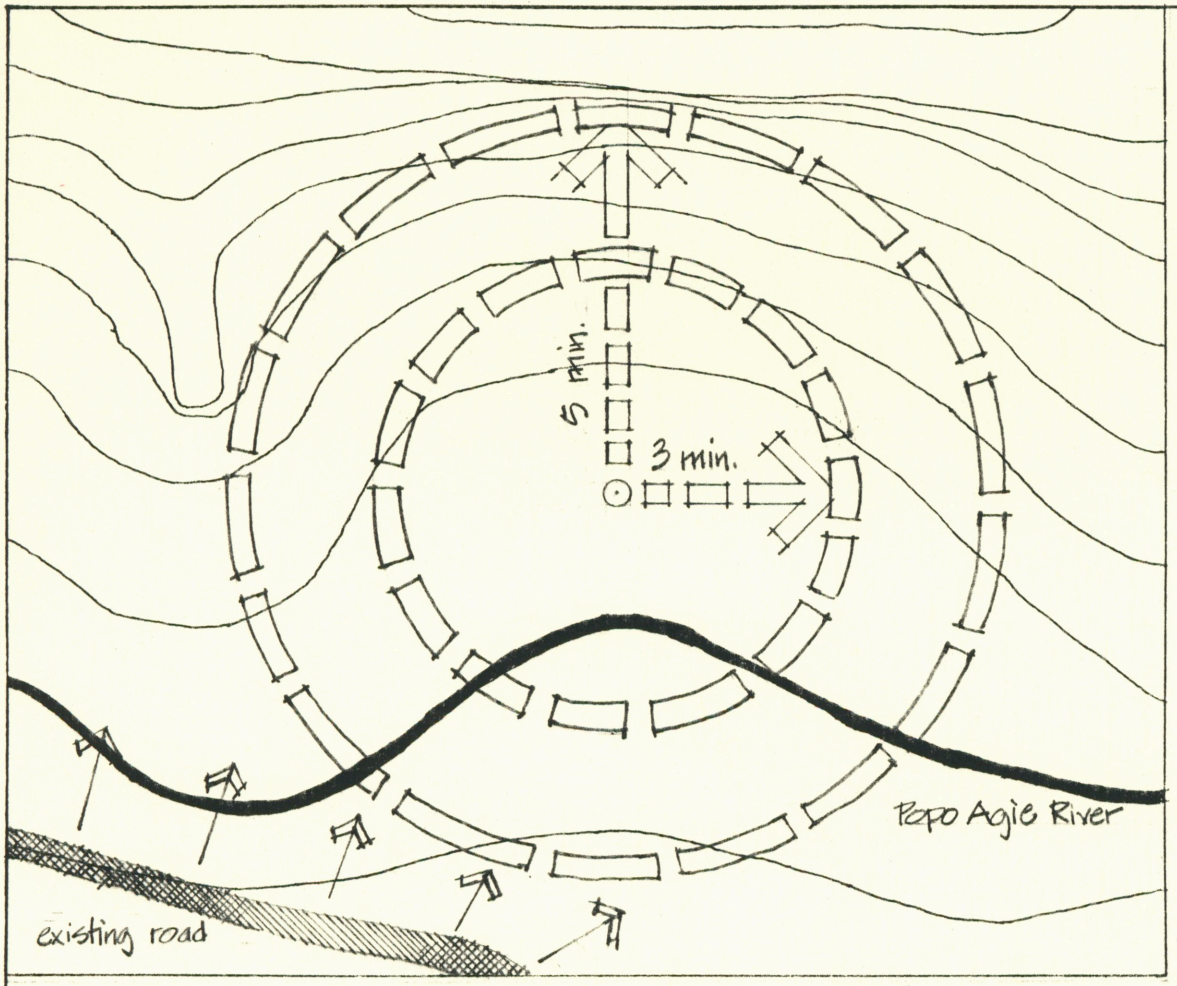
- provides wide variety of slopes - from cliffs to flat and anywhere inbetween
- creates excitement to the design potential
- most of slope is buildable



section A·A 1"=300'

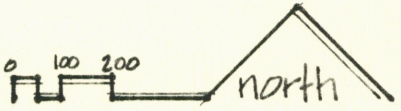


section B·B 1"=300'



Walking Distance

- walking distances will vary due to the rugged topography of the site

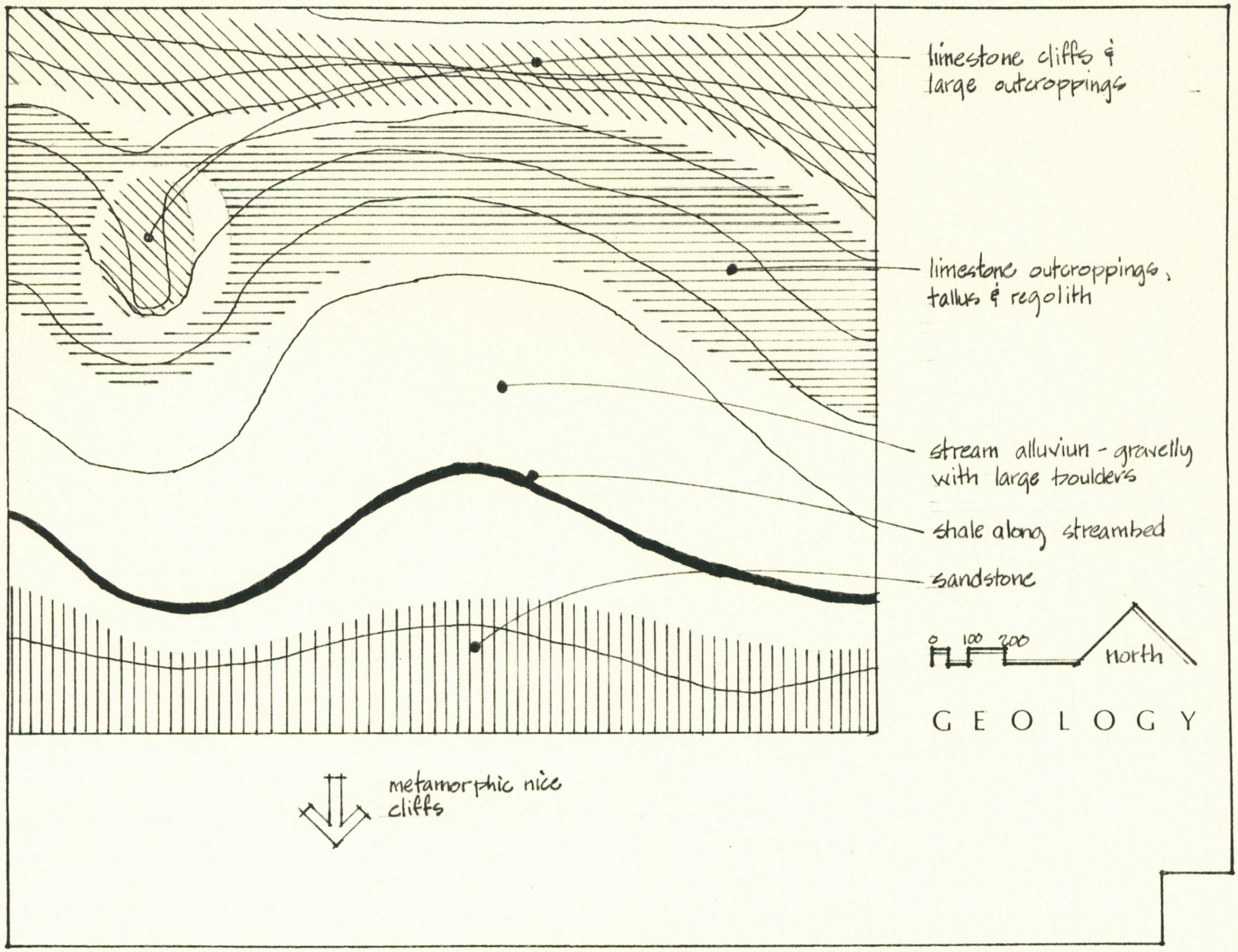


NOISE &
WALKING DISTANCE

Site Noise Considerations

- existing road (which is paved) is the major noise consideration. It provides major access to national forest areas. Major use time is between May & November. Noise is partially muted by the vegitation & stream
- stream also provides noise that can be capitalized on.

S . I . T . E

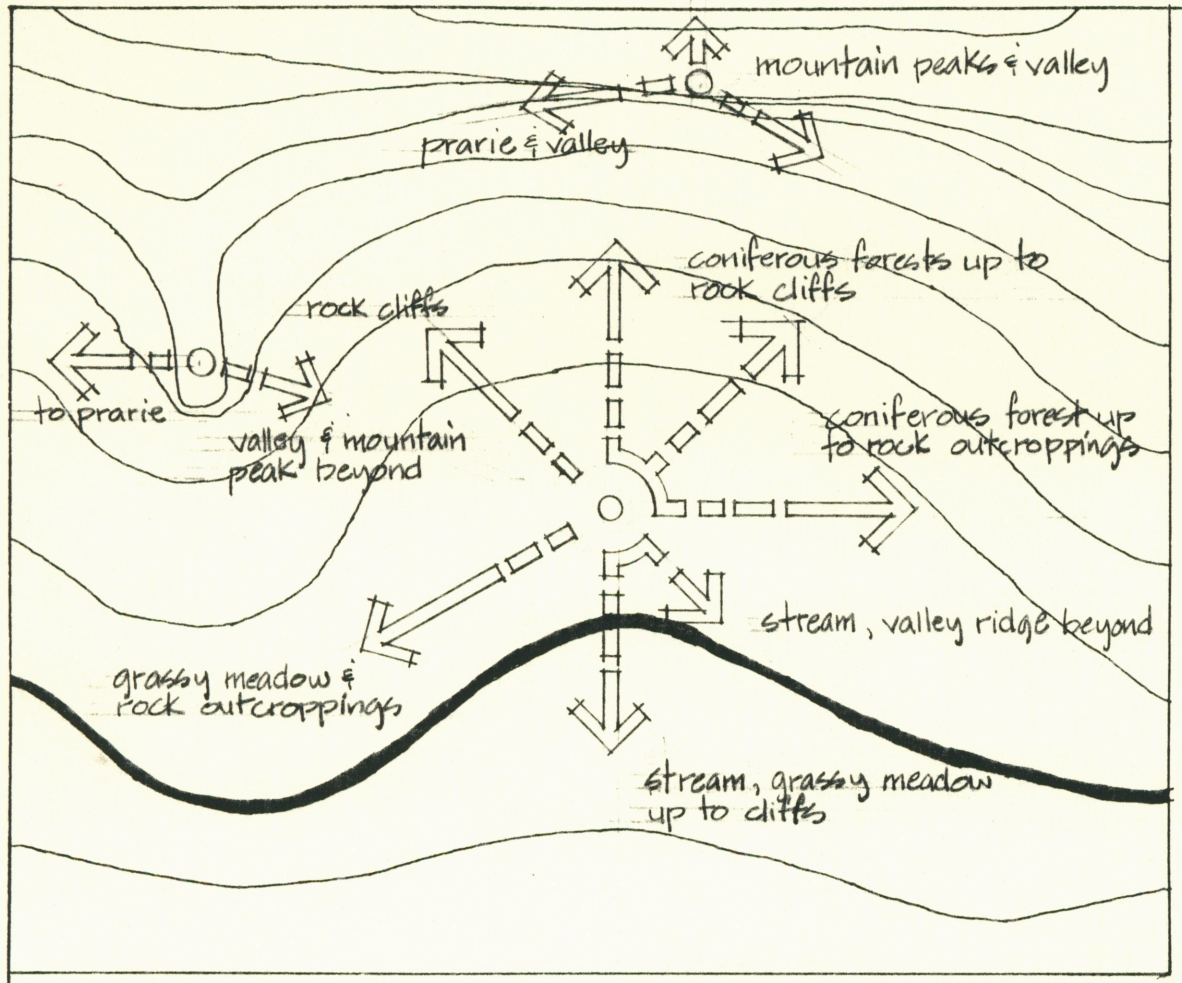

limestone cliffs & large outcroppings
limestone outcroppings, talus & regolith
stream alluvium - gravelly with large boulders
shale along streambed
sandstone
0 100 200
north
GEOLOGY
metamorphic nice cliffs

S . I . T . E

Geology...

- site would appear to have no severe soil problems
- limestone is fairly stable & can be built on (cliffs & outcroppings)
- rock formations are suitable for climbing activities
- large boulders in stream alluvium portion of site are nice contrast (rounded) to the hard edge cliffs & outcroppings
- built form could be put anywhere on site
- regolith is more suitable to build on than the tallus
- geological formations will provide strong image to design

S . I . T . E


mountain peaks & valley
prarie & valley
coniferous forests up to rock cliffs
rock cliffs
to prarie
valley & mountain peak beyond
coniferous forest up to rock outcroppings
stream, valley ridge beyond
grassy meadow & rock outcroppings
stream, grassy meadow up to cliffs


0
100
200
north

VIEWS

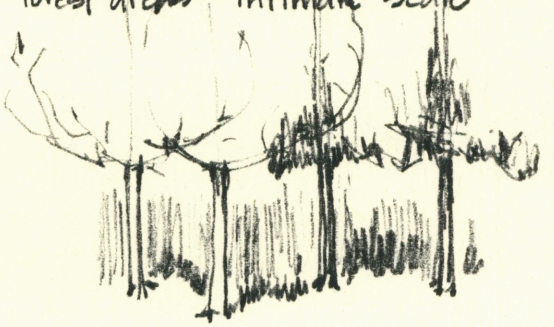
SITE

Views...

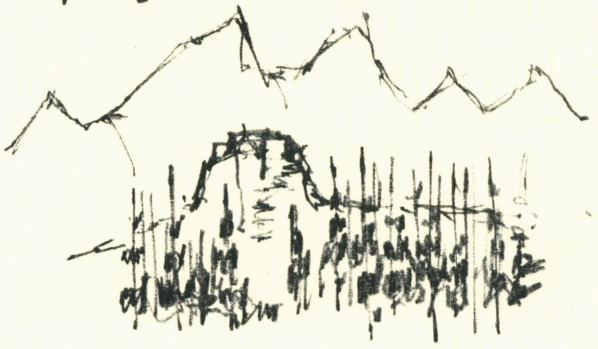
- wide variety of views
  - rock cliffs & outcroppings
  - mountain stream
  - mountain meadows
  - mountain peaks
  - small coves in forest
  - to distant prarie

- topography provides for large scale views or intimate views
- topography & vegitation can change view when travelling a small distance
- visibility from existing road can be capitalized on
- layering of natural features has strong view potential

- Screening with trees, especially in heavy forest areas - intimate scale

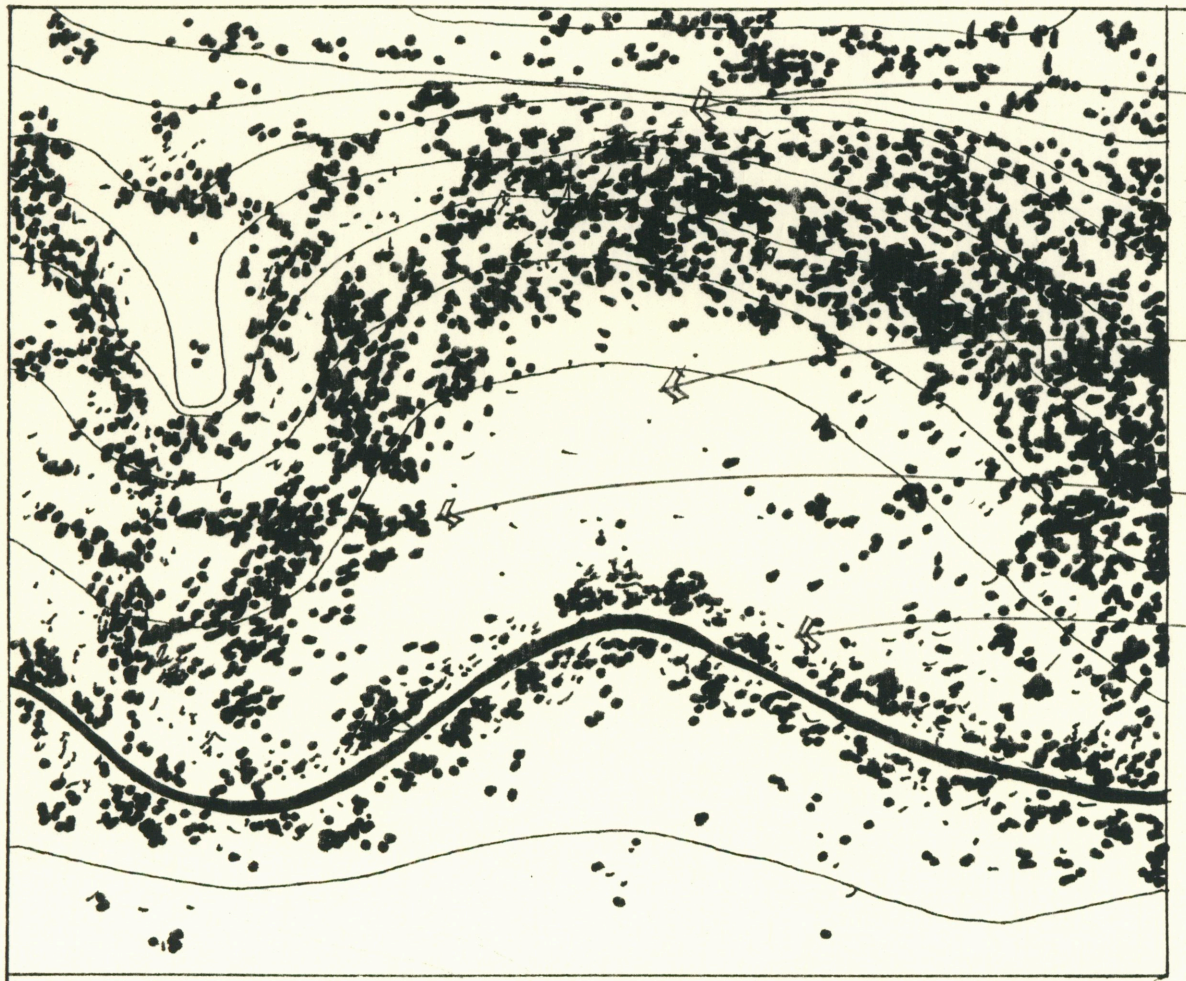


- Layering of natural features



- Framing special places





majority of trees are coniferous, mainly douglas fir, ponderosa pine, & lodgepole pine

dry prarie grasses with sage brush & wild flowers

aspen grove

pockets of aspen & birch along stream with low shrubs & bushes

0 100 200 north

VEGETATION

SITE

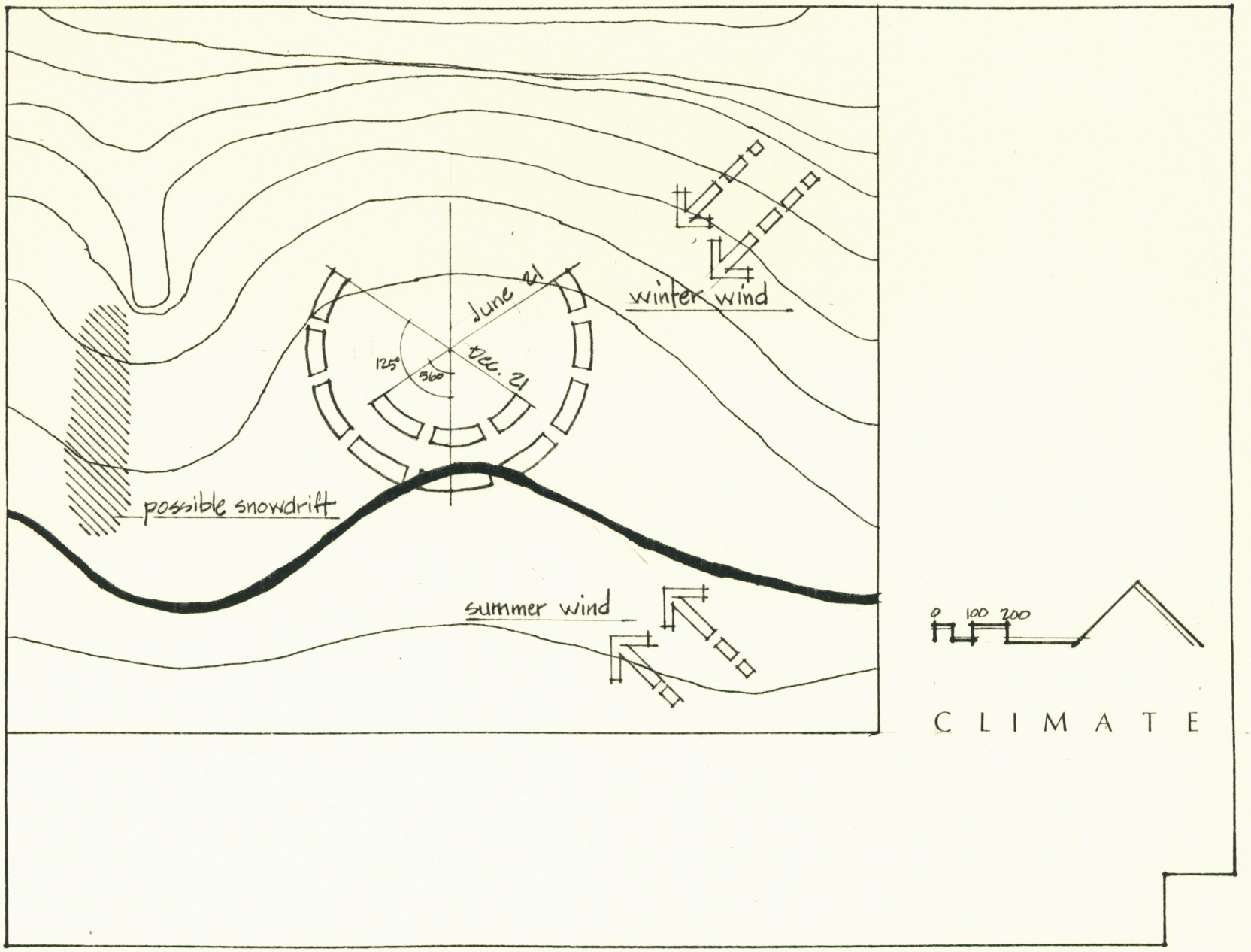
Vegetation...

- Capitalize on characteristics of each type of vegitation (deciduous loses leaves, coniferous provides heavy screening, etc.)
- grass areas transition into forest with small pockets (small meadows) which provide small scale areas
- stream area provides widest variety of vegitation
- natural vegitation pattern creats places for built form
- creats strong edges





SITE



CLIMATE

SITE

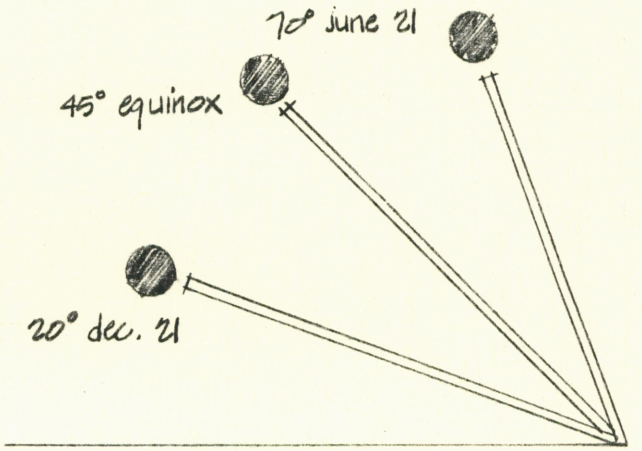
Climate...

-Solar
- good orientation provides ample oppurtunity to use solar in design
- vegitation provides a variety of ways to control solar
- all portions of site have good exposure

-Temperature
- temps. do not get extremely hot or cold
- cooling is not a major problem
- heating required basically from October to May

-Precipitation
- doesn't present any real problem
- may want to consider some protection in highly used outdoor spaces

-Snowfall
- will have to deal with removal
- accumulation around buildings & trees
- snow drifting is some areas
- large meadow generally less accumulation



Sun Angles

Percipitation	10" to 12" / year
Snow	55" / year
Temperatures (averages)	jan 21° F july 82° F

S I T E

-Wind
- consider protection from winter winds
- use summer winds for cooling
- vegitation & geological features help to block winds

S I T E

NOLS has a diversity of people that are involved in its program, both as students & faculty. These individuals partake in a variety of programs.

NOLS programs...

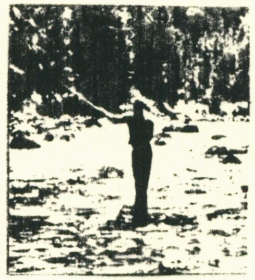
- mountaineering
- wilderness courses
- natural history course
- adventure course
- outdoor education
- rock climbing
- instructor education
- wilderness photography
- fly fishing
- skiing
- Kayaking

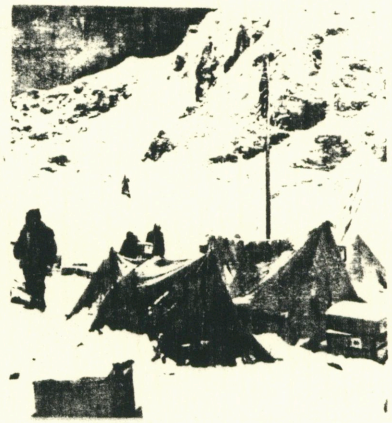




adventure...

growth...





P·R·O·G·R·A·M

People Profile...

Student
- age generally ranges from 16 to 30 years
- many come from larger urban areas
- good physical condition is mandatory
- backgrounds vary
- generally interested in seeking adventure

Instructors
- come from various walks of life
- generally their fields relate to the outdoors (ie. professor of geology, Alaska park ranger, enviromental lawyer, Nordic ski racer, botanist)
- spend various amounts of time with program
- great range in age
- many are former NOLS students
- all committed to the outdoors

How the school functions...

- students stay on campus from 2 to 5 days depending on their program choice
- students get orientated on campus and then spend various amounts of time in the field
- maximum number of students on campus @ one time is 100
- maximum number of students in field @ one time is 200

P · R · O · G · R · A · M

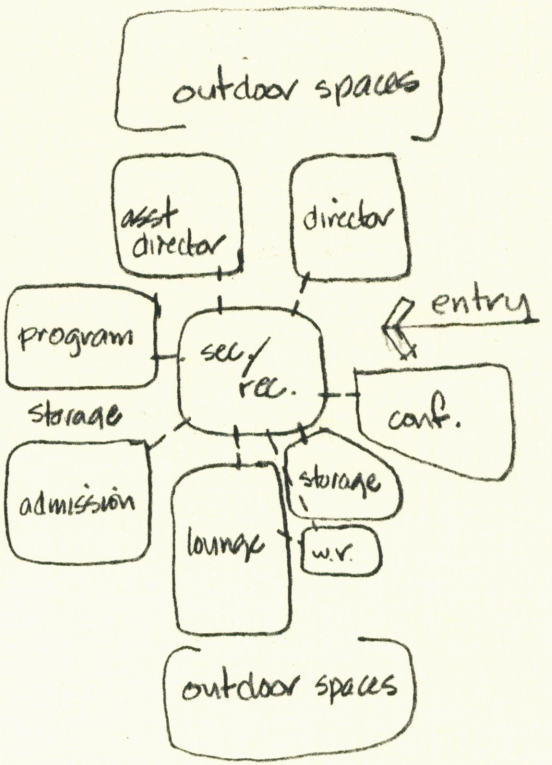
- Spatial Analysis

Following is an analysis of the space needs for the school. They are broken into 6 general zones...

- administration
- educational
- equipment
- dining
- housing
- vehicle

ZONE Administrative

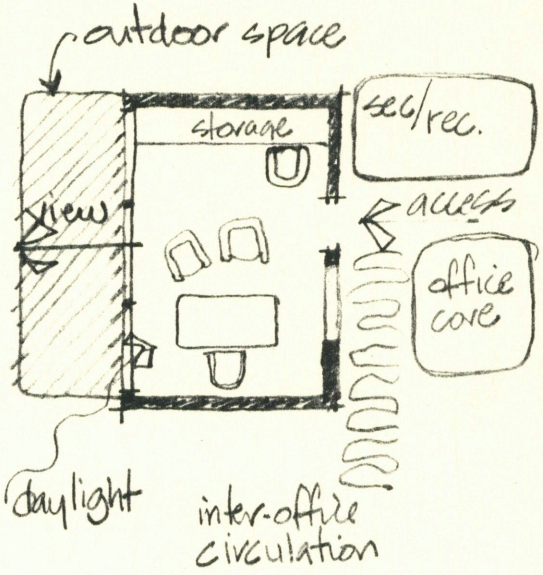
• director	160
• assistant director	160
• program director	216
• admissions	120
• secretary & reception	900
• conference room	420
• faculty lounge	300
• storage	225
• washrooms	120
total sq. footage	2621



P · R · O · G · R · A · M

zone	Administration
space description	Directors office
number of users	1
activities	administrative planning, meet with visitors (2-3), students, faculty
considerations	comfortable office setting, frequent visitors
equipment	desk, chairs, file cabinet, small computer, storage cabinet
area required	10'x16' 160 ♯
legal /safety	
environmental	daylight, acoustical privacy, hvac
functional relationship	access to outdoors, close to secretary & reception area

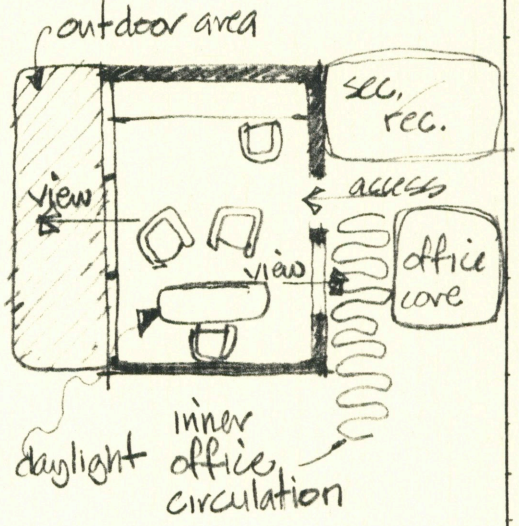
- warm reception to visitors
- relate images of NOLS
- open & airy interior
- let nature in



P · R · O · G · R · A · M

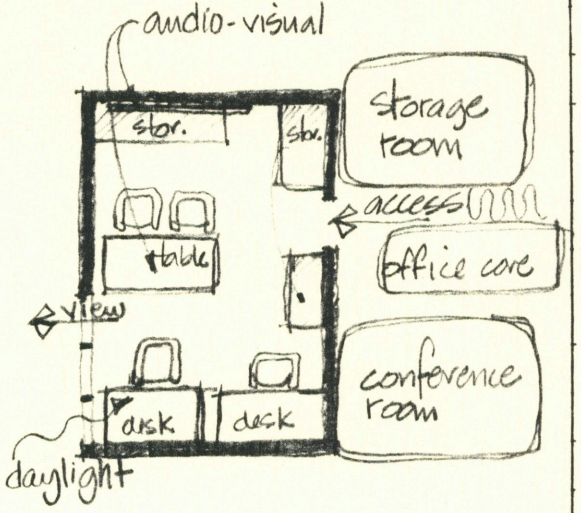
zone	Administration
space description	Assistant Director
number of users	1
activities	administration duties, meet with visitors students, faculty
considerations	comfortable office setting
equipment	desk, chairs, storage, small computer
area required	10'x16' 160 ft
legal / safety	
environmental thermal, acoustic, visual	hvac, daylight, acoustical privacy warm & inviting interior, ext. view
functional relationship	close to secretary & reception area access to outdoors

- open and airy
- feel nature
- images of NOLS



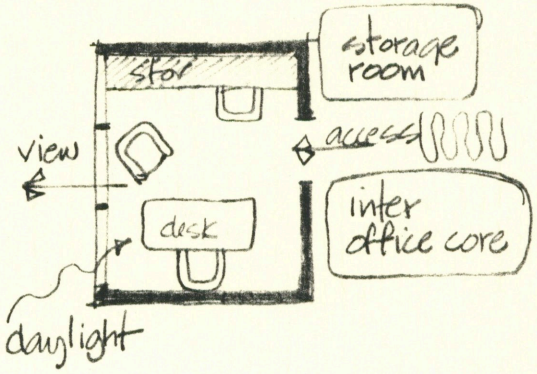
zone	Administration
space description	Program Director
number of users	1-4
activities	direct & coordinate all school programs consult frequently with faculty
considerations	may be up to 4 people working @ one time, people come & go frequently use audio-visual
equipment	desks, table, chairs, file cabinets storage cabinet, small computer, audio-visual
area required	12'x18' 216ft
legal / safety	
environmental	hvac, daylight, ext. view, control of light
functional relationship	close to large storage area, close to conference room

- creative atmosphere
- reflect on Nas ideas
- energetic atmosphere
- thought provoking



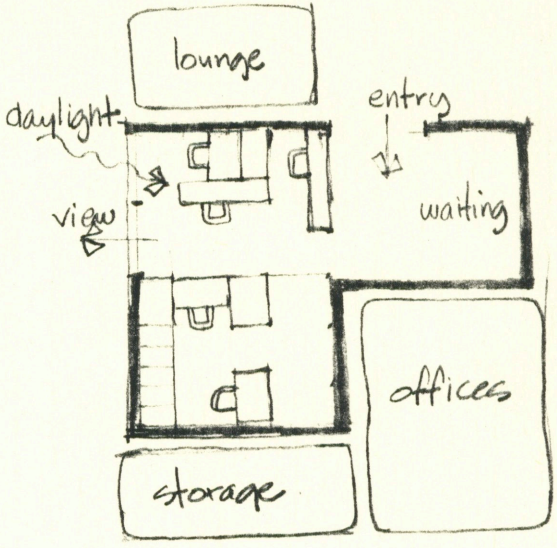
zone	Administration
space description	Admissions
number of users	1
activities	plan student enrollment, accept applications, process applications review applicants
considerations	comfortable office atmosphere
equipment	desk, chair, file cabinet, storage small computer
area required	10'x12' 120#
legal / safety	
environmental	hvac, daylight, ext. view
functional relationship	close to storage room, inter office core

- aggressive
- progressive
- reflect images of NOLS



zone	Administration
space description	Secretary & Reception
number of users	4
activities	Clerical, bookkeeping, secretarial, reception
considerations	comfortable atmosphere, people moving thru frequently, seperation of noise areas, waiting area, flexibility
equipment	desks, chairs, typewriters, file cabinets storage cabinets, computer
area required	30'x30' 900#
legal / safety	
environmental	hvac, good lighting (task), daylight warm welcome int.
functional relationship	center of administration, @ entrance close to storage

- warm & airy
- lots of light & plants
- open feeling
- lots of activity
- welcome to NOLS...

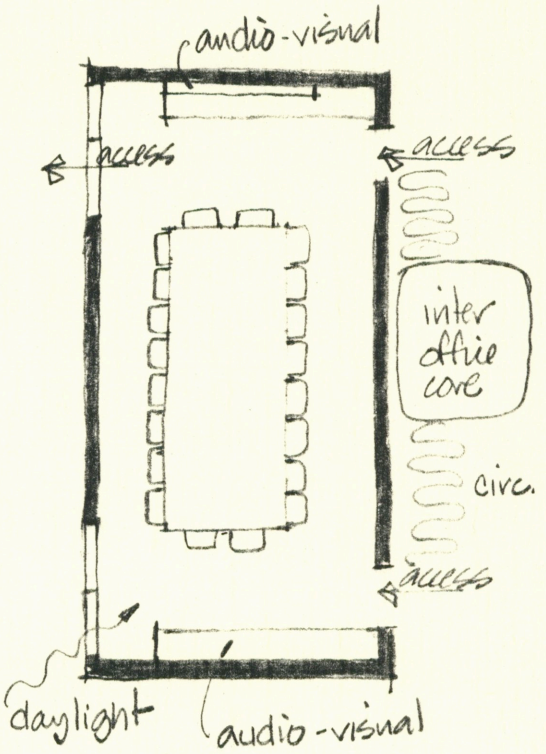


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P · R · O · G · R · A · M

zone	Administration
space description	Conference Room
number of users	20
activities	1 to 20 person meetings, used by all administrative personel
considerations	need audio-visual
equipment	large table, chairs, audio-visual
area required	14'x30' 420 ft
legal / safety	2 exits
environmental	hvac, light control, ext. view, control daylight, acoustical privacy
functional relationship	centrally located, access to outdoors

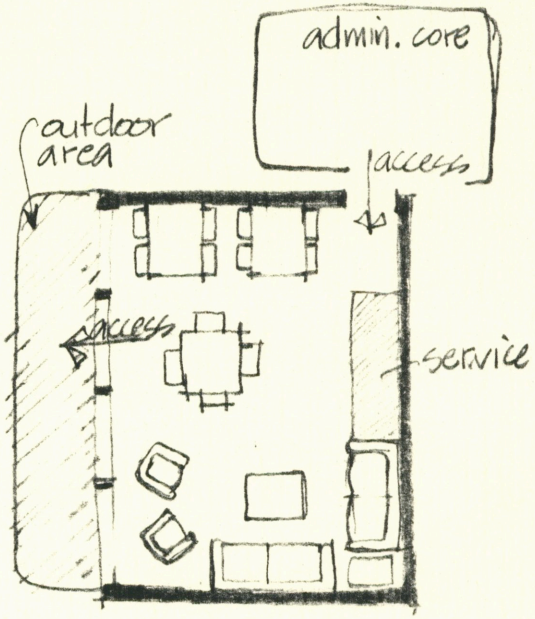
- provoke interaction
- warm feeling



P · R · O · G · R · A · M

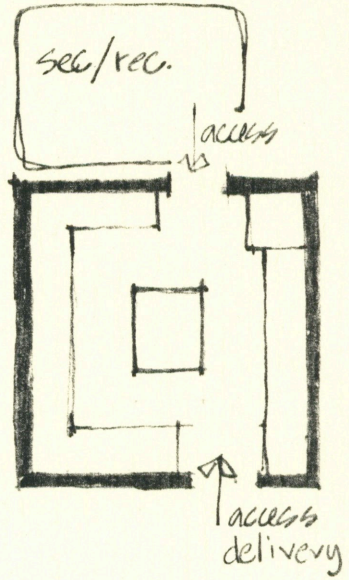
zone	Administration
space description	Faculty Lounge
number of users	20
activities	relaxation, coffee breaks, small gatherings
considerations	quiet, semi-private, used on somewhat of a schedule
equipment	vending machines, coffee pot, hot plate, refrigerator, tables, chairs, sofa
area required	15'x20' 300ft
legal / safety	
environmental	hvac, relaxing atmosphere, daylighting
functional relationship	access to outdoors, close to administration core, close to washrooms

- kick back & relax
- quiet talk
- friendly & comfortable



P · R · O · G · R · A · M

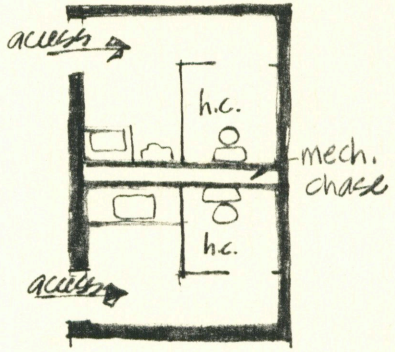
zone	Administration
space description	Storage Room
number of users	
activities	store documents, office supplies
considerations	must be flexible,
equipment	shelves, cabinets, tables, safe
area required	15'x15' 225 ☐'
legal / safety	
environmental	hvac
functional relationship	access to service (deliveries), close to sec./rec. area



P · R · O · G · R · A · M

zone	Administration
space description	Washrooms
number of users	20 (assume 50/50 mix)
activities	
considerations	grooming area, handicap, privacy sanitation
equipment	toilets, urinal, lavatories, hand & face drying equip., mirror
area required	min. stall 3'x5' & 5'x5' (h.c.)
legal / safety	handicap requirements
environmental	hvac, good ventilation, privacy, common mech. chase
functional relationship	centrally located

• don't look institutional

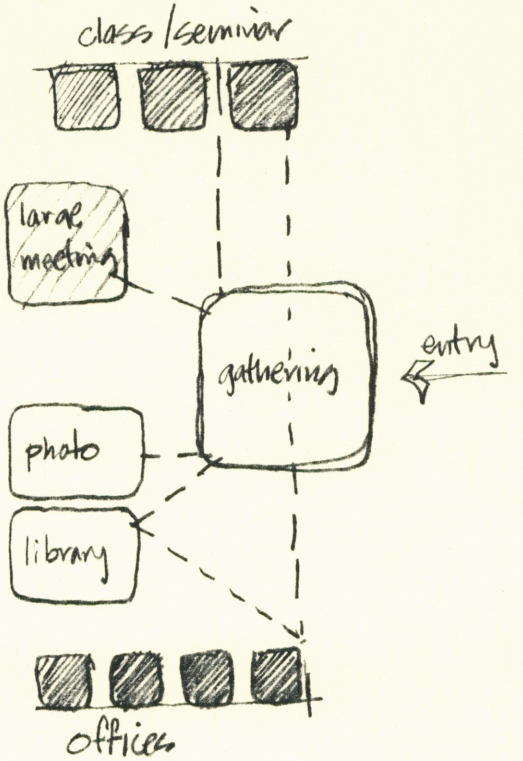


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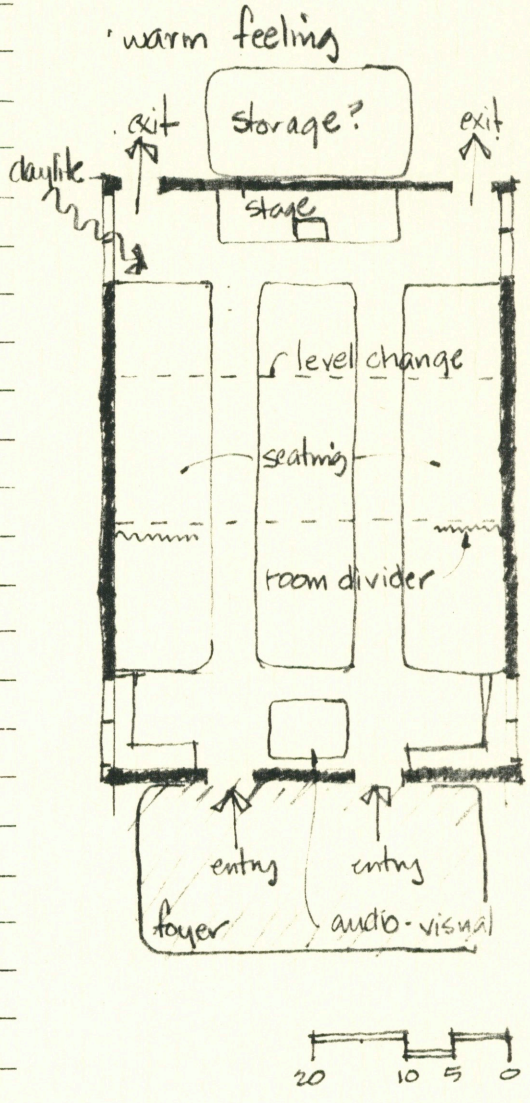
ZONE Educational

• large meeting room	2400
• classroom / seminar	1560
• gathering	6000
• library	1200
• instructor office	2800
• photo prep	400
• darkroom	200
• washrooms	250
total sq. ft.	14,810

• outdoor rooms

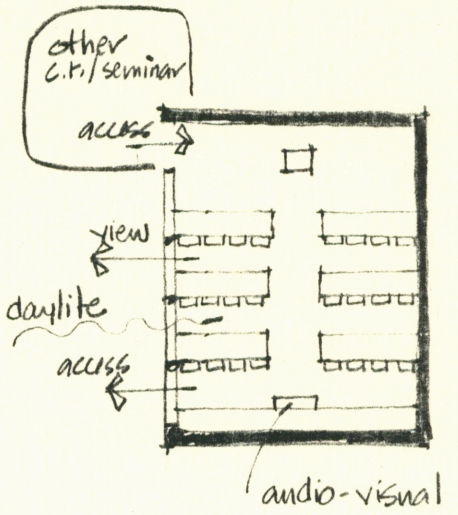


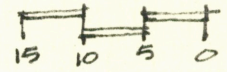
zone	Educational
space description	Large Meeting Room
number of users	100 - 120
activities	school meetings, presentations, community events, lecturers
considerations	flexibility, may be divided into smaller areas, use small stage level change for better view
equipment	tables, chairs, podium, stage, storage shelves
area required	40'x60' 2400#
legal / safety	min. 2 exits
environmental	hvac, controlled daylight (diffused?)
functional relationship	adjacent to foyer, near toilet facility



zone	Educational
space description	Classroom / Seminar (3 req'd)
number of users	20-25 max.
activities	seminars, class instruction, group meetings
considerations	open planning for flexibility, use audio-visual, classes used @ various times
equipment	tables, desks, chairs, storage shelves, blackboard, audio-visual
area required	20'x 26' 520#
legal / safety	
environmental	hvac, acoustical privacy
functional relationship	adjacent to educational core, access to outdoors

- intimate space
- interaction
- bring nature in
- keep attention of people

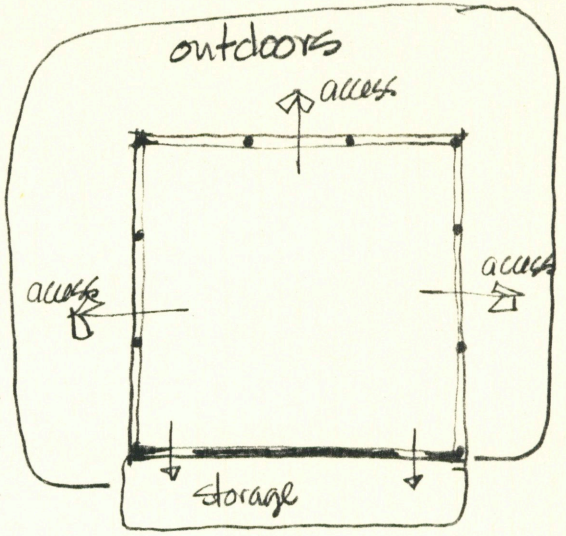


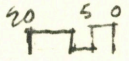


P · R · O · G · R · A · M

zone	Educational
space description	Gathering
number of users	150 to 200 max.
activities	various size group gatherings, presentations, performances,
considerations	may be used by other groups than the school, flexible planning
equipment	movable stage, chairs, tables, audio-visual
area required	6000 ft
legal / safety	exit requirements
environmental	hvac, daylight, acoustical control, light-control for audio-visual
functional relationship	relate to center of campus, access to nature, center of educational area

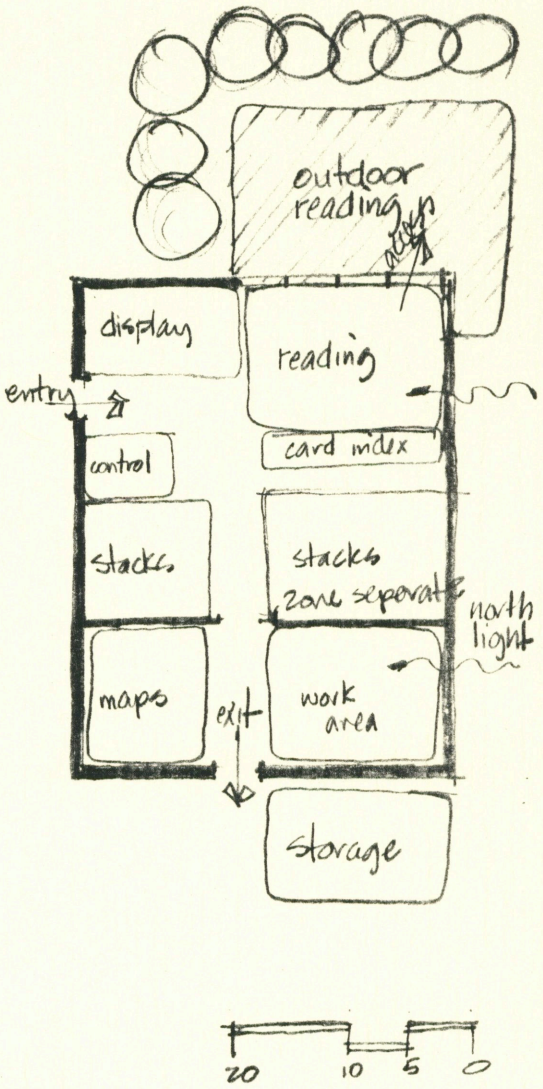
- warm interior, fireplaces
- great room feeling
- showcase
- natural materials
- let outdoors in





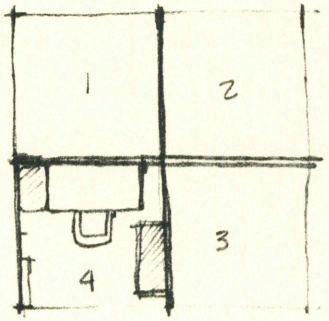
P · R · O · G · R · A · M

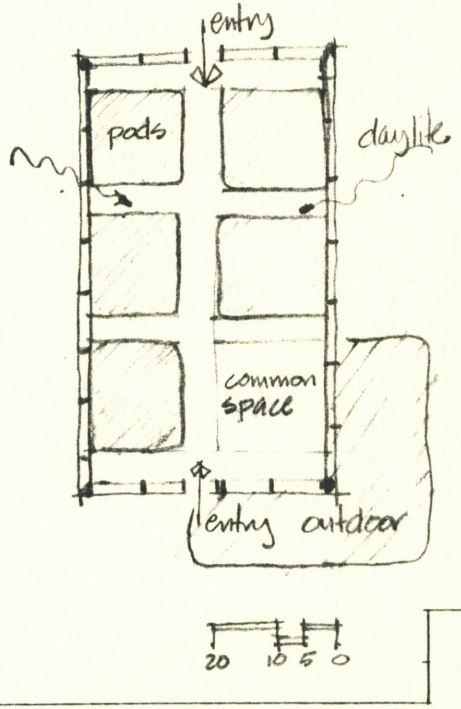
zone	Educational
space description	Library
number of users	20-40
activities	research, study, book storage, map reading, displays
considerations	need quiet zone as well as noise area security (check-out), reading area area for displays, book repairs
equipment	desk, chairs, tables, sofa, book cases, map drawers, file cabinet, card index
area required	30'x40' 1200 ft
legal / safety	security for library material
environmental	hvac, special moisture control, good lighting, warm & relaxing interior, daylight control, acoustic control
functional relationship	close to c.r./seminar, outdoor reading spaces, may need additional storage



zone	Educational
space description	Instructors office
number of users	15-20
activities	class preperation, meet with students, faculty meeting
considerations	flexible open planning, provide smaller spaces instead of one large one, low scale for one to one communication
equipment	dividers, desks, chairs, file cabinets, storage,
area required	40'x70' 2800#
legal /safety	
environmental	hvac, light & airy atmosphere, daylight
functional relationship	close to library, access to outdoors

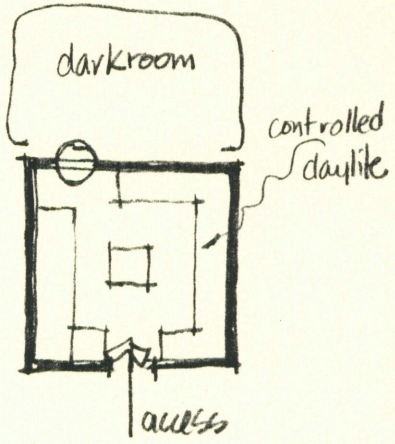
typical pod layout
15'x15'

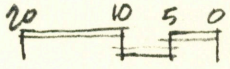




zone	Educational
space description	Photo Prep
number of users	10
activities	mount photos, prepare photo equipment
considerations	lots of activity, people move from one station to another
equipment	tables, counters, presses, dryers
area required	400 ft
legal / safety	
environmental	hvac, good ventilation, daylight (controlled)
functional relationship	next to darkroom

- don't want it to look like institutional lab

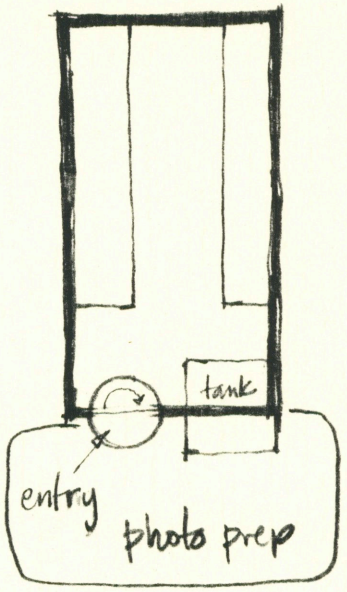




P · R · O · G · R · A · M

zone	Educational
space description	Darkroom
number of users	5
activities	develop & process film, make prints
considerations	people move in & out while others are still working, effecient work space
equipment	darkroom equipment
area required	200 ft
legal / safety	need good ventilation, chemicals
environmental	hvac, no daylight, special lighting
functional relationship	next to photo prep room

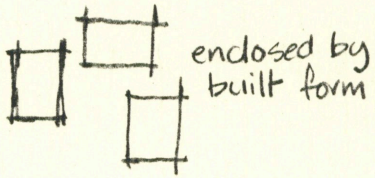
- dark interior
-

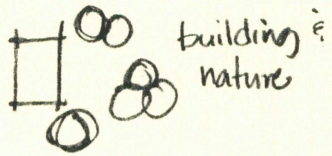


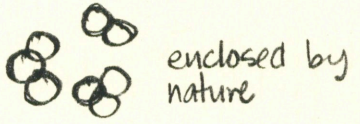


P · R · O · G · R · A · M

zone	Educational
space description	Outdoor Rooms
number of users	varies
activities	demonstrations, seminars, lessons, recreation, group interaction
considerations	wide need in size required, some protected, some away from campus
equipment	benches, gazebos
area required	varies
legal / safety	
environmental	
functional relationship	





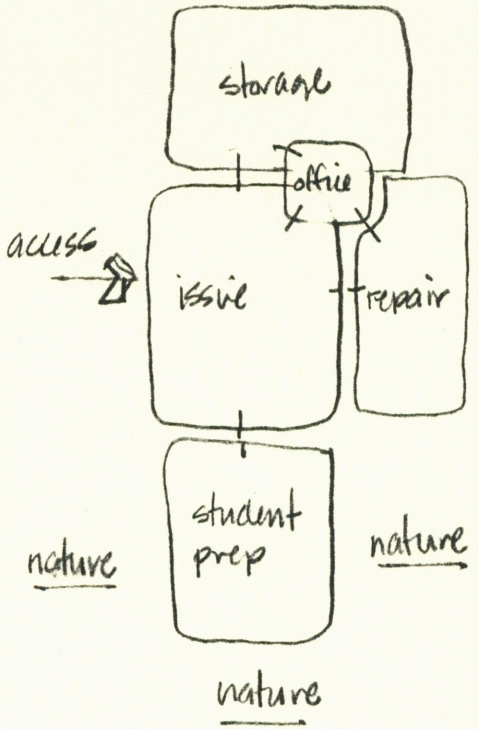




P · R · O · G · R · A · M

ZONE Equipment

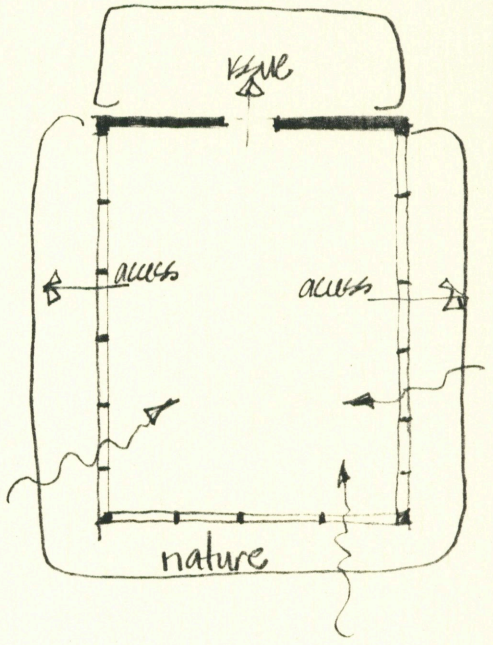
• student prep area	1200
• issue room	2000
• equipment repair	600
• storage	3000
• manager office	200
• washrooms	120
total sq. footage	7120

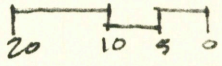


P · R · O · G · R · A · M

zone	Equipment
space description	Student Preparation Area
number of users	20-25 max.
activities	inspect & become familiar with equipment prepare to go into field, small group demonstrations
considerations	lots of movement, need space to set-up equipment, open plan
equipment	tables, chairs
area required	1200 ft
legal / safety	
environmental	hvac, lots of daylight
functional relationship	access to outdoors, next to issue room

- get students psyched up to go out into the field
- lots of noise & excitement
- allow nature into space

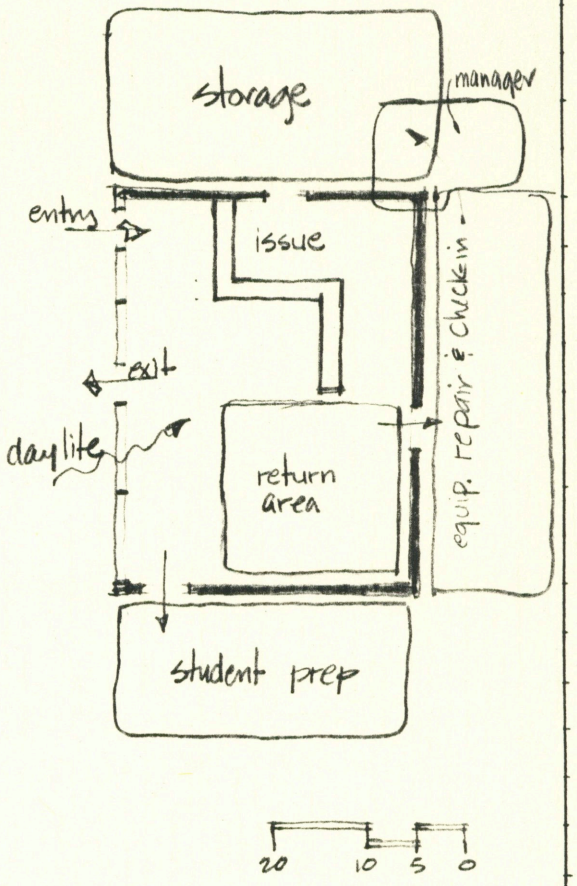




P . R . O . G . R . A . M

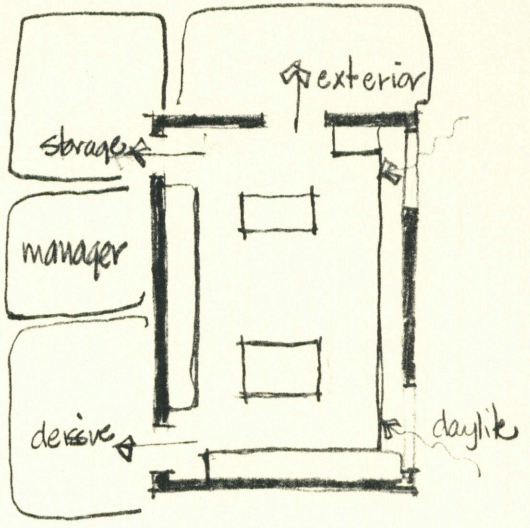
zone	Equipment
space description	Issue Room
number of users	varies
activities	students check-out & return equipment
considerations	large number of people @ certain times effecient flow of people
equipment	desk, chair
area required	2000#
legal / safety	
environmental	hvac, daylight
functional relationship	adjacent to equipment storage & equip-ment repair, next to student preparation area

- anticipation
- new experience



zone	Equipment
space description	Equipment Repair
number of users	1-4
activities	repair all types of equipment, check equipment after return from field
considerations	people will be moving around a lot wide range of activities (sewing, wax skis, etc.) need workbreaks
equipment	tables, chairs, sewing machine, storage cabinets
area required	600 ft
legal / safety	equipment usage safety
environmental	hvac, good ventilation, daylight, acoustical control (work noise)
functional relationship	close to deissue area & storage area, manager's office

• warm space, loud tunes playing

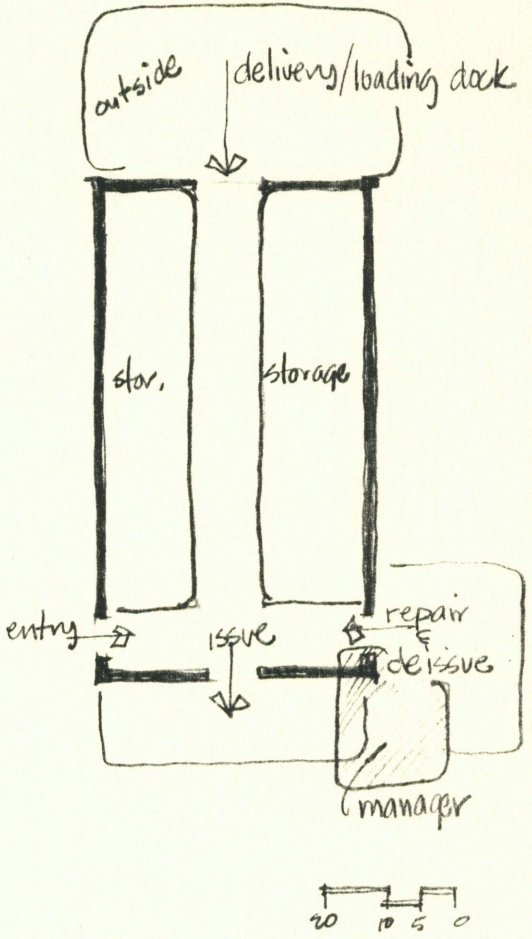




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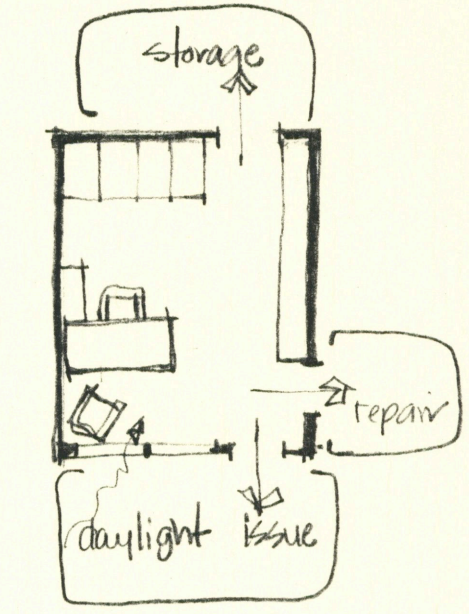
zone	Equipment
space description	storage
number of users	
activities	store school gear (backpacks, ropes, tents, etc.), inventory of equipment
considerations	flexibility mandatory, some items hang from ceiling
equipment	tables, shelves, cabinets
area required	3000 #
legal / safety	sprinkler system
environmental	hvac, extra amts. of humidity to deal with
functional relationship	outside (delivery & loading dock), issue room

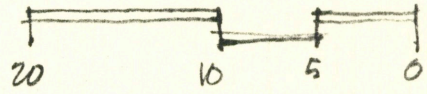
- avoid storage shed look (metal bldg. especially)
- break down large mass



zone	Equipment
space description	Manager's Office
number of users	1-2
activities	run equipment issue operation, office work
considerations	comfortable office atmosphere, direct access & sight line to issue room
equipment	desk, chair, file cabinets
area required	200#
legal / safety	
environmental	hvac, daylight (may have to be borrowed)
functional relationship	access to issue room, storage, & equipment repair

• don't want office to look like office in the back of a storage building



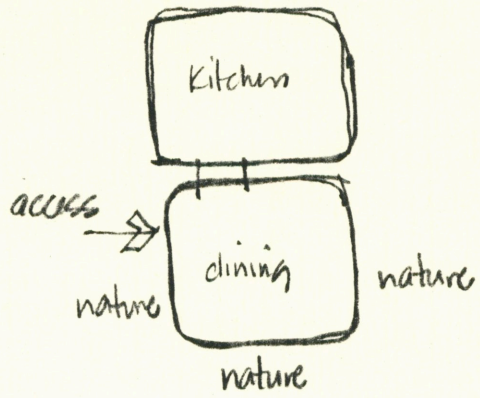


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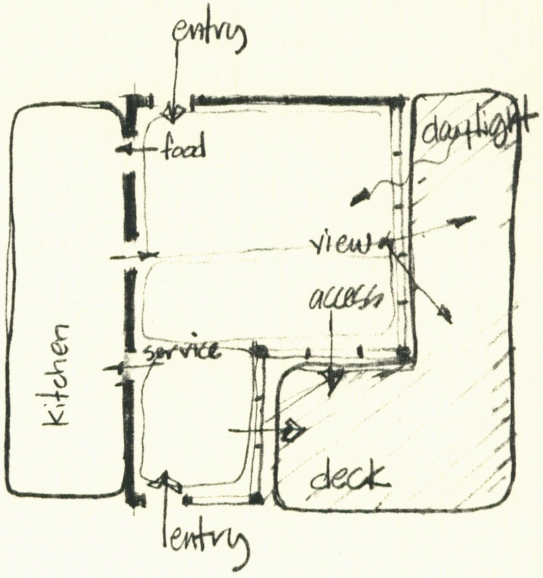
ZONE Dining

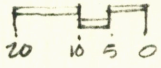
· dining room	2200
· kitchen	1600
· washrooms	250
total sq. ft.	4050



zone	Dining
space description	Dining Room
number of users	120 max.
activities	eating, group meetings
considerations	flexible planning, meals served @ specific times, various size areas for dining
equipment	tables, chairs, disposal, food pick-up
area required	2200 ♯
legal / safety	
environmental	hvac, daylight, bring nature in
functional relationship	centrally located, adjacent to kitchen access to outdoors

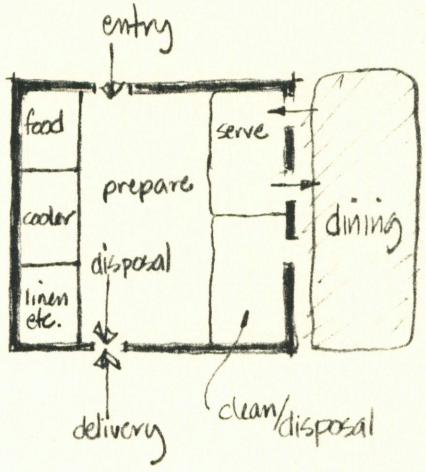
- warm, airy, light
- nature into space
- "eat in nature"
- friendly, intimate





zone	Dining
space description	Kitchen
number of users	
activities	prepare meals, store food, distribute food to people going out into field
considerations	effecient flow of goods, may have to prepare banquet meals
equipment	commercial kitchen
area required	1600 ft²
legal / safety	health codes, fire control
environmental	hvac, good ventilation
functional relationship	next to dining, access to service (delivery, disposal), loading dock

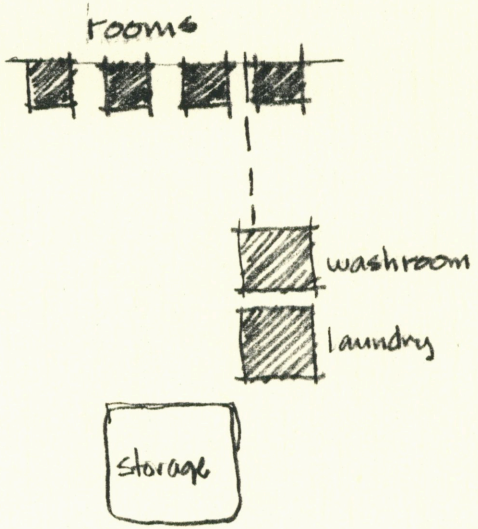
- avoid institutional
- "home kitchen"





ZONE Housing

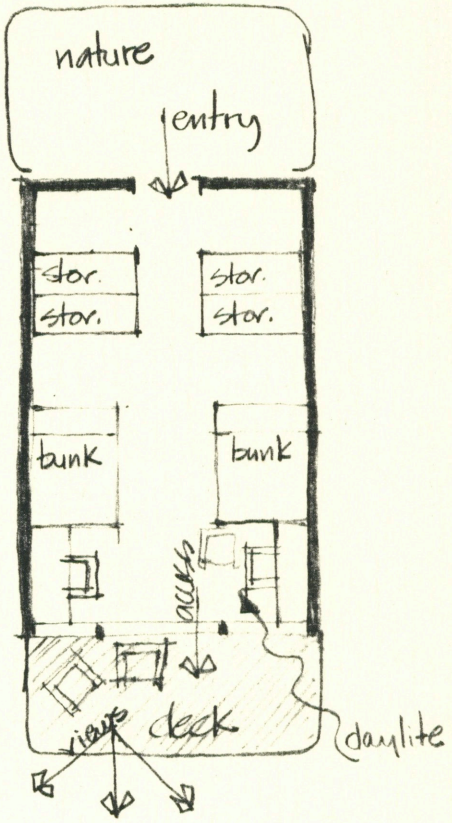
• dorm room	10,000
• storage	750
• laundry	325
• washrooms	600
total sq. ft.	11,675



P · R · O · G · R · A · M

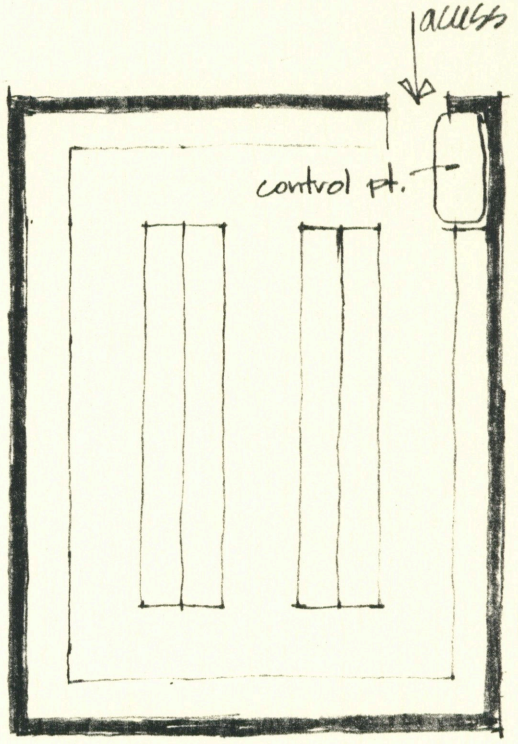
zone	Housing
space description	Dorm Room
number of users	4-6 (100 students max. 10-15 faculty)
activities	sleep, small group gathering, grooming reading, study, write
considerations	privacy, comfortable feeling (home) provide variety of different size units
equipment	bed, storage cabinet, chair, desk
area required	15'x25' 325#
legal / safety	
environmental	hvac, daylight
functional relationship	close to washrooms, outdoor space

- intimate, cozy
- feel like home in nature



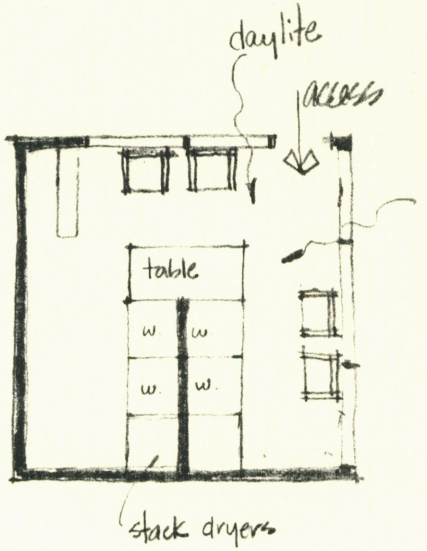
P · R · O · G · R · A · M

zone	Housing
space description	Storage Room
number of users	150 max.
activities	store personal belongings when going out into the field
considerations	no set schedule for use, different groups come & go at different times security
equipment	storage lockers (2'x2'x4')
area required	25'x30' 750ft
legal /safety	
environmental	
functional relationship	close to dorm rooms



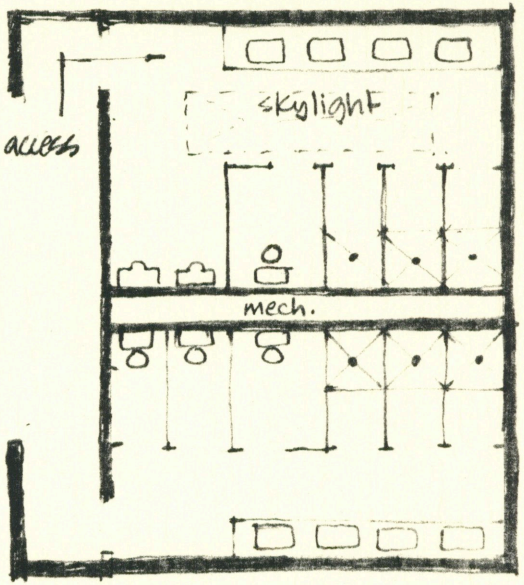
P · R · O · G · R · A · M

zone	Housing
space description	Laundry
number of users	100
activities	wash & dry clothes, iron clothes
considerations	people may wait for laundry,
equipment	washer, dryer, ironing board, soap dispenser, table, chair
area required	18x18' 325 ft
legal / safety	
environmental	hvac,
functional relationship	close to dorm rooms, next to wash-rooms



P · R · O · G · R · A · M

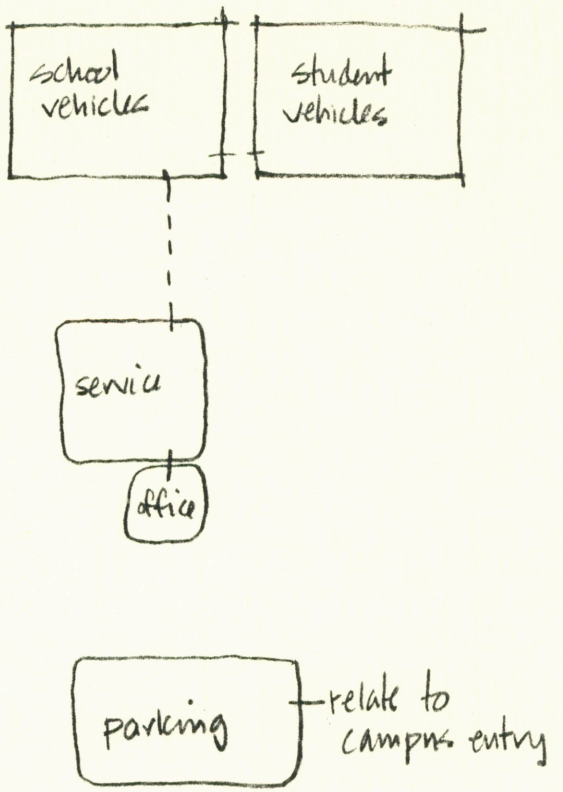
zone	Housing
space description	Washrooms
number of users	100 (assume 50/50 mix)
activities	toilet, shower, grooming,
considerations	sanitation, handicap, privacy, one unit to service 35 students (3 units) screened entry
equipment	toilet, shower, urinals, mirrors, hand & face dryers
area required	20'x30' 600ft
legal / safety	
environmental	hvac, good ventilation, possible skylight
functional relationship	close to housing, next to laundry



P · R · O · G · R · A · M

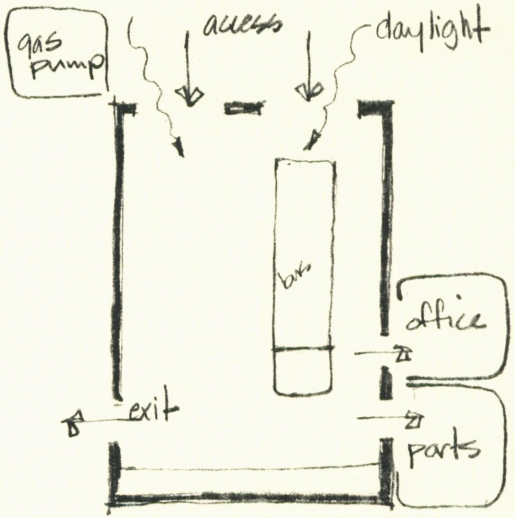
ZONE Vehicle

• vehicle service	2400
• office & parts	500
• vehicle storage	4800
• student car storage	18,000
• parking	12,000
• washroom	60
total sq. ft.	37,760



P · R · O · G · R · A · M

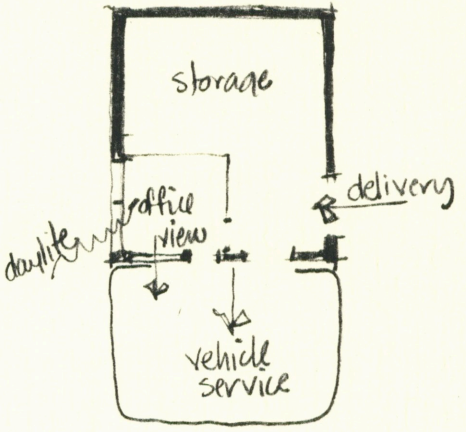
zone	Vehicle
space description	Vehicle Service
number of users	2
activities	Store vehicles, perform maintanence & repair on all vehicles
considerations	work on vehicles inside, store outside (covered area), may need several vehicles in shop @ same time, high ceiling
equipment	mechanic shop, gas pump, hydraulic lift
area required	2400 ft
legal /safety	ventilation, fire protection
environmental	hvac, daylight
functional relationship	close to manager's office, close to service road, access to parts storage



P · R · O · G · R · A · M

zone	Vehicle
space description	Office & Parts Storage
number of users	2
activities	Store & issue parts, office work (keep records, order supplies, etc.)
considerations	
equipment	desk, chair, file cabinet, shelves
area required	500 ft
legal / safety	fire protection
environmental	hvac, daylight for office
functional relationship	access to service area

- avoid office in back of shop feel

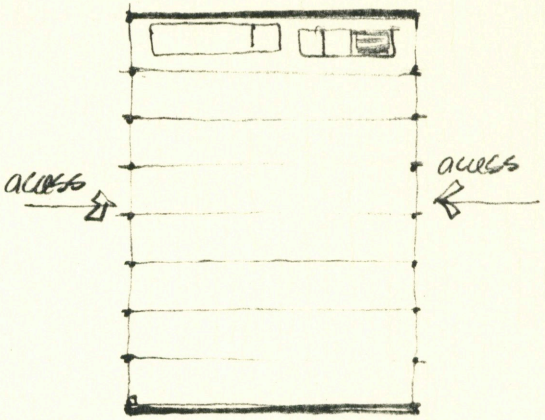




P · R · O · G · R · A · M

zone	Vehicle
space description	Vehicle Storage
number of users	
activities	store busses, pick-ups, cars, vans, truck
considerations	flexible, open spaces, covered area
equipment	
area required	4800 ♯
legal / safety	
environmental	
functional relationship	close to service road

- break down large mass
- 1 truck, 3 busses, 3 pick-ups, 4 vans, 3 cars

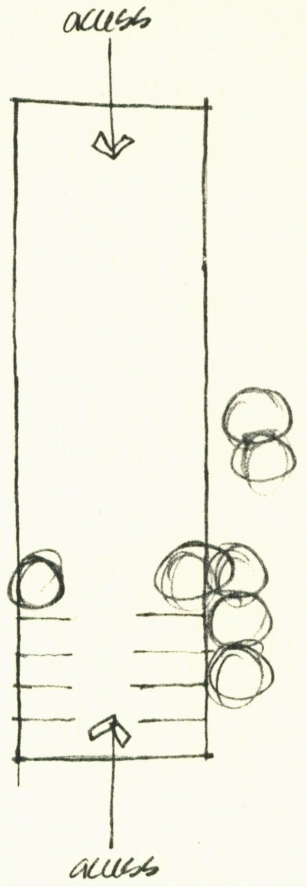


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P · R · O · G · R · A · M

zone	Vehicle
space description	Parking
number of users	40
activities	staff, student & visitor parking
considerations	student cars will be parked in special compound if they are leaving for field
equipment	electrical plug ins
area required	12,000 ft
legal / safety	lighting for security
environmental	
functional relationship	close to entry of campus

- hide parking w/ vegitation
- break spaces into smaller parking areas

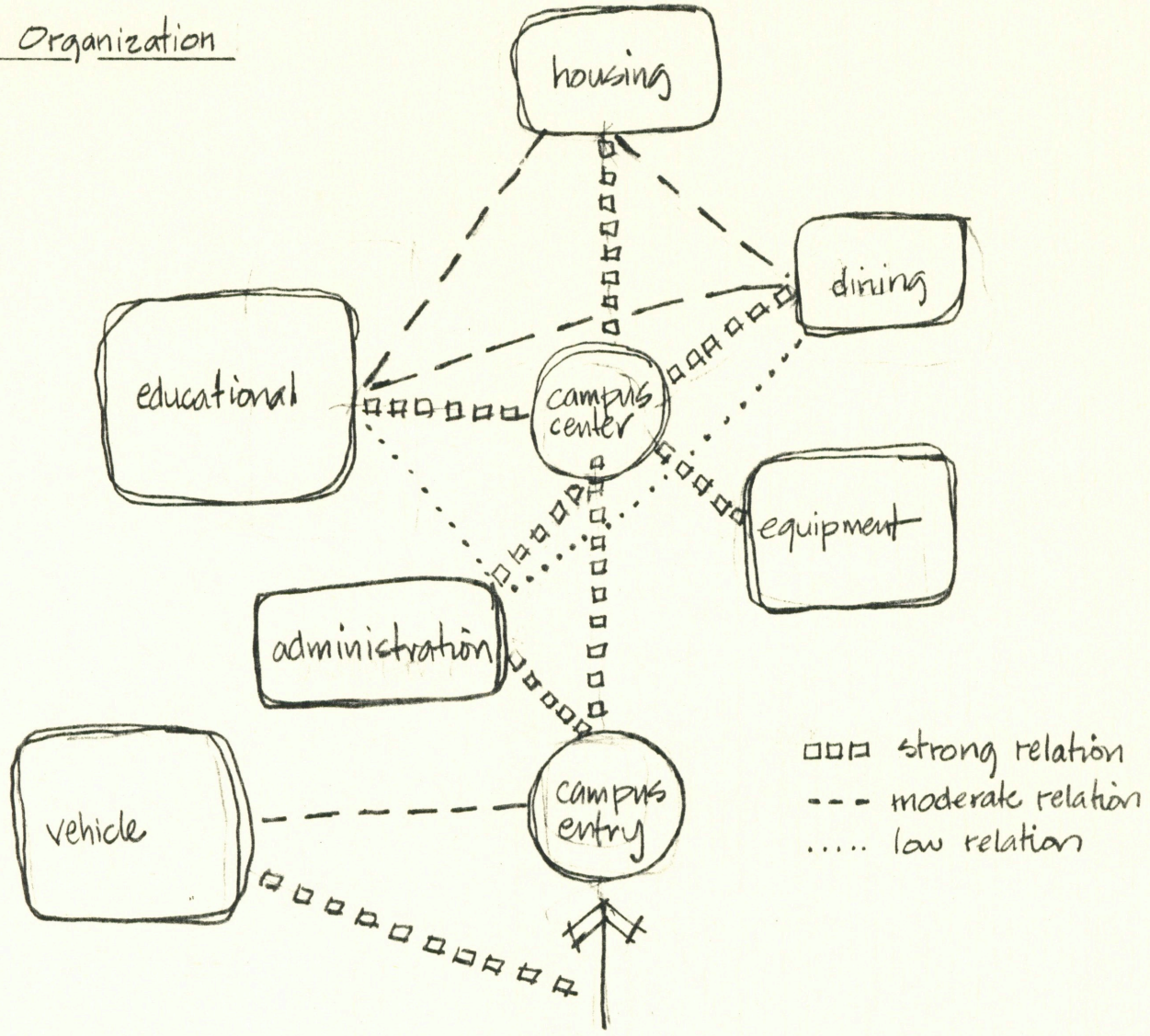


P · R · O · G · R · A · M

Zone summary...

administration		equipment		vehicle	
• director	160	• student prep	1200	• vehicle service	2400
• asst director	160	• issue room	2000	• office & parts	500
• program director	216	• equipment repair	600	• vehicle storage	4800
• admissions	120	• storage	3000	• student vehicles	18,000
• sec. & rec.	900	• manager office	200	• parking	12,000
• conference room	420	• washroom	120	washrooms	60
• faculty lounge	300	total #	7120	total #	37,760
• storage	225				
• washroom	120	dining			
total #	2621	• dining room	2200	Total building	48,036 #
		• kitchen	1600		
educational		• washrooms	250	Total parking	30,000 #
• large meeting	2400	total #	4050		
• classroom	1560			Total Project	78,036 #
• gathering	6000	housing			
• library	1200	• dorm rooms	10,000		
• instructors office	2800	• storage	750		
• photo prep	400	• laundry	325		
• darkroom	200	• washrooms	600		
• washrooms	250	total #	11,675		
total #	14,810				

Zone Organization



The following are case studies that represent the range of facilities reviewed.

- community college
- special school
- camp
- college

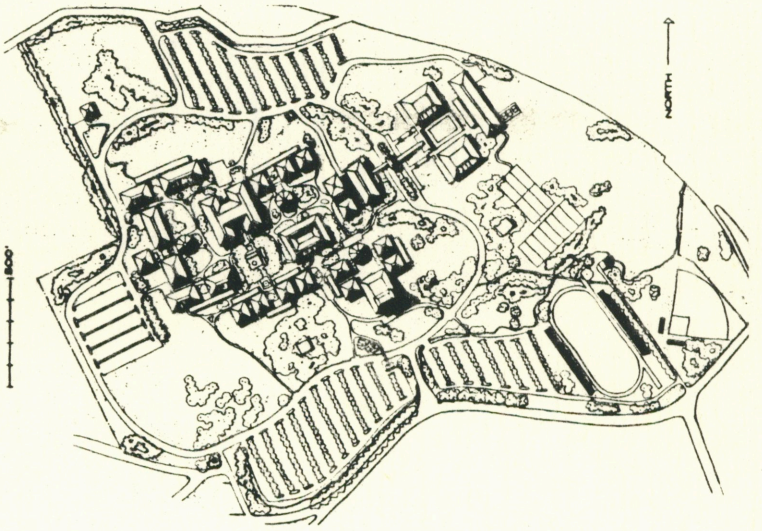
C·A·S·E S·T·U·D·Y

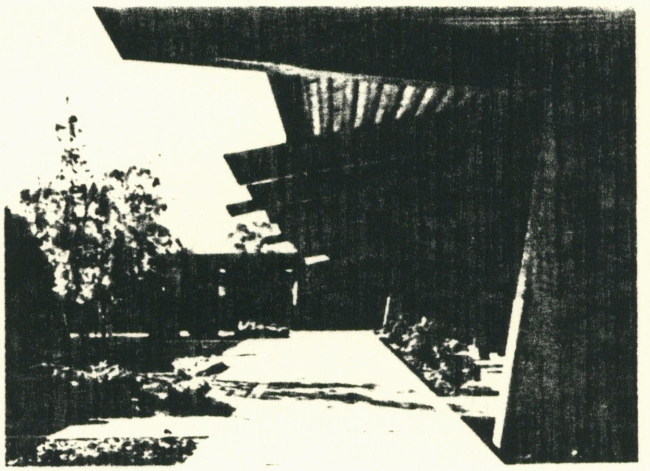
CASE STUDY

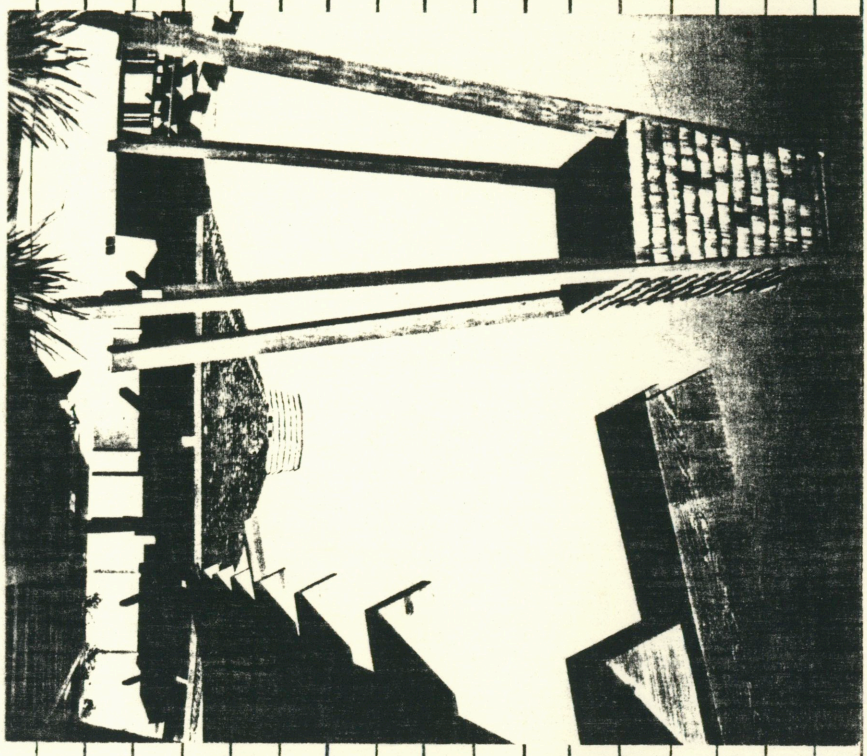
• community college •

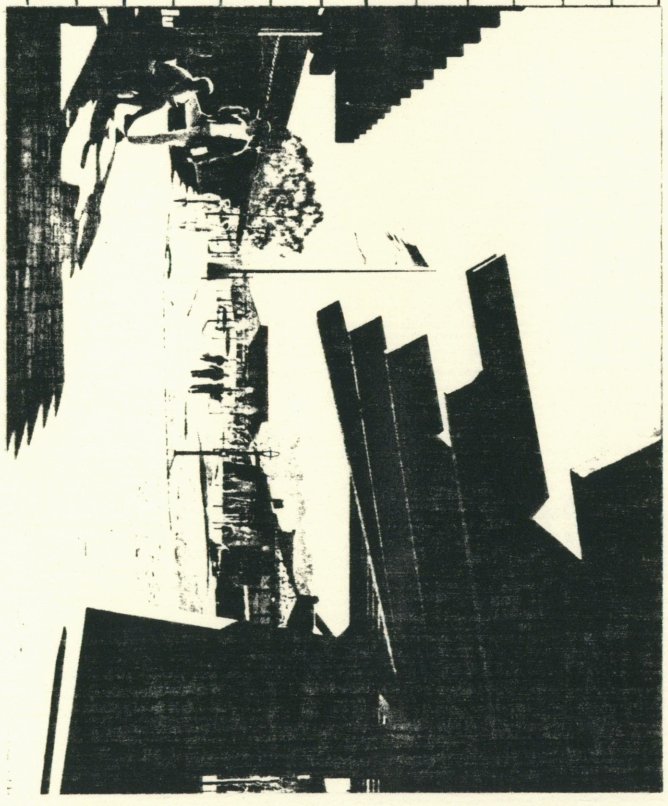
Foothills College Los Altos, Calif.

- makes use of outdoor rooms which are different scale for various group sizes & intimacy levels
- uses berms to create seats
- natural enviroment blends w/ bldgs.
- big roofs (all using same form) tie campus together
- use natural materials
- site plan has natural flow yet uses formal geometry
- walls confine campus from adjoining areas
- parking is on perimeter of campus
- tower provides center focus & landmark
- bridge entry is strong feature
- campus enhances the view of the site it is on
- roof overhang makes good transition from nature to built forms
- glass brings nature in
- transient users, don't live on campus









C·A·S·E S·T·U·D·Y

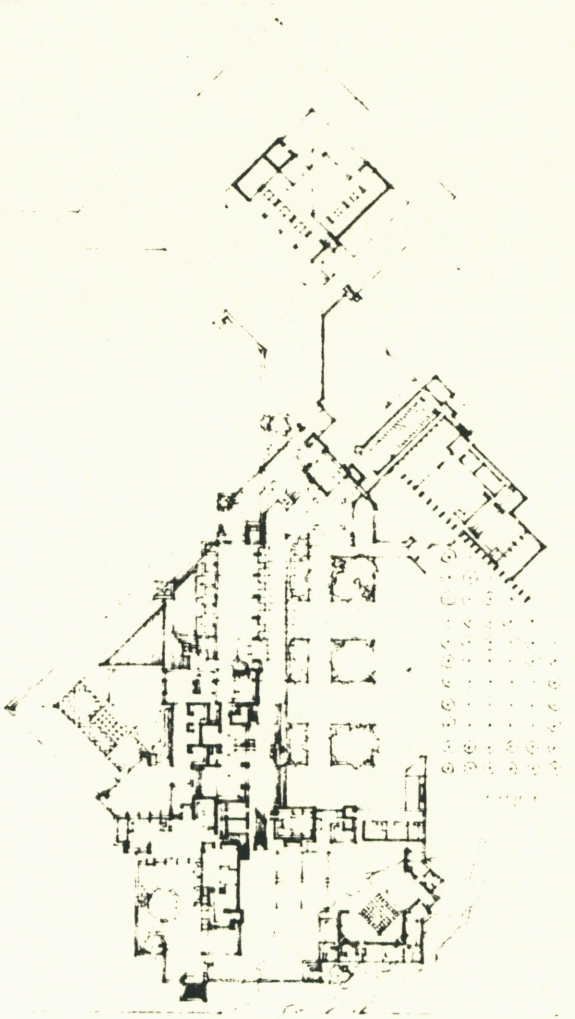
CASE STUDY

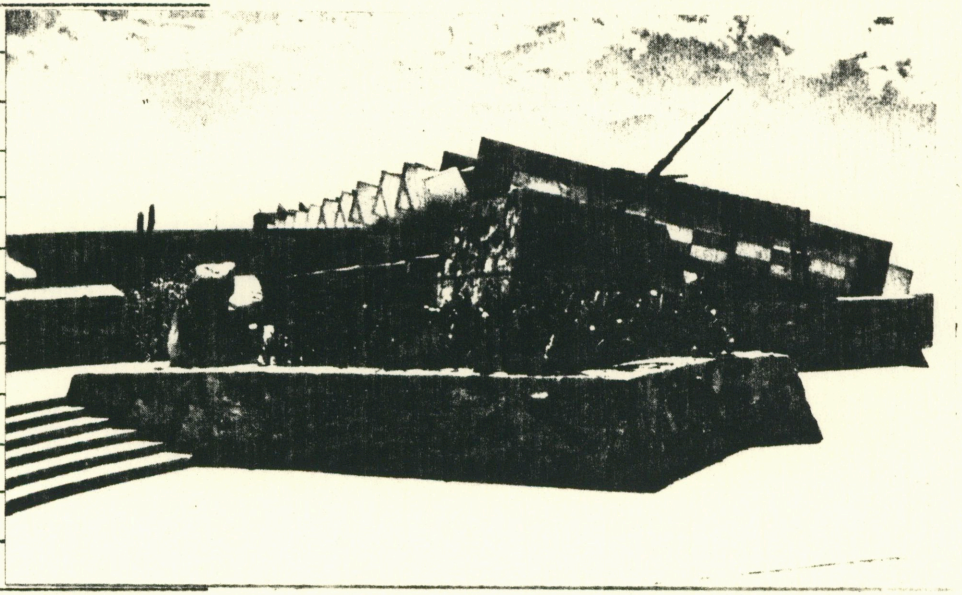
- special school -

Taliesin West, Arizona

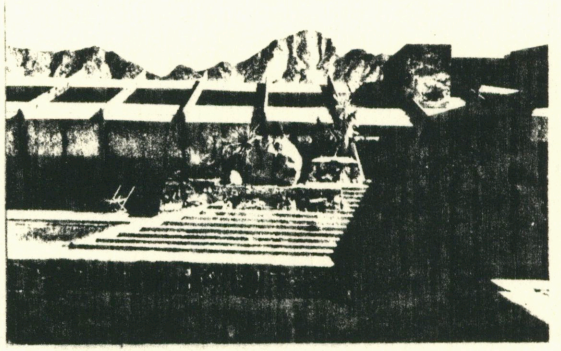
- exceptional relation to nature
- simple geometric forms
- forms grow out of nature
- low horizontallity spreads it out into desert
- very geometic plan (rotated grids)
- opens out to nature
- bldgs. extend out & disappear into landscape

- schoel deals with special group of people
- puts these people in special place
- place promotes their skills & talents





entry –

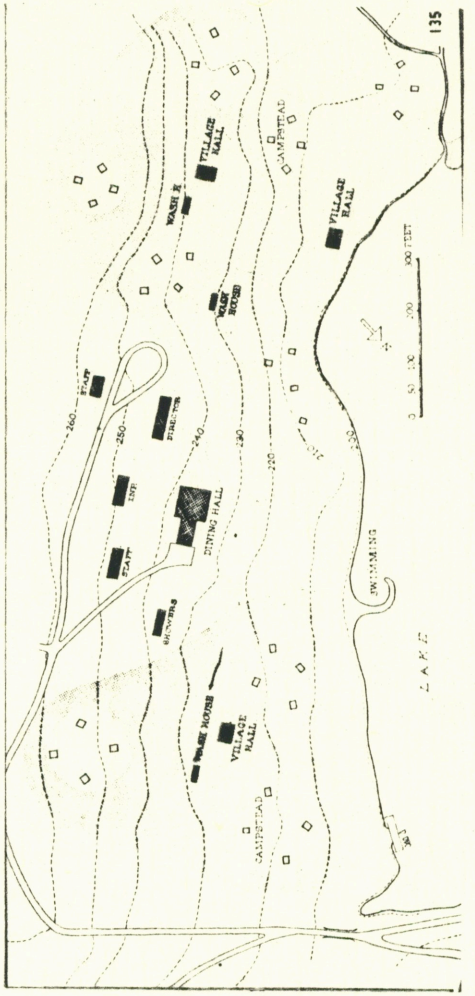


CASE STUDY

- summer camp -

Camp Bliss, Fishkill, N.Y.

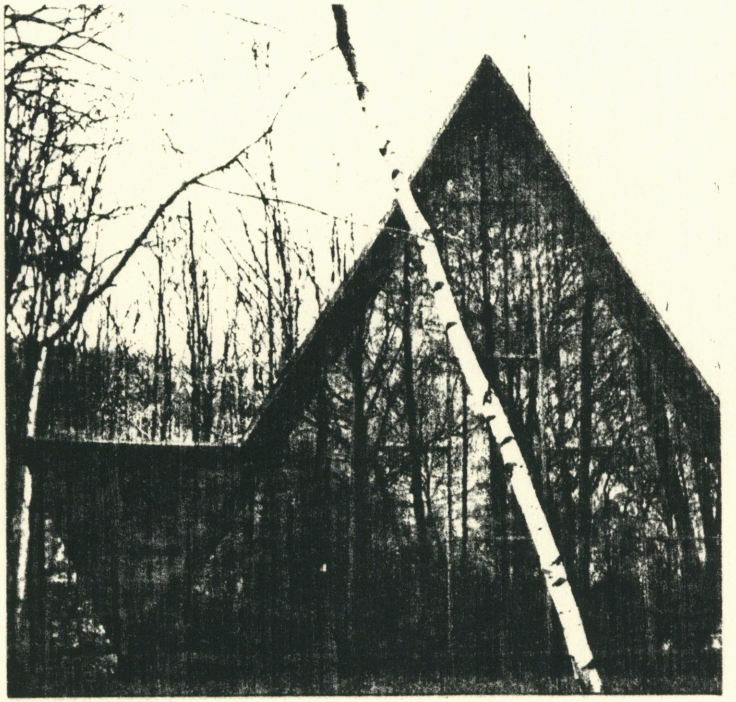
- free flowing camp plan, dining hall center
- housing portion of camp has much looser planning
- small "campsteads" for housing clusters
- housing units are like modified tents
- camp users get feeling of being out in nature "roughing it"
- housing units set up on platforms giving a clear seperation to landscape
- camp buildings take on a variety of forms, no consistency to form
-
- seasonal use
- users stay in camp for duration of program
- users are from urban areas, generally children
-
- camp plan uses small groupings around village halls, which provides small communitys



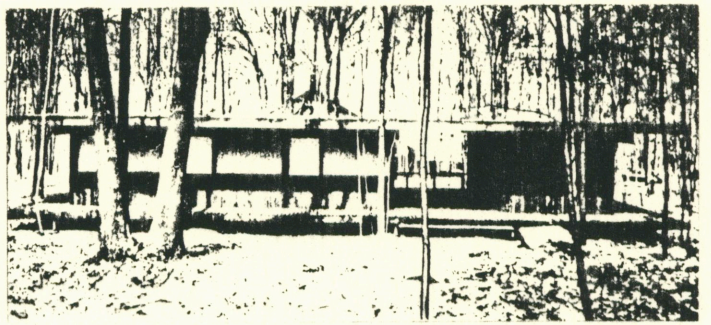


sleeping -

- bldg. form changes with use
- collage of forms



dining -



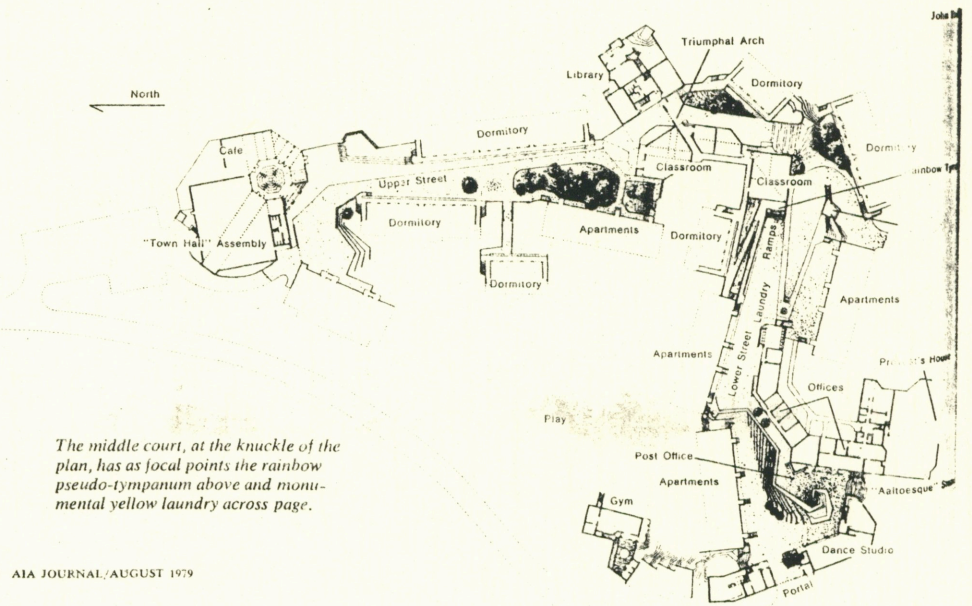
service -

C·A·S·E S·T·U·D·Y

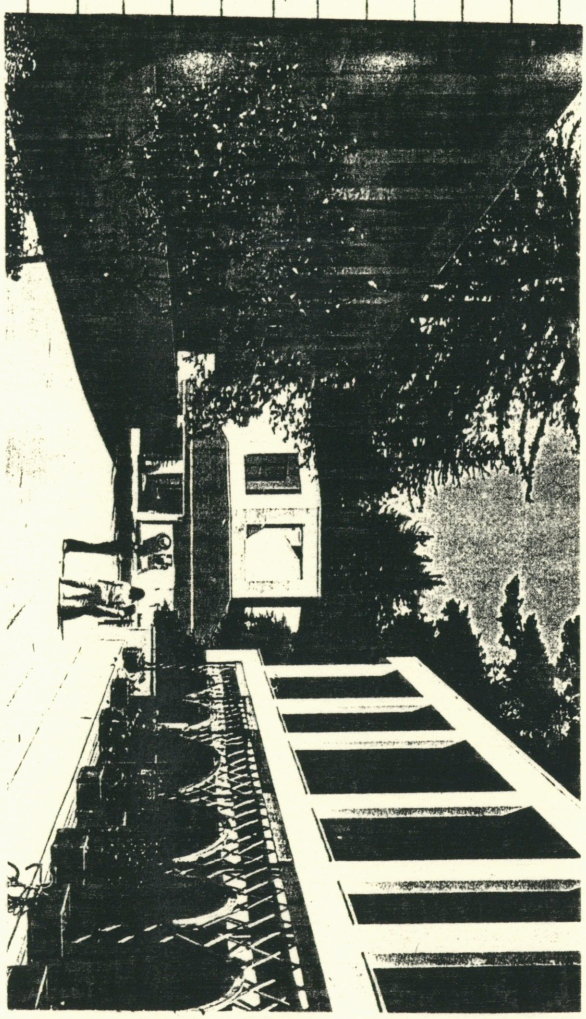
college

Kresge College, California

- uses street as major organization
- uses site well!
- creates a variety of interesting spaces
- functions are mixed together
- axis are terminated well
- color is used as an accent
- needs more vegitation
- spaces seem to be to wide & have a cold feeling (concrete)



The middle court, at the knuckle of the plan, has as focal points the rainbow pseudo-tympanum above and monumental yellow laundry across page.





C·A·S·E S·T·U·D·Y

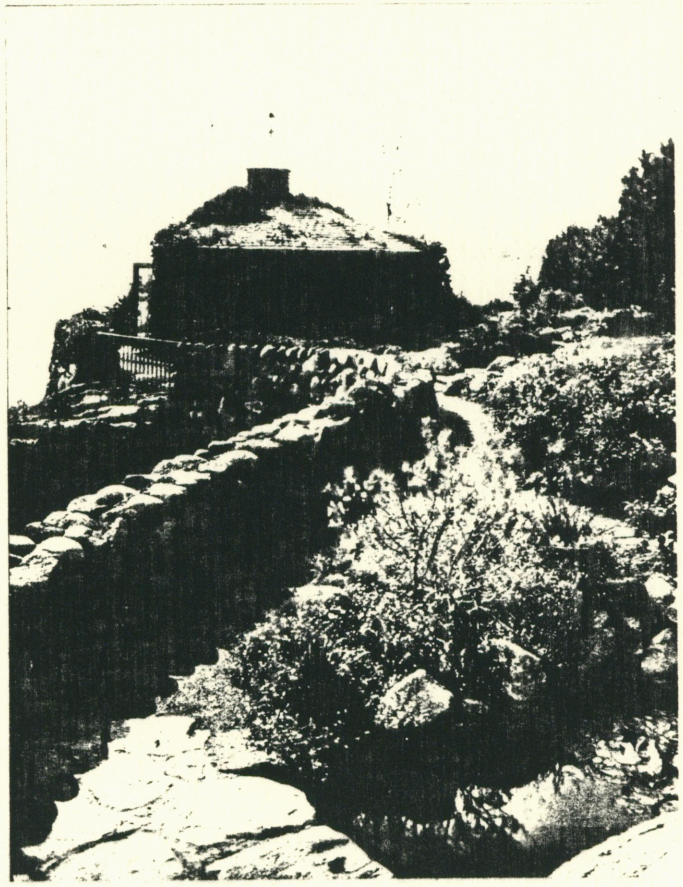
- create a facility that will serve to promote the NOLS philosophy (see introduction)
- develop a strong sense of site-structure unity

the following is a reflection on the ideas, images, & thoughts that give inspiration & guidance to my project....

"begin in delight & end in wisdom" Robert Frost

Image...

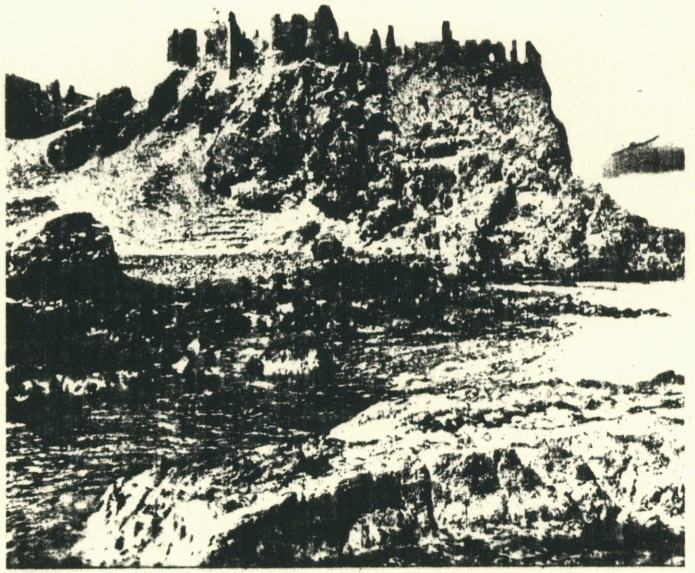
- sensuous natural quality
- feels good in its relationship with setting
- natural material
- nature "grows" on the built form
- creates strong image



(Goldsmith, 1941, p. 323)

Image...

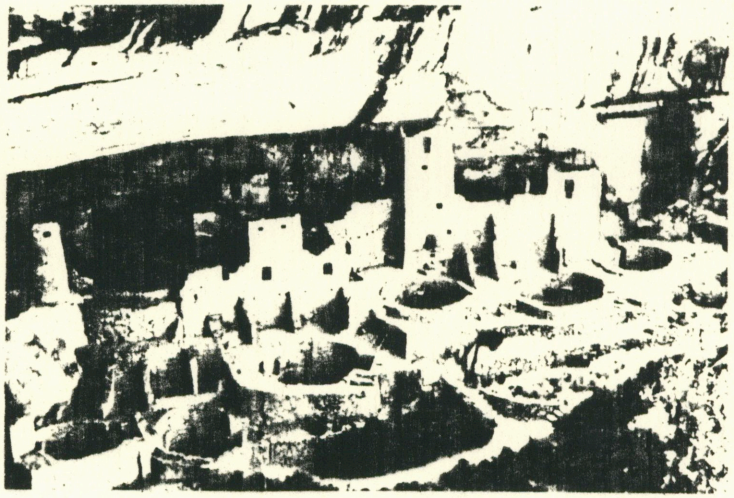
- built form extends cliffs into sky
- strong visual image
- consistent use of natural materials
- relates to topography well



(Simonds, 1961, p. 32)

Image... mesa Verde

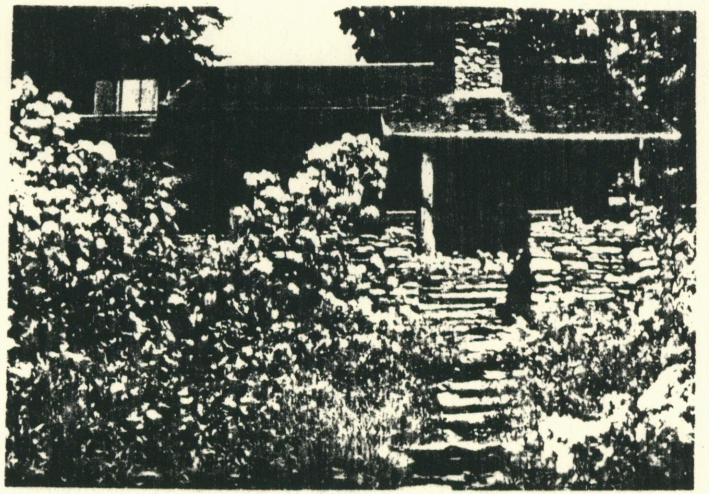
- fits into setting
- uses physical site features
- natural feel to planning
- grows up the cliffs
- strong sense of material
- free flowing massing



(Noble, 1984, p. 79)

Image...

- building "grows" (organically) from nature
- heavy roof invites shelter & protection
- transition zone from base & roof
- natural material & texture



(Goldsmith, 1941, p. 320)

I . D . E . A . S

Outdoor Room...

- frames nature
- extends outward
- uses natural materials
- built form & nature forms the space
- capitalizes on view
- intimate space, under covering
-



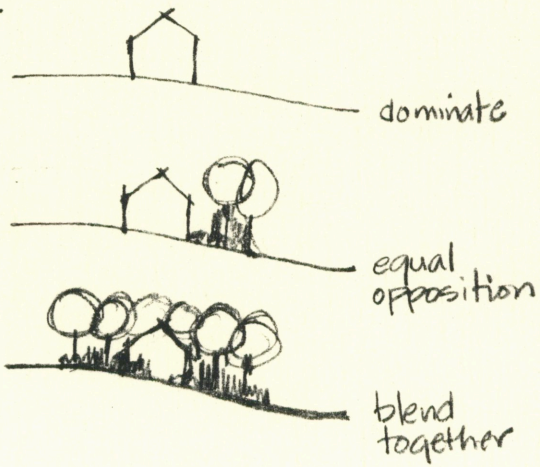
(Goldstein, 1941, p. 339)

I . D . E . A . S

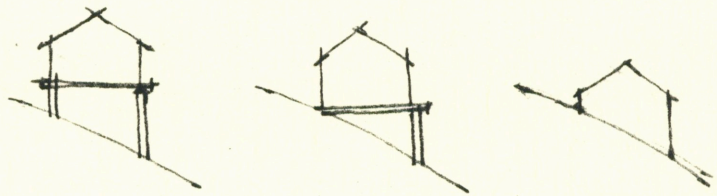
Built form on the landscape...

- create image
- protection by landscape
- develop unique relationship
- integrate built form to environment
- building with topography give added strength to landscape

landscape



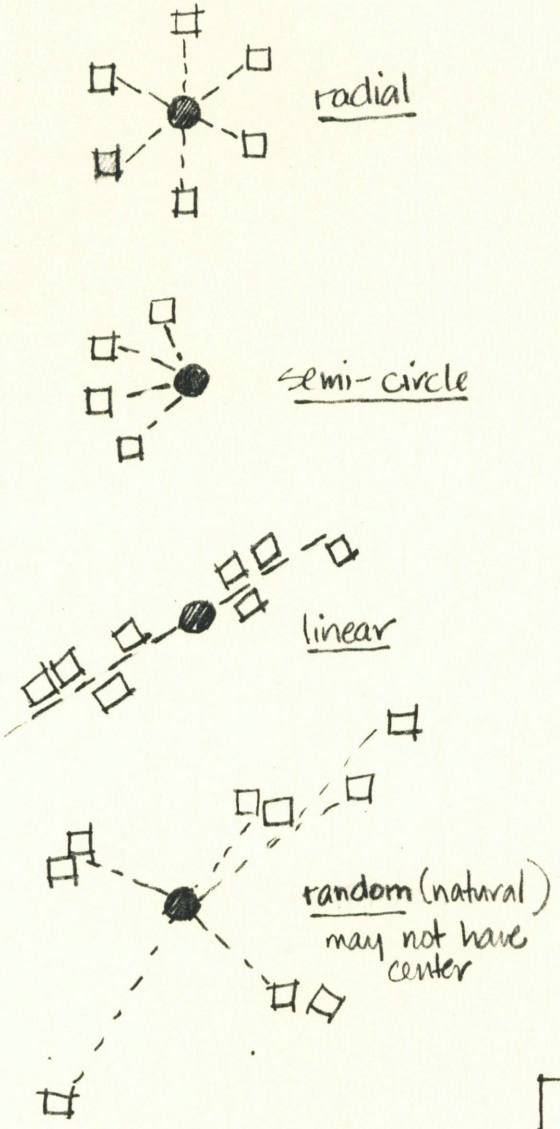
topography



I . D . E . A . S

Center –

- point of reference
- focal point
- create image
- gives a sense of belonging to a group of spaces
- gives formal strength to planning

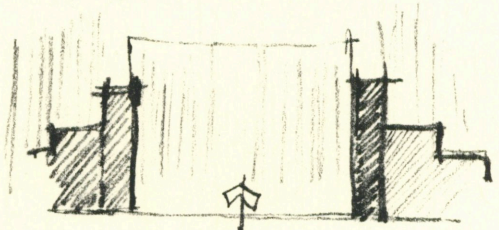


I · D · E · A · S

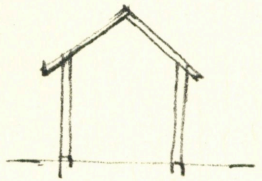
Entry —

- the beginning
- awareness of something beyond
- create image
- sense of place
- denotes special place
- change of material

gate - built form

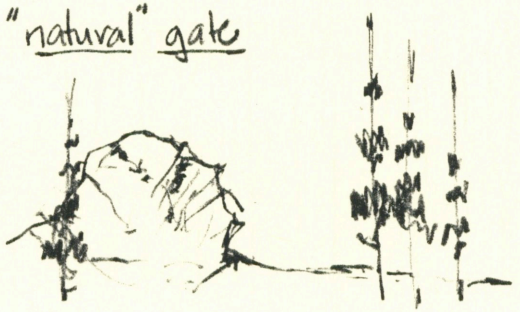


- frame opening
- path beyond
- formal statement

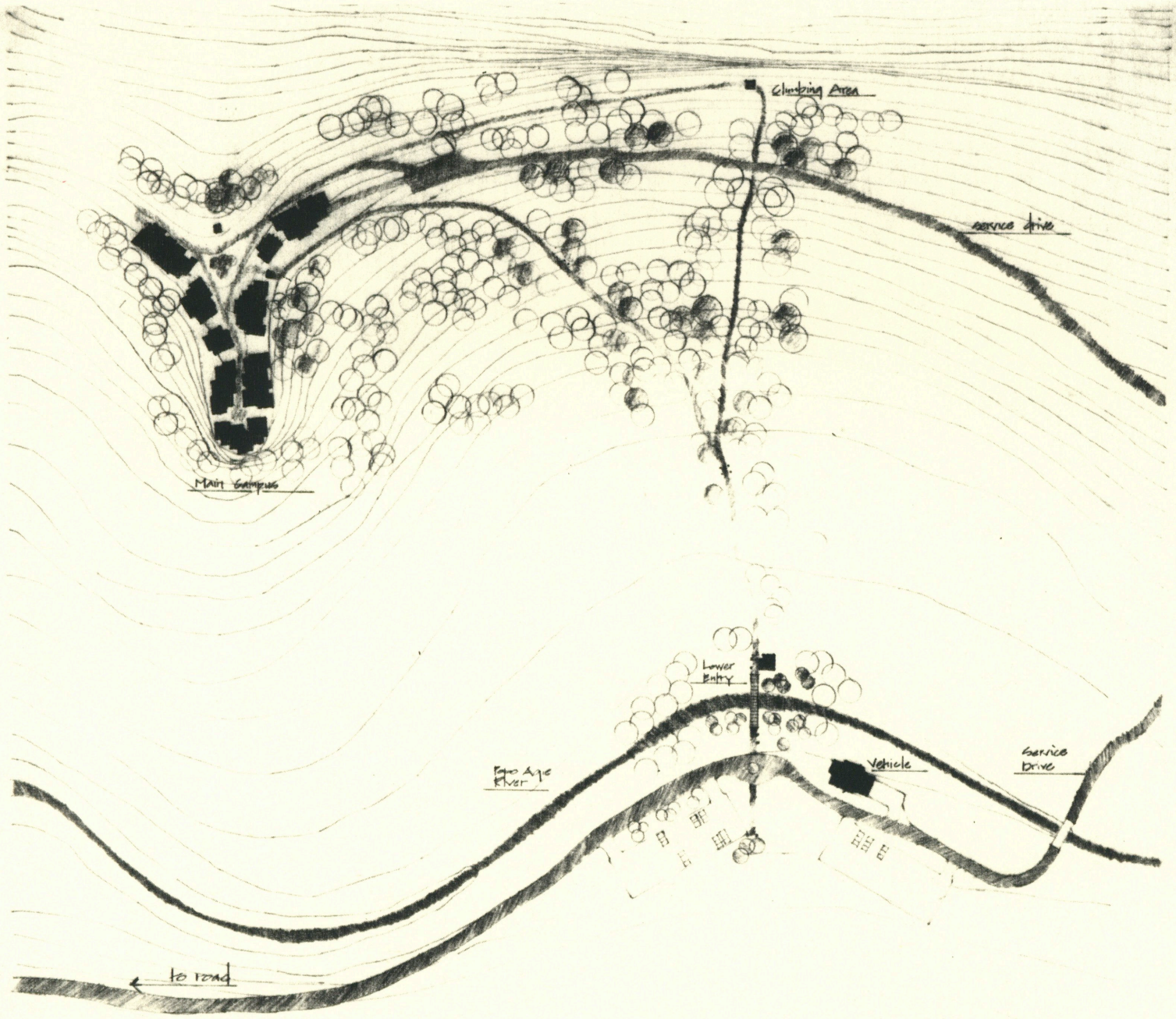


- enclose
- cover

"natural" gate

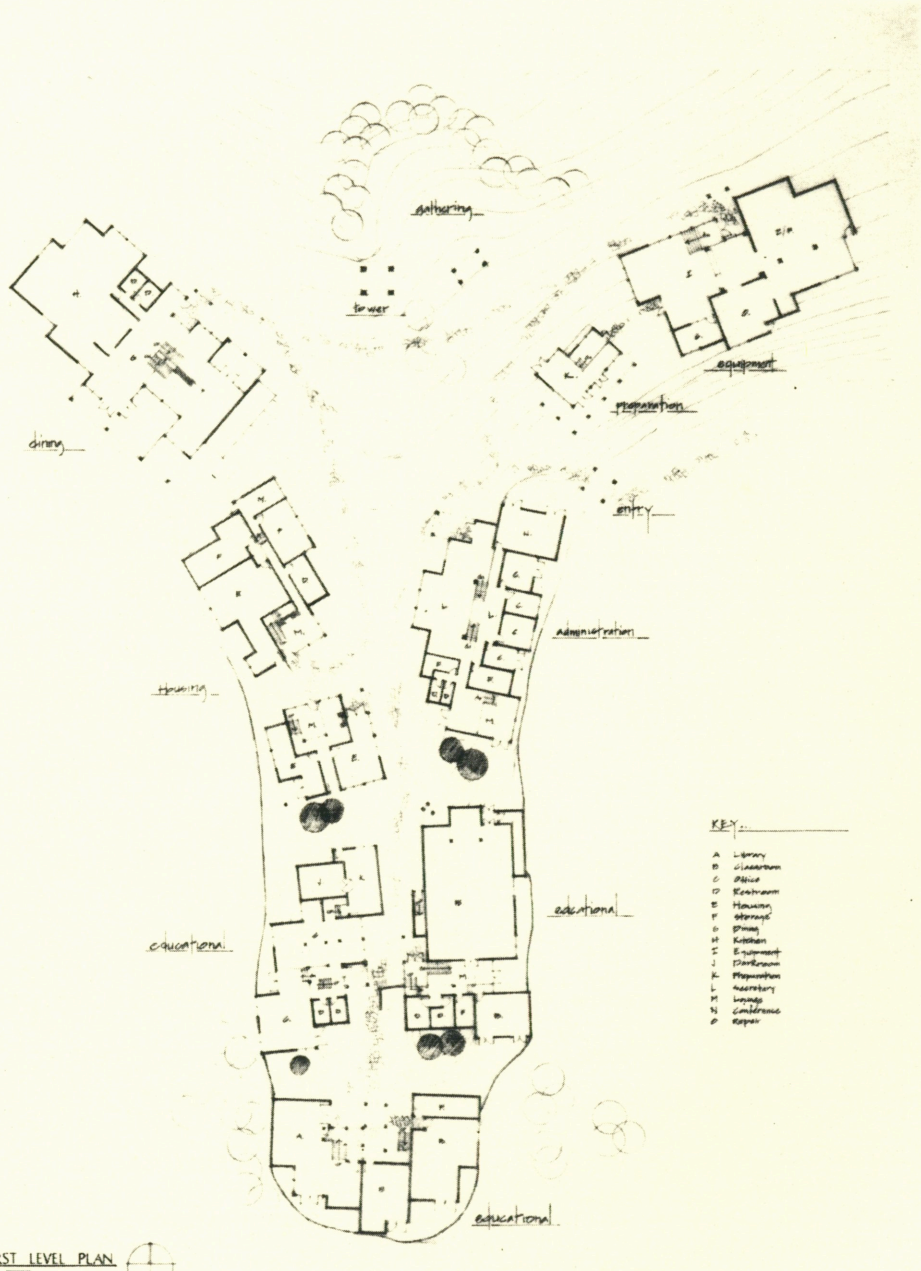


I . D . E . A . S



SITE PLAN

D . E . S . I . G . N

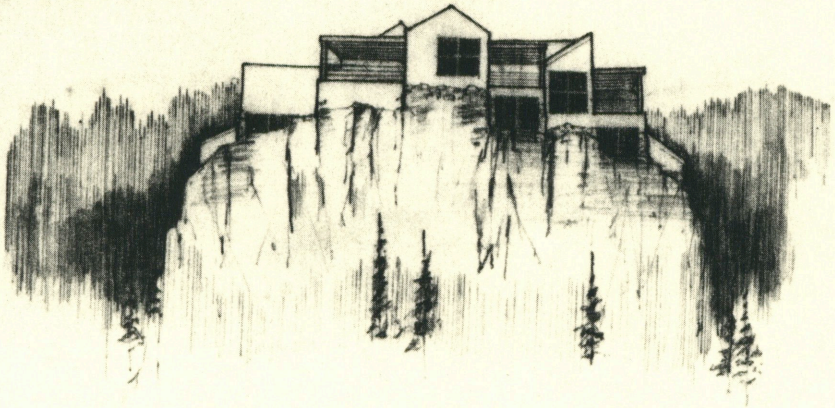


FIRST LEVEL PLAN



VIEW FROM LOWER ENTRY

D · E · S · I · G · N



NORTH VIEW



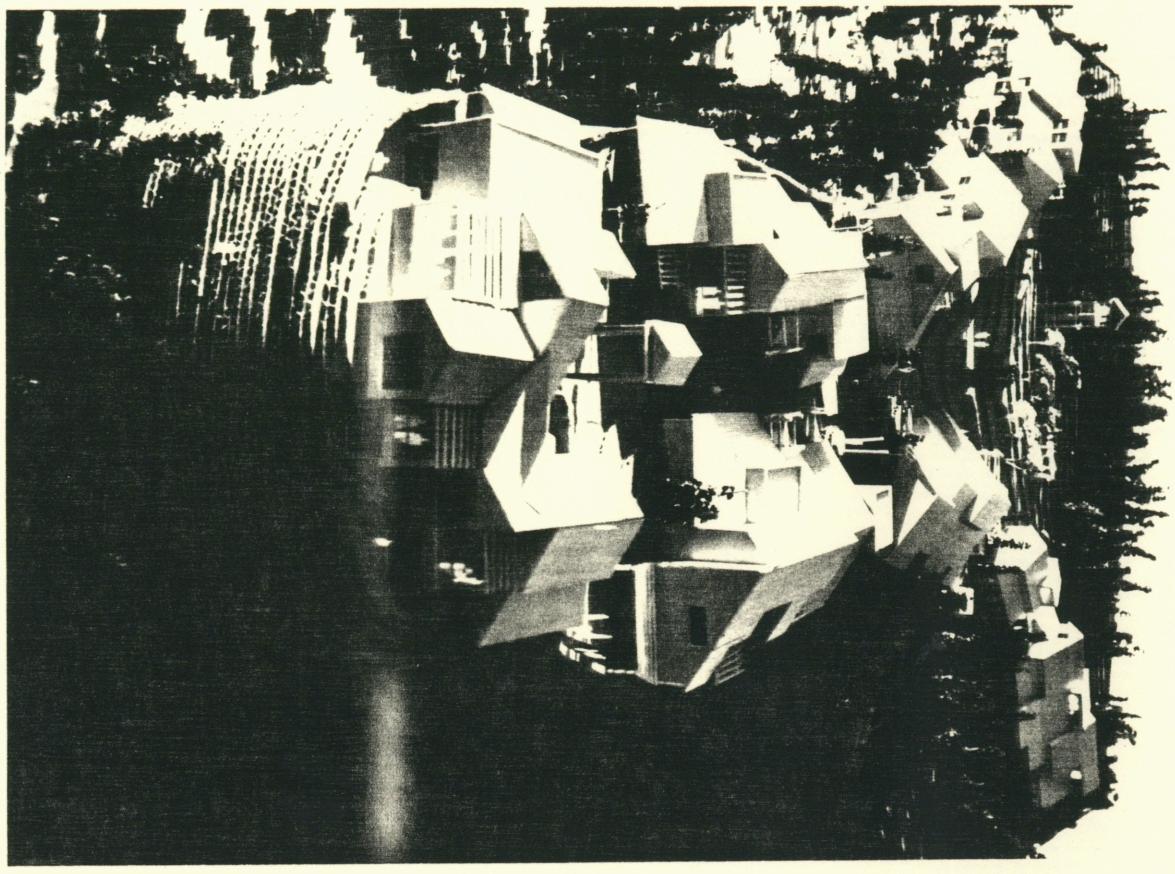
STREET

D . E . S . I . G . N





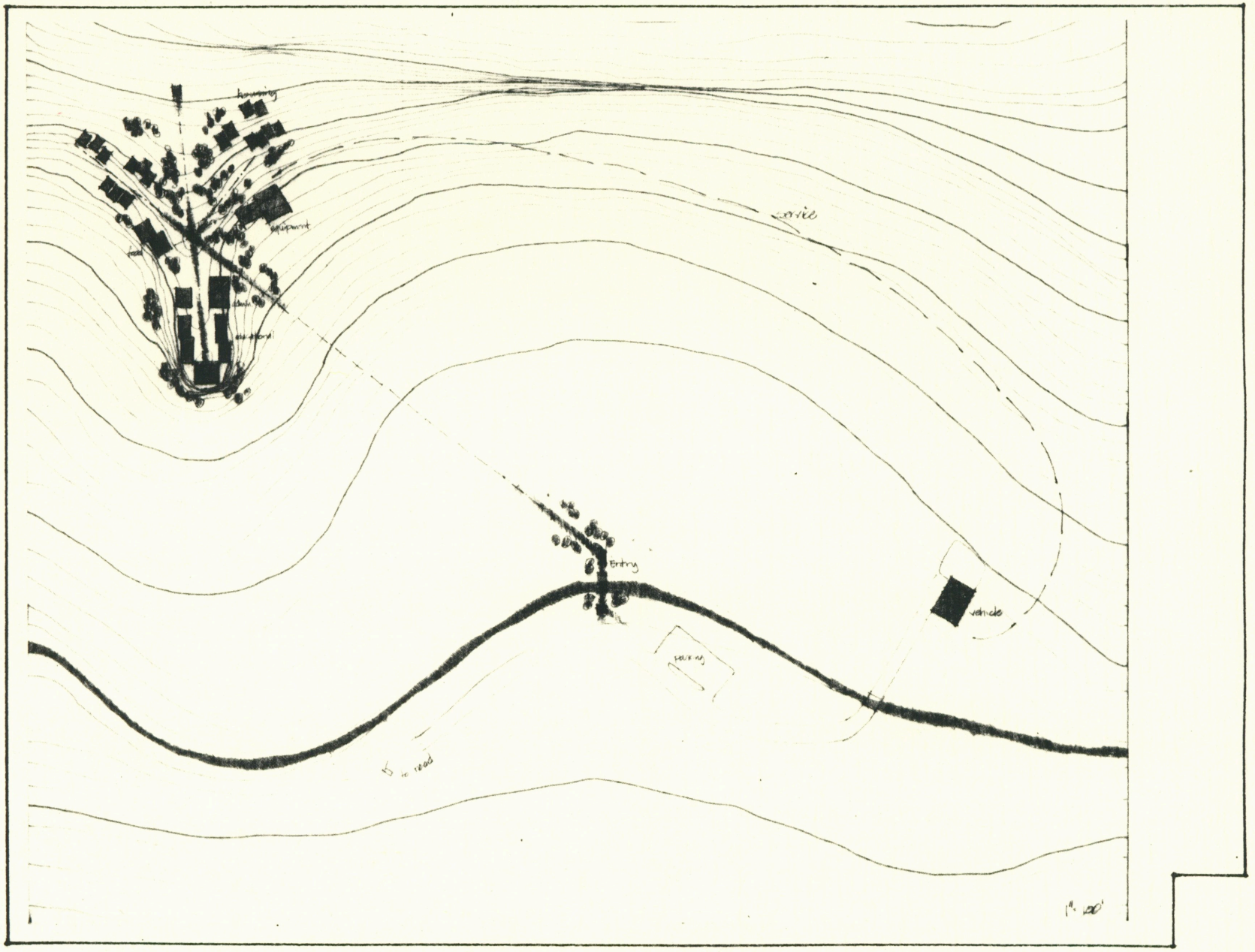
D . E . S . I . G . N



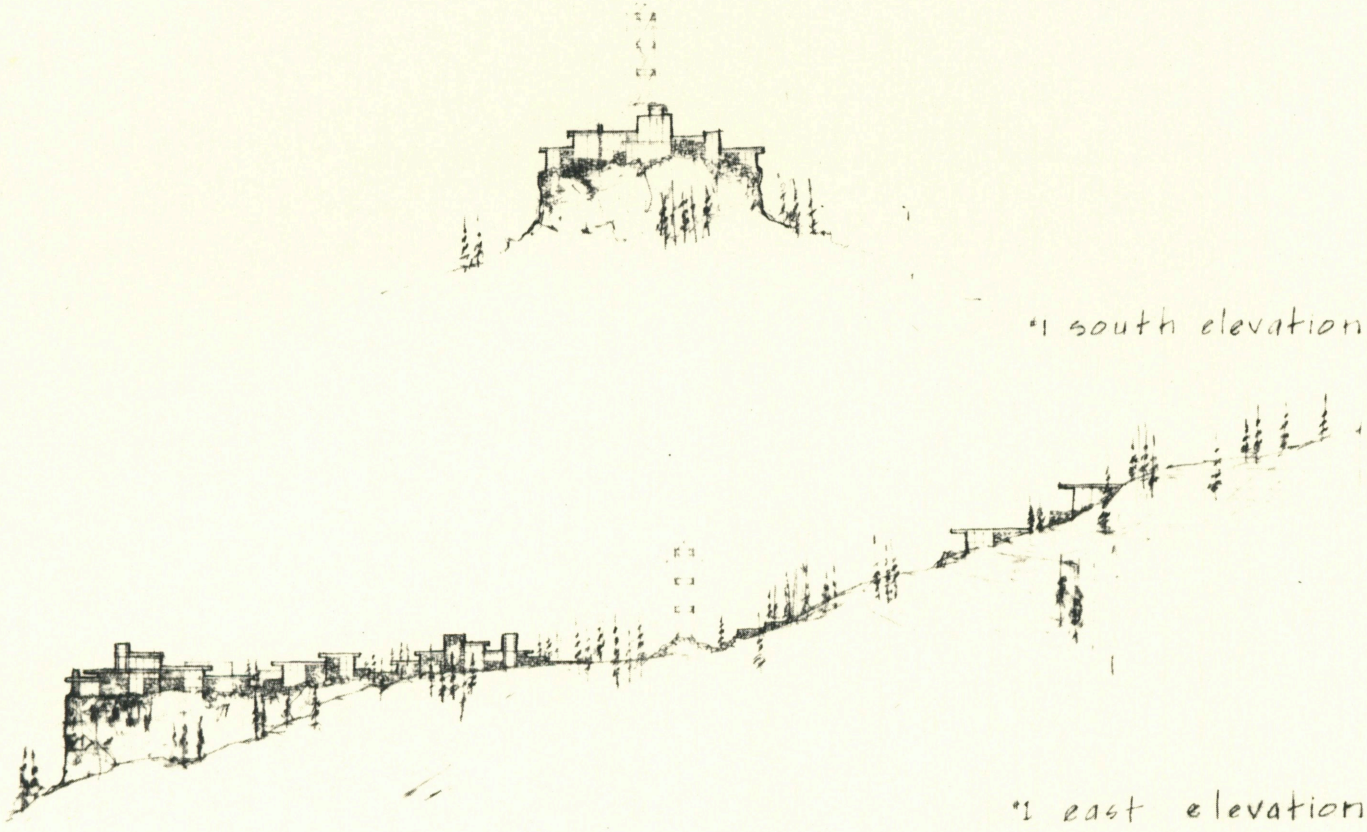
D · E · S · I · G · N



D . E . S . I . G . N


housing
equipment
service
Entry
vehicle
parking
15' wide road

D . E . S . I . G . N



"1 south elevation

"1 east elevation

D . E . S . I . G . N

95
85

FOOTNOTES

[1] Shaklee, F.C. Reflections on a Philosophy. (New York: The Benjamin Co. 1973) p. 52.

[2] National Outdoor Leadership School (Lander, Wy: NOLS, 1985) p. 2.

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