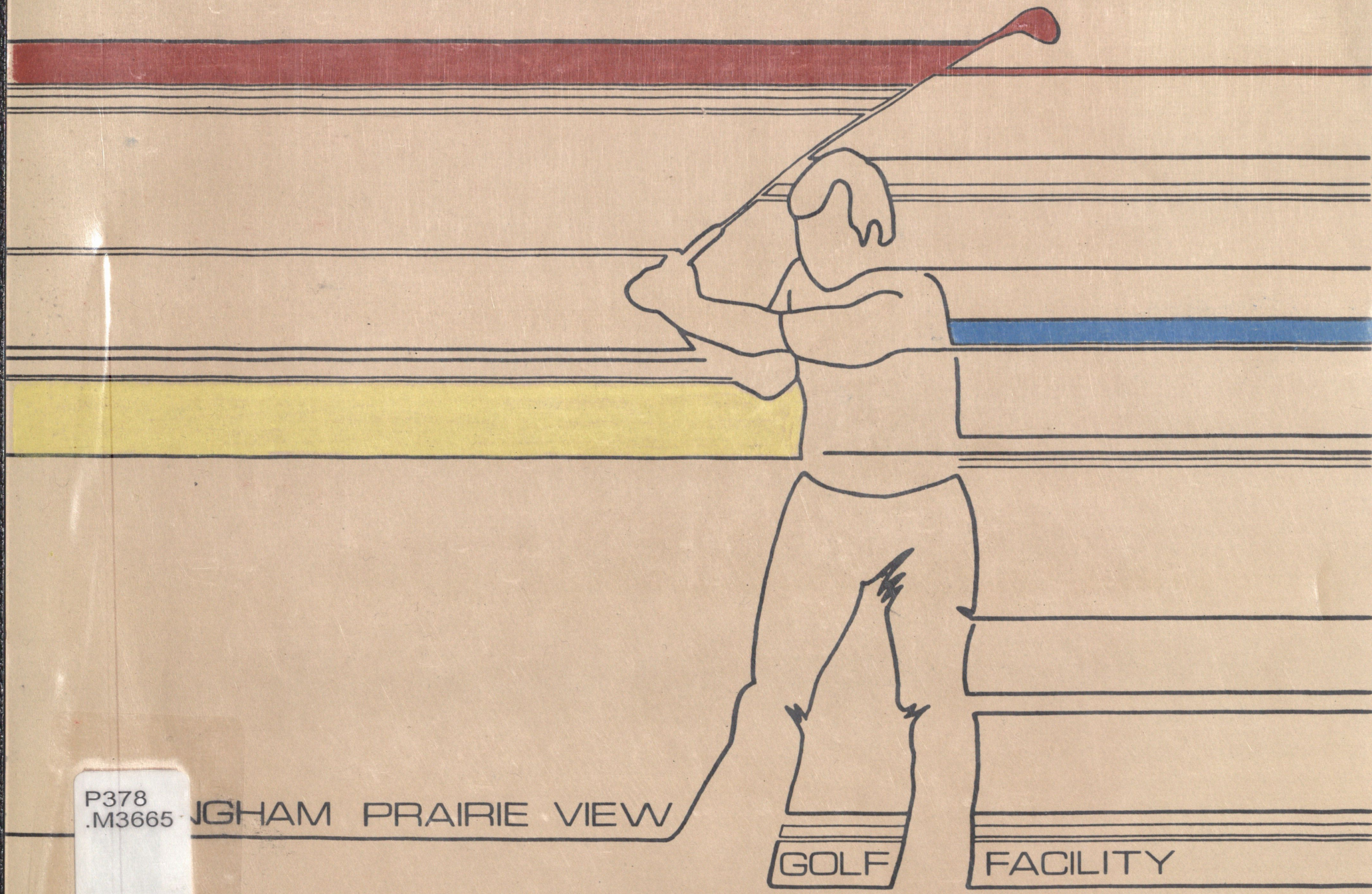


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NGHAM PRAIRIE VIEW

GOLF FACILITY

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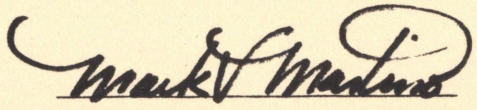
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Mark Martino

A CLUBHOUSE AND GOLF COURSE

BY

MARK VINCENT MARTINO

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

of

Bachelor of Architecture

Approved by:

Pamela Bancroft, Advisor

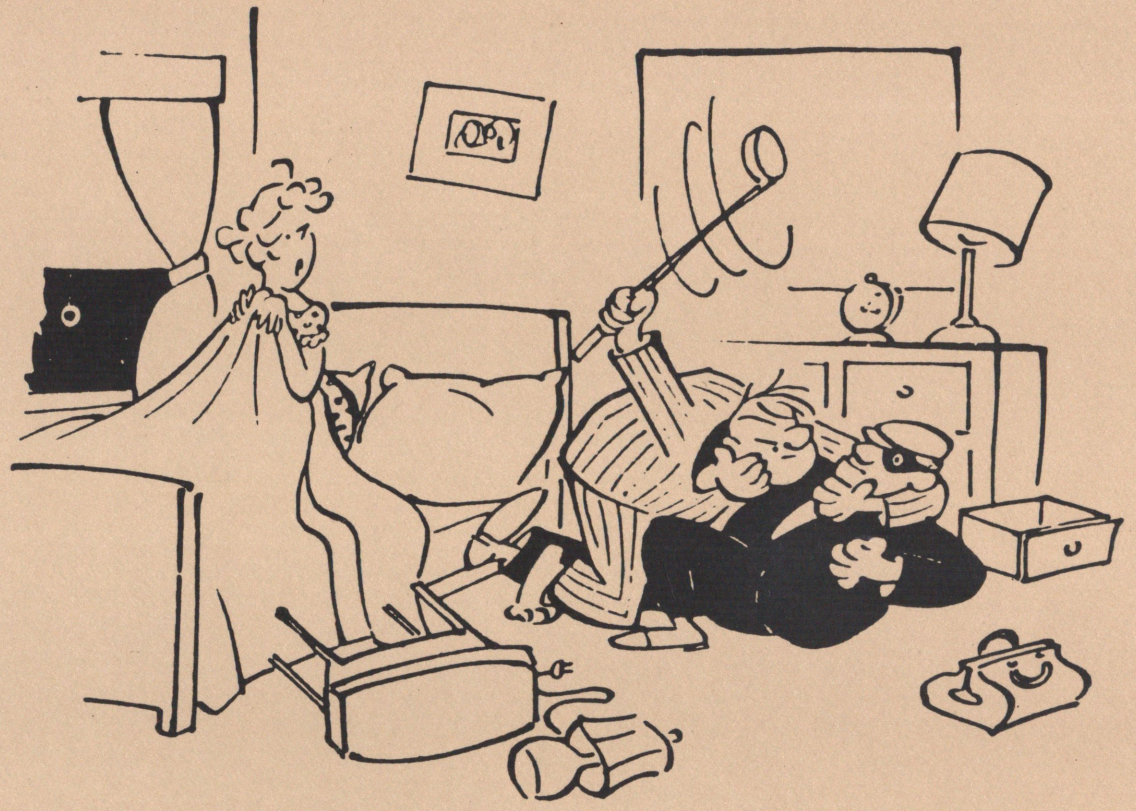
Robert Utzinger, Director

Committee Person

Montana State University
Bozeman, Montana
June, 1988

This book is dedicated to my parents, Joseph T. and Susan H. Martino. Their love, help, and encouragement through the past years have made my dream come true.

"Thank You"



"Use an iron, honey! Your woods haven't been so good lately!"
GOLF DIGEST 82

THESIS STATEMENT

THESIS STATEMENT

The project this thesis is written for is a golf clubhouse and nine new holes for existing Kingham Prairie View Golf Course in Cheyenne, Wyoming. The new clubhouse will provide a symbol, landmark, and a focal point to surrounding neighborhoods and to the city in which it will evolve. It will also provide the city of Cheyenne with an extra source of revenue. The project will aid in attracting tourists, conventions, industry, and will provide social activities as well as athletic facilities.

The city of Cheyenne presently has four other golf courses in addition to the nine hole course this project deals with. There are three other eighteen hole courses which are the Cheyenne Country Club, Warren Air Force Base which is open for military personnel and guests, and the Cheyenne Airport Municipal Golf Course. The fourth course is a nine hole facility at the Littly America Hotel. It is open to their guests and the public.

An expansion of nine holes plus a new clubhouse at Kingham Prairie View golf course is substantiated by the following: projected increase in population for Cheyenne and Laramie County, golf facilities aid in attracting tourists, the increase in cost of travel resulting in more people staying in their own communities, and the source of revenue to the city which facilities provide.[1]

There has been an increase of rounds played at both municipal courses over the past years. A nine hole course is considered busy with 3,500 rounds of golf per month, and an eighteen hole course is considered busy with 7,000 rounds per month.[2] The following table shows the increase of rounds played at both of the municipal courses in Cheyenne.

Airport Golf Course		Prairie View Golf Course
1983	43,820	17,651
1984	44,105	18,779
1985	44,207	18,913
1986	44,314	20,684

Average increase of rounds per year:

123.5 758.7

Cheyenne's two municipal courses would be considered busy if 52,500 rounds of golf were played during the peak months of playing time (May-September). Since 1982, both Cheyenne Municipal courses have averaged 65-70,000 rounds of golf per season.[3] These are the major factors this thesis considered for the development of a new clubhouse and an additional nine holes of golf for the city of Cheyenne.

The expansion of a public golf course and facilities must meet several needs. Among them are the acquiring of a site through land presently available and owned by the city, through trading of land, or by donations from private sources. Land can be purchased, or agreements with other golf courses could be made to utilize their facilities.

Other considerations in expansion should include the need to comply with minimum requirements in developing nine and eighteen hole courses. These include minimum requirements of fifty acres for a nine hole course and 110 acres for eighteen holes, complying with zoning regulations; site accessibility to the public; and availability of power, water and sewer are also important factors.

There are many cost factors to consider when planning a new clubhouse and golf course. The basic of these factors are: cost of land; natural assets/liabilities of site chosen; architects' fees; type of design, labor and equipment required; and any additional equipment and manpower required to provide a good maintenance program.

Funding for the project can be possible through city funds, county funds, severance tax funds, one percent sales tax of Wyoming, donations with matching funds as available, and a fee income with the increase to be put into an escrow account for expansion improvements only.[4]

Considerations of existing buildings new and old will be acknowledged so the new clubhouse will not dominate or downplay any of them. The project will be a focus point and invite all related developments around it.

Local climate and topography conditions will play a large part in the design process. Views, solar gain, and wind are existing conditions that will have the greatest effect on the final design solution.

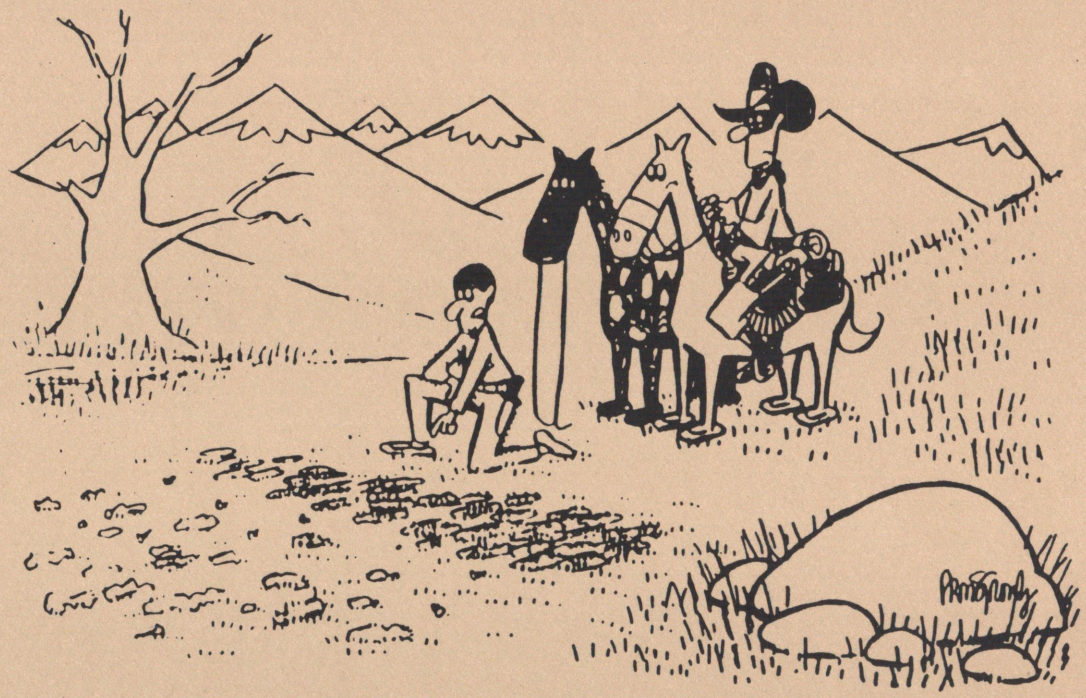
CHAPTER REFERENCES

[1]Cheyenne Parks and Recreation. Master Plan. 1986, p. 43.

[2]Cheyenne Parks and Recreation.

[3]Cheyenne Parks and Recreation. Master Plan. 1986, p. 43.

[4]Ibid., p. 43.



"Him stop here, Kemo Sabe—hit practice shots."
GOLF DIGEST 82

THE LONELIEST GAME

THE LONELIEST GAME

A question worth asking is, what is golf? Can it be defined, or does golf defy any definition? Many people have tried to define golf, such as writer Arthur Balfour, who states:

> "A tolerable day, a tolerable green and a tolerable opponent supply - or ought to supply - all that any reasonably constituted human being should require in the way of entertainment."[1]

Bobby Jones, a professional golfer, puts it another way:

> "Golf in my view, is the most rewarding of all games because it possesses a very definite value as a molder or developer of character. The golfer very soon is made to realize that his most immediate, and perhaps his most potent, adversary is himself."[2]

This definition will make all kinds of sense to anyone who decides to take up the game of golf. Yet another states it in a different way, such as writer A.A. Milne, "Golf is popular simply because it is the best game in the world at which to be bad."[3] There is no precise definition here, but there is the beginning of an understanding, or is there?

It is true that there are a number of types of golfers consisting of the "hackers," the "good golfers," and the "scratch players."

What is the so called hacker? They are golfers who love the game and everything about it, but expect to hit bad shots while playing. The bad shots are natural, and expected. However, the hacker does on occasion hit the perfect shot - a drive that goes straight and long down the fairway, or the shot that lands two

feet from the hole. These are the perfect, the sensual, and the satisfying shots that the hacker will hold in memory for weeks to come.

The good golfers play very consistently. Their drives are usually straight and their short game is up to par. The good golfer expects to have two putts or less to reach the green. However, if there are a number of drives that find water, and too many three putts, the good golfer becomes emotionally disappointed and implies to friends, "I'm taking up a different game," and kicks the door of another person's locker while cursing the four putt on the back nine.

Then there is the scratch player. He is the one that shoots around par consistently and has a zero handicap. Scratch players blame the golf course, not themselves. Reaching a short par four in one, they miss the eagle putt by inches to the right, and reply, "Those damn greenskeepers; I've told them a thousand times to cut the greens shorter and to cross-mow against the green."

These are only three groups or types of golfers considered. What about all the golfers in between? How will they respond to the game?

Can golf be defined by the non-golfer? "All you have to do is hit a little white ball into a hole, big deal." Golf does have rules, and many of them. So many, not even the professionals know them all because the game is just too complex.

The only true definition of golf is one which is given by individual golfers themselves.

CHAPTER REFERENCE

[1]Peter Doberiener, The Glorious World of Golf. The Ridge Press, Inc., 1973, p. 12.

[2]Ibid.



"I told you this was a posh club, didn't I?"
GOLF DIGEST 83

THE CLUBHOUSE

THE CLUBHOUSE

Golf clubhouses in general all offer the same facilities whether they are considered municipal, semi-private, resort, or private country clubs.

The municipal course has the primary function of controlling starting of players and collecting fees. Municipal courses should also have golf and other equipment for sale or rent, and minimum food and beverage sales.[1]

The semi-private club offers the same functions as the municipal, but also includes expanded food services, larger locker rooms, and might offer tennis, swimming, or other recreational facilities.

A resort golf course usually does not have a clubhouse. The lodge or hotel becomes the clubhouse and offers minimum golf facilities such as sales of golf equipment, and club storage.[2]

Functions listed above with the exception of expanded and more elaborate lounges, lockers, bar, food, and other services, make up the private country club. The country club is primarily centered around athletics of all sorts such as golf, tennis, squash, bowling, curling, weight training, and health facilities. Country clubs might offer youth programs, which would include day rooms, locker rooms, or day-camp activities.[3]

The major difference in functions between private clubs and public courses are not related to golf itself, but instead to the social amenities such as drinking, eating, partying, and less strenuous activities. Functions should not be confused with the quality or extent of the facilities themselves.[4]

When the decision is made on what type of club is needed, locating the clubhouse on the site might include most or all of these design elements:[5]

1. Views available from the clubhouse.
2. Clubhouse building.
3. Clubhouse parking spaces and turn-around.
4. Maintenance building for golf course and clubhouse.
5. Swimming pool and bath house.
6. Tennis courts.

The major of these design elements to consider in locating the clubhouse is the views. Many golf courses are located in regions that offer spectacular views of mountain lakes, oceans, or cities. When there is a lack of these views, the clubhouse does have the availability to focus on the views of the golf course itself, and these views should be used when establishing the final orientation of the clubhouse on the site.[6]

The first and tenth tees, and the ninth and eighteenth greens should all be located near the clubhouse. A putting green and a driving range should also be located as near the clubhouse as possible, the putting green especially.

The tees should be close so the golf professional can have good views of golfers ready to play. The golf pro on busy days may control play from both tees, and should have good visibility to achieve quick and controlled play. When this is unavoidable, a starter's shack will be needed. A drawback the starter's shack has is the requirement of additional staff to operate it. Locating the ninth and eighteenth greens close to the clubhouse allows people in the clubhouse a view of the course, and is practical for the golfer to end at the clubhouse whether playing nine or eighteen holes of golf.

The clubhouse building should function on the site as follows:[7]

1. Provide for people arriving with golf bags to play golf.
2. Provide for people arriving for other club functions such as dining.

3. Provide for people coming out of the building to play golf, tennis, swim, or leave.
4. Provide service entrance for delivery trucks, garbage removal, and service vehicles.

A separate entrance is sometimes used so golfers can enter directly into the locker rooms and pro shop, and this will reduce the traffic through the main entrance/foyer. There should also be provided separate exits to the golf course itself, and this is mainly through the pro shop and locker rooms.

When other club functions are occurring, the use of a drop-off area would be convenient. This area might be covered so people can get in or out of their cars in inclement weather. Ideal auto movement would consist of the main entrance driveway, to the loading and unloading area, to the parking areas. A turn-around area may be needed if these functions cannot be met.

Parking areas are certainly necessary, and almost always difficult to design so they appear visually attractive. Considerations for parking areas involve locations, size, arrangement,[8] safety, storm water control, lighting, and landscaping.

Most convenient for the people in vehicles would be the parking area directly adjacent to the main entrance. The clubhouse should have some area around it for landscape beautification. The entrance driveway should allow the user to experience the golf course and clubhouse first, before entering any parking areas. A traffic pattern[9] with one entrance, one exit, and clearly marked, is desirable. Parking areas can be divided into two or more areas, which can make them appear less obtrusive. The use of landscaping in these areas to screen them off will also make them more attractive. Speed bumps may be used to slow traffic and to insure safety precautions.

The golf course will need storage for equipment used to keep it in shape. This is often a separate building from the

clubhouse, and it is usually located far away from the course as well. The maintenance building, often called, should be between 50' x 100' or 60' x 120', or similar size.[10] This building should provide a heated workshop area, and storage areas for equipment such as fairway mowers, green mowers, hole cutters, fertilizer spreads, tools, and miscellaneous golf equipment.[11] A work storage area should also be provided outdoors, and it should be at least one-half acre in size.[12] This space should be screened from view of the clubhouse and golf course by means of landscaping.

Swimming pools and tennis courts are usually affiliated with private country clubs. The size of the pool, and the number of tennis courts desired is dependent on the consideration for expansion, as extra tennis course and pool facilities may be designed at some future time.

The clubhouse consists of three major spaces for the golfer: The locker room, the pro shop, and the bar/lounge.

The first activity that most golfers do when arriving at the clubhouse is to go to the locker room. The locker room should be functional and bright. The underground, low-ceiling locker room is a thing of the past for both modern clubhouses and thinking clubhouse architects.[13] An average of four to five square feet per locker and adjacent dressing area is recommended for most average clubs.[14] This is liable to change with membership increases and/or with the amount of funding or money that the club has. The average foursome has seven minutes after entering the locker after a round before the foursome following them will arrive. The average person does not shower for more than seven minutes, thus four showers would be adequate. The locker room in conclusion should be functional, light, airy, roomy, and in good taste, but does not necessarily need to be lavish.

The pro shop is generally smaller than the locker room, or other spaces in the club, but is used just as often if not more often than the locker room. The users of the clubhouse purchase

all or nearly all golf supplies and soft goods from their golf professional.[18] The required sales space for display should then be around 1,000 to 2,000 square feet. In some instances the pro shop is not attached directly to the clubhouse. When the pro shop is located a distance away from the main building, it is often inconvenient or the weather is not conducive to walking from the clubhouse to the pro shop. The pro shop should be inviting, well lighted, functional, and provide all necessary equipment for the golfers' needs.

After playing, or before playing a round of golf, the golfer often will relax in the bar/lounge space. This area should be inviting and socially relaxing to the user. Although this area will be mainly used for cocktails, tables should be provided for quick easy lunches or snacks. The bar/lounge area should be highly decorated with carpeted floors, acoustically treated walls and ceilings, decorative bar and back bar, and should provide good views to the golf course.

These spaces as well as others will differ in size from clubhouse to clubhouse. The following charts showing clubhouse requirements should be used only for preliminary planning purposes.[18] These will need to be adjusted to individual clubhouse projects.

CHAPTER REFERENCES

[1]National Golf Foundation. Planning The Golf Clubhouse. 3rd Ed., Revised 1981, p. 138.

[2]Ibid., p.139.

[3]Ibid.

[4]Ibid.

[5]Ibid., p. 122.

[6]Ibid.

[7]Ibid., p. 125.

[8]Ibid.

[9]Ibid.

[10]Ibid.

[11]Harold J. Cliffer, Planning the Golf Clubhouse (Chicago 54, Ill.: National Golf Foundation, Inc., 1956), p. 21.

[12]National Golf Foundation. Planning The Golf Clubhouse 3rd Ed., Revised 1981, p. 127.

[13]Ibid., p. 145.

[14]Ibid., p. 146.

[15]Ibid., p. 147.

[16]Ibid.

[17]Ibid.

[18]Ibid., pp. 254-260.

Area requirements for clubhouse facilities

The following approximate square foot area requirements for golf club facilities and usages are submitted as a guide to assist in planning new clubhouses or additions. The basic working figures should be used only for preliminary planning purposes. They must be adjusted and adapted to each individual situation.

Facility	*Type*	*Suggested Space*
Lockers	Single	7.0-9.0 s.f. per locker
	Double Tier	3.5-4.5 s.f. per locker
	Triple Tier	2.3-3.0 s.f. per locker
	Alcove Type	5.0-6.5 s.f. per locker
Showers	Gang Type	15-20 s.f. per shower
	With 2 dressing cubicles	23-25 s.f. per shower
	With 1 dressing cubicle	27-30 s.f. per shower
Water Closets and Urinals	Including equal number of lavatories	30-40 s.f. per water closet or urinal
Sauna or Steam Rooms	Multiple Use	10-15 s.f. per person
Bag and Cart Storage	Bags — Vertical	1.75-2.0 s.f. per bag
	Bags — Horizontal	1.25-1.50 s.f. per bag
	Cart Bag or Carts and Bag	2.0-2.5 s.f. per unit
Golf Cars	With Open Aisle	60-65 s.f. per car
	Aisles Filled	40-45 s.f. per car
Dining	Formal	13-15 s.f. per person
	Banquet	10-12 s.f. per person
	Grille Room	12-15 s.f. per person
Kitchen	As a percentage of Dining and Grille Areas	30-50%
Ballroom	Seating and Dancing	6-8 s.f. per person
Coat Room		.75-1.0 s.f. per coat
Cocktail Lounge		15-17 s.f. per person
Bar	Per Bartender's Station	65-80 s.f.
Circulation Space, Wall Thicknesses, etc.	Percentage of total floor area	8-15%

Source: Country Club Design Data, Mankey Associates, Clubhouse Architects.

From this survey of new clubhouses built within the past two years, we gleaned some other information which may be of help to you in planning your clubhouse.

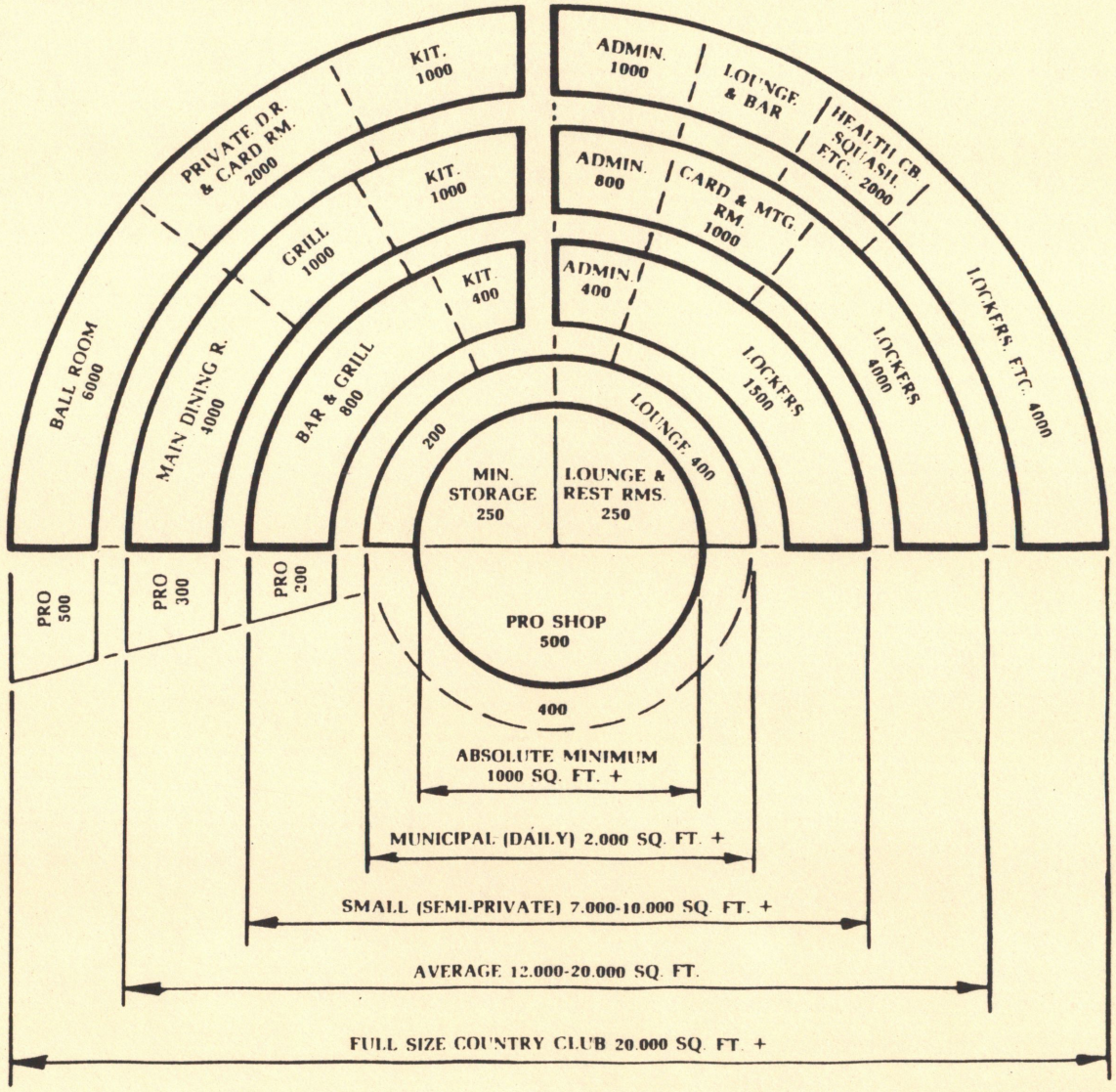
SPACE ALLOCATIONS: Average	D.F.	MUN.	P-NE	P-E	Av. All Facil.
Parking Lots (Sq. Ft.)	26,000	43,750	24,266	76,000 x	37,842
Parking Lot Capc. (No)	136	114	189	192	152
Space, per car (Sq. Ft.)	151	383	128	399 x	174
Golf Car Stge. (Sq. Ft.)	3,255	2,073	3,633	3,408	3,207
No. Golf Cars stored	50	96	62	57	64
Space per car (Sq. Ft.)	69	22*	59	60	50
Pro Shop Area (Sq. Ft.)	700	650	1,050	1,628	932
No. Bags Stored	125	60	223	375	215
Bag Storage (Sq. Ft.)	512	160	376	1,424	475
Space per bag (Sq. Ft.)	4.1	2.6	1.6	3.8	1.8
Dining Room (Sq. Ft.)	1,870	1,052	2,076	1,555	1,571
No. of Seats	137	95	145	117	123
Other Dining Areas (S.F.)	520	457	615	1,007	600
No. of Seats	32	37	56	50	43
Space per person DR (S.F.)	18.2**	12.3**	10.9**	20.1**	15.6**
Kitchen Area (Sq. Ft.)	538	406	1,246	1,190	882
Kitchen/Dining Ratio:					
Total Dining (Sq. Ft.)	2,390	1,509	2,691	2,562	2,171
Total Kitchen (Sq. Ft.)	538	406	1,246	1,190	882
Ratio	4.4/1	3.7/1	2.2/1	2.2/1	2.5/1
Office Area (Sq. Ft.)	200	143***	350	500	276
Lockers					
Men	125	40	241	209	137
Women	100	30	125	107	77

(*) Not all cars are stored indoors.
(**) Normal dining room arrangement. Additional seating can be added during peak periods to increase seating capacity.
(***) All business functions of a Municipal facility are not usually conducted at facility, i.e. remote accounting, directors office.
(x) Includes landscaping area surrounding parking lot.

We should caution you that these figures represent newly-constructed clubs. It has become an increasing trend to build a basic facility for the opening of a clubhouse, and then expand as needs dictate. In most cases these would not be the final space allocations, but indicate the initial allocations.

SOURCE: NATIONAL GOLF FOUNDATION

The Growth of a Clubhouse

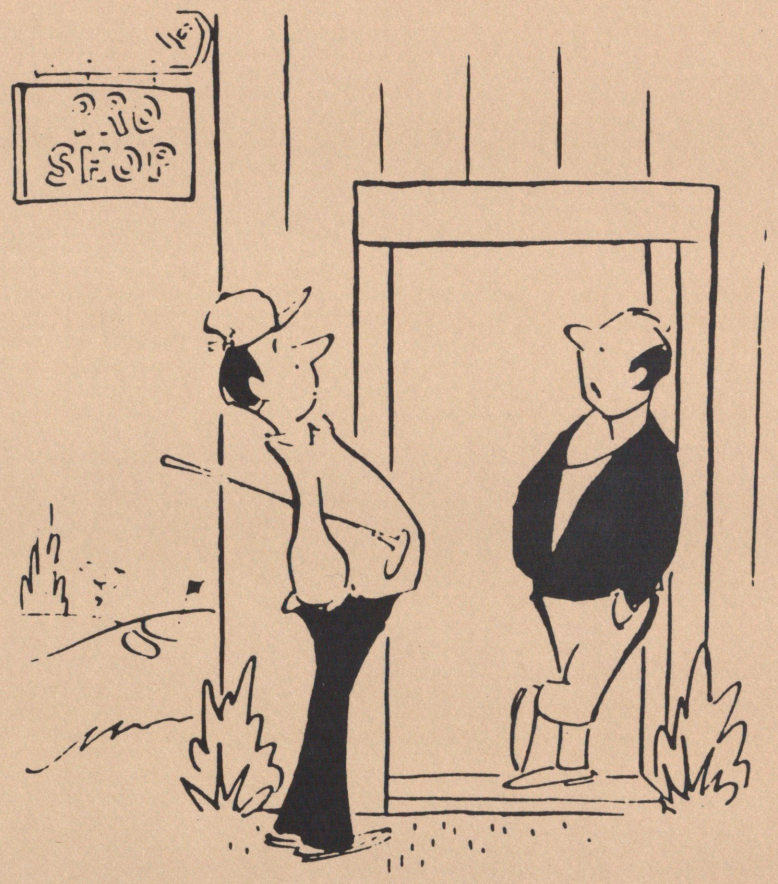


Source: Joseph S. Finger & Associates, Inc.

GOLF FACILITY DEVELOPMENT COSTS

	HIGH	LOW	MEDIAN
Basic golf course construction (clearing, grading, construction of tees, greens, and traps, seeding, etc.)	$1,267,500	$200,000	$510,000
Irrigation system	400,000	40,000	175,000
Pump house	60,000	1,000	22,500
Car paths, shelters, bridges, etc.	200,000	2,000	65,000
Service road	75,000	1,000	20,000
Golf course maintenance equipment	325,000	25,000	98,500
Maintenance building	200,000	10,000	81,500
Pre-opening golf course maintenance	200,000	5,000	59,390
TOTAL GOLF COURSE DEVELOPMENT COSTS	$2,727,500	$284,000	$1,031,890
Clubhouse construction	$1,155,000	$58,000	$345,000
Clubhouse equipment and furnishings	198,000	6,000	77,040
Entrance road and parking	190,000	5,000	40,000
Golf cars (median of 42 cars)	105,000	29,300	80,000
Golf car storage shelter	50,000	1,500	30,000
TOTAL CLUBHOUSE AND GOLF CAR COSTS	$1,698,000	$99,800	$572,040
TOTAL FACILITY DEVELOPMENT COSTS	$4,425,500	$383,800	$1,603,930

Note: The above costs do not include land acquisition costs or architect's fees.
SOURCE: NATIONAL GOLF FOUNDATION



"I had to stop giving lessons. I was picking up too many bad habits.
GOLF DIGEST 82

CASE STUDIES

AIRPORT MUNICIPAL GOLF COURSE

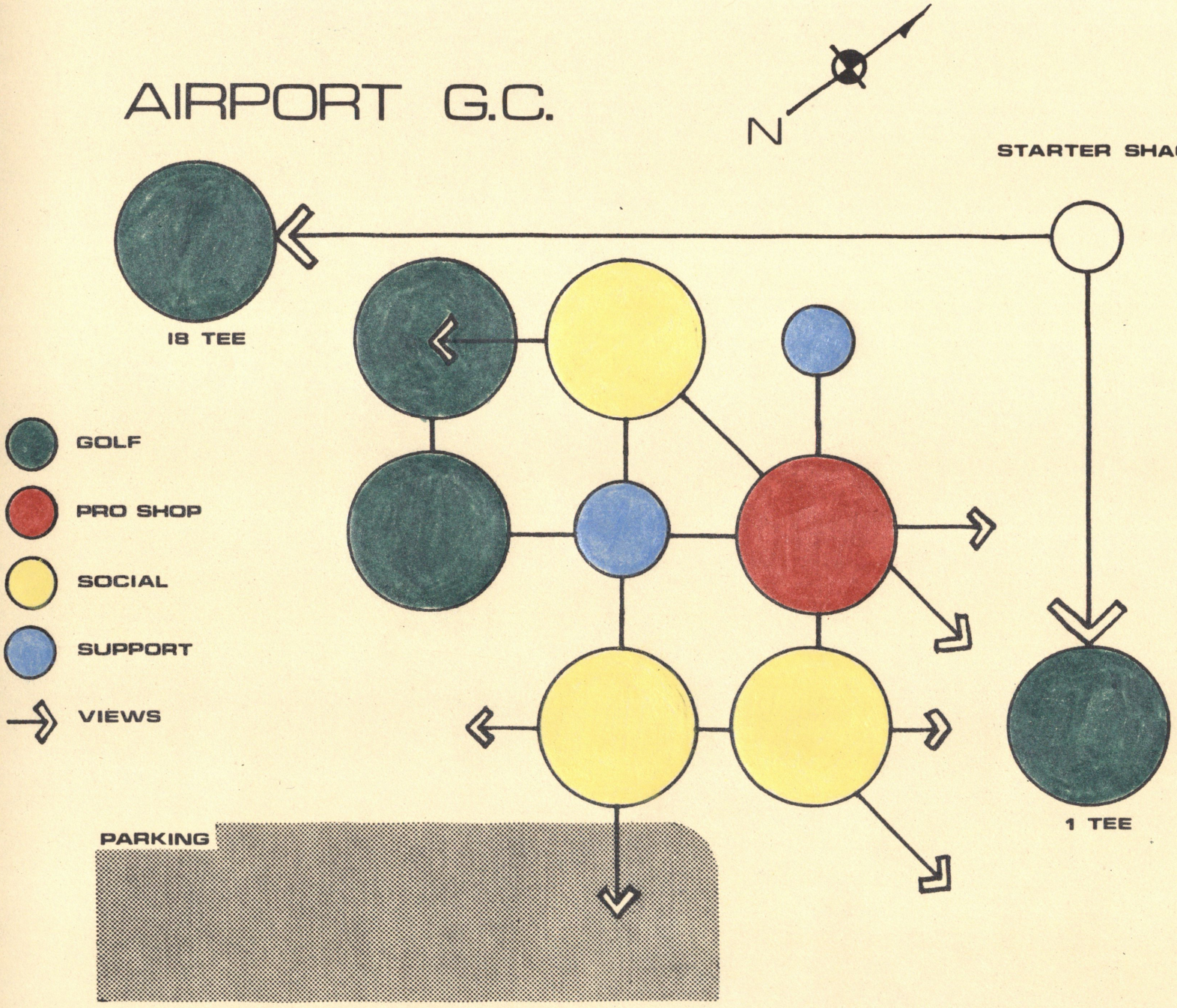
Cheyenne, Wyoming

The airport golf course is a semi-private club in Cheyenne, Wyoming. The club is the only eighteen hole municipal golf course in Cheyenne. The club has many problems that should be considered and reinterpreted into this thesis project. The major problem with the clubhouse is the lack of views it provides.

From the dining area a person can only see part of hole number ten, the driving range, and the practice green. The lounge has the same view to the southwest, and to the southeast people have a good view of the parking lot and long views of holes one and two. From the proshop, the staff has a good view to the tee of hole number one to control play, but has no view of the tee at hole number ten. The club does have a starter's shack that gives good views to both tees one and ten; however, this needs an additional staff member, and is only used when the weather is compatible and when the course is being heavily played by golfers.

Good characteristics include: practice areas located close to locker rooms, ample amount of outdoor eating and sitting areas, and any direct access from parking lot to practice areas and the proshop. The poorest quality of the club that will try to be avoided in this project is traffic occurring frequently through the clubhouse when golfers purchase range balls in the proshop, then walk through dining area to the driving range and putting green. Golfers that choose to go to practice areas first must walk to the proshop to purchase items, then walk back to the practice areas. These spaces should be adjacent to one another for easy access for the golfer.

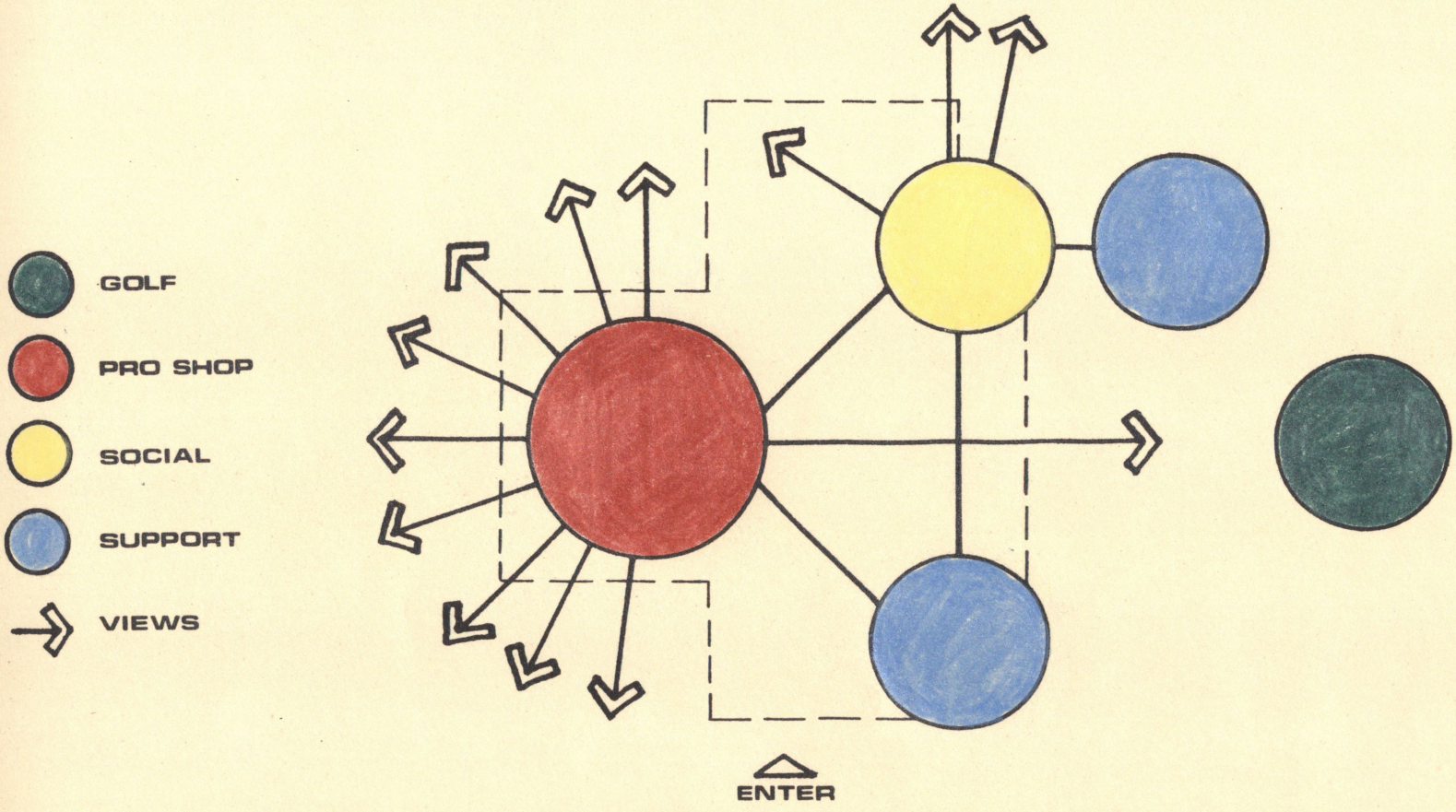
AIRPORT G.C.


N
STARTER SHACK
18 TEE
1 TEE
GOLF
PRO SHOP
SOCIAL
SUPPORT
VIEWS
PARKING

Palo Alto Municipal Golf Course
Palo Alto, California

This golf course and clubhouse is a quiet eighteen hole course in a residential neighborhood in Palo Alto, California. The clubhouse has features that would be considered for this thesis project. At the Palo Alto course, the pro shop has excellent views to the entire golf course to control play. Other positive characteristics include: tees one and ten, and greens nine and eighteen are close to the clubhouse, which is very compatible to the golfers; and the design of this clubhouse is a separation of golf facilities, food service, and toilet facilities which are all connected under one roof. Using the topography of the site chosen for this thesis project, sun can directly access the building. Using the idea of a large covered area, the golfer can seek shade, views, or relaxation from the sun, while being close to all facilities the clubhouse offers. The Palo Alto clubhouse has a very modern and inviting design. Brick and heavy timber are materials used which are present in other buildings around the site chosen for this thesis.

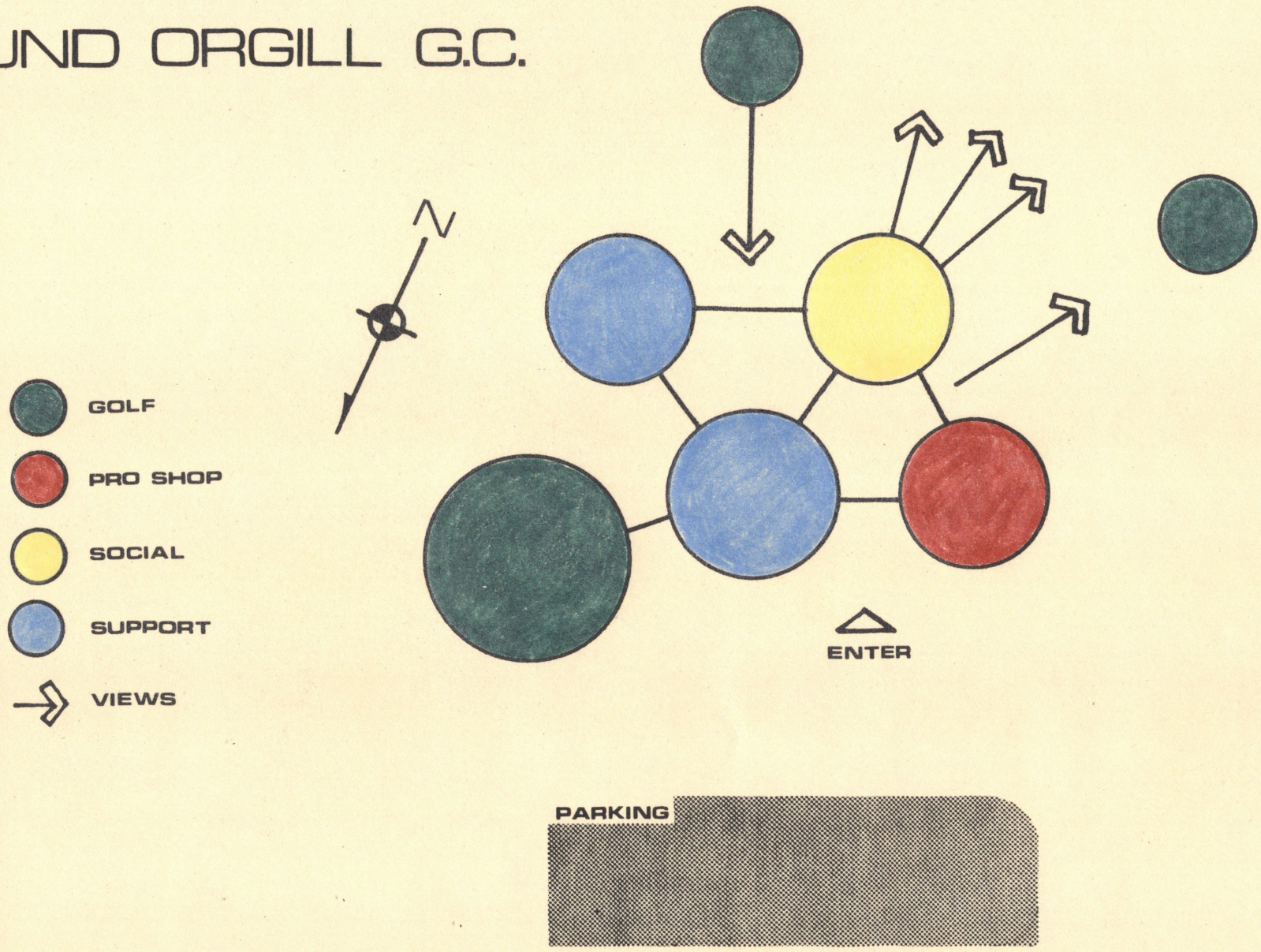
PALO ALTO G.C.



Edmund Orgill Golf Course
Millington, Tennessee

This clubhouse is a country-owned municipal golf facility with eighteen holes. The clubhouse is very interesting because of its unique and attractive design. The exterior design is important to this thesis because the clubhouse will be noticeable from many areas on the particular site chosen. A strong image will be needed to invite people to the building. Positive characteristics of the Edmund Orgill Clubhouse include: the use of indigenous stone and concrete pillars, which is important in this thesis project to avoid conflict with other buildings that are in the area of the site location; the clubhouse is on one level which will lessen the amount of any confusion that might occur to golfers and visitors; and a large basement is provided for storage and for service to golf carts. With the high change in topography on this project's site, one can utilize the slope for underground services. Poor characteristics of the Edmund Orgill Clubhouse include: no vision from the pro shop to the golf course; a separate starter's shack is needed to control play which means extra staff and this should be avoided if possible in the thesis project.

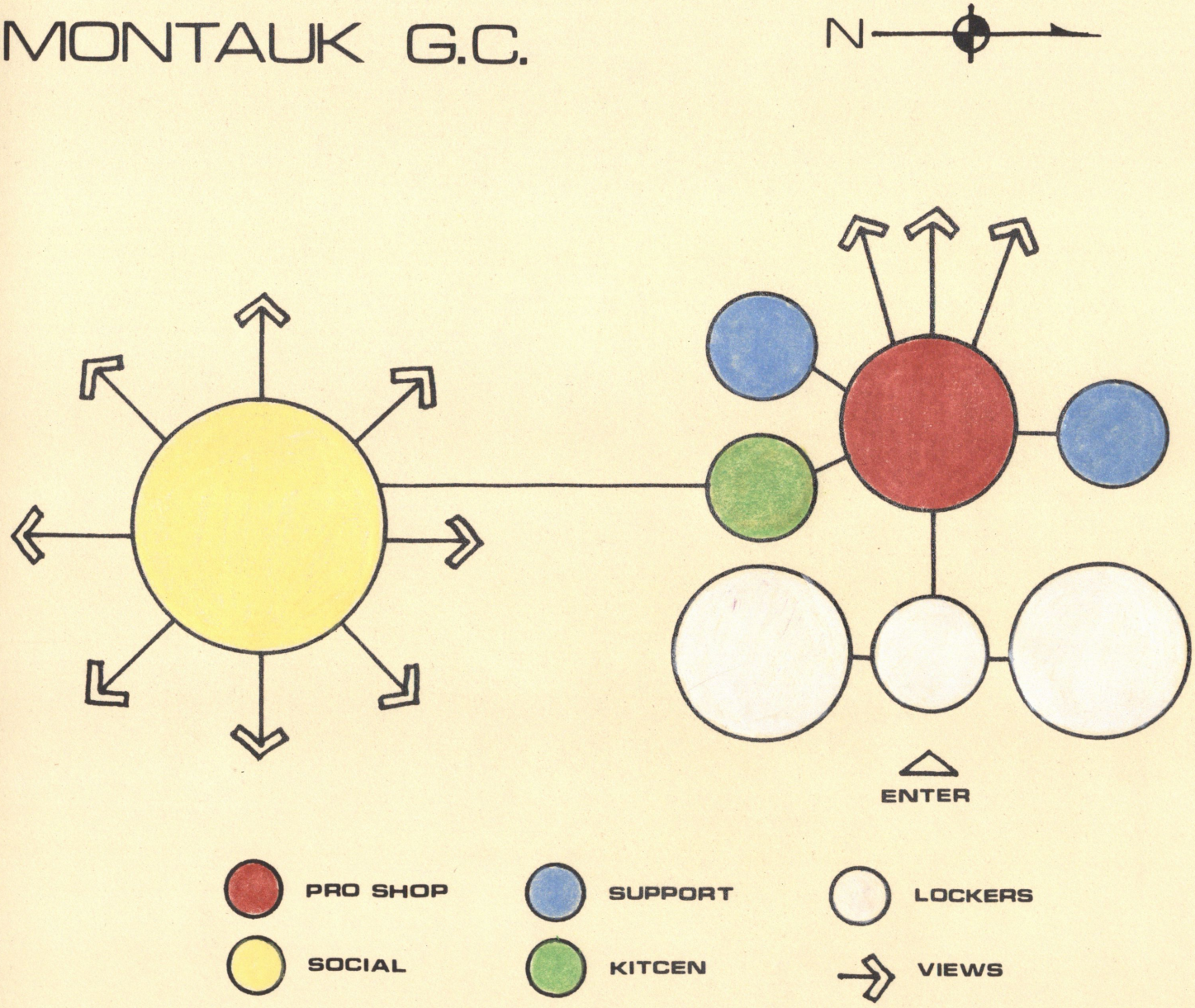
EDMUND ORGILL G.C.

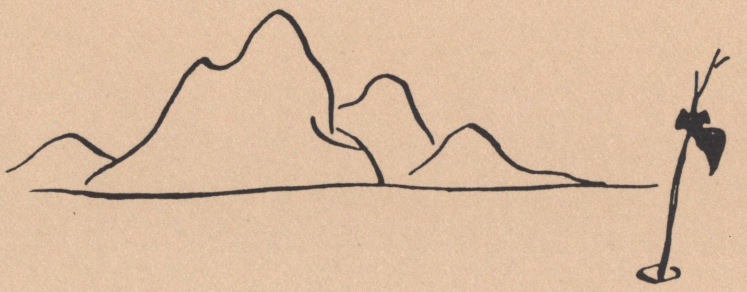


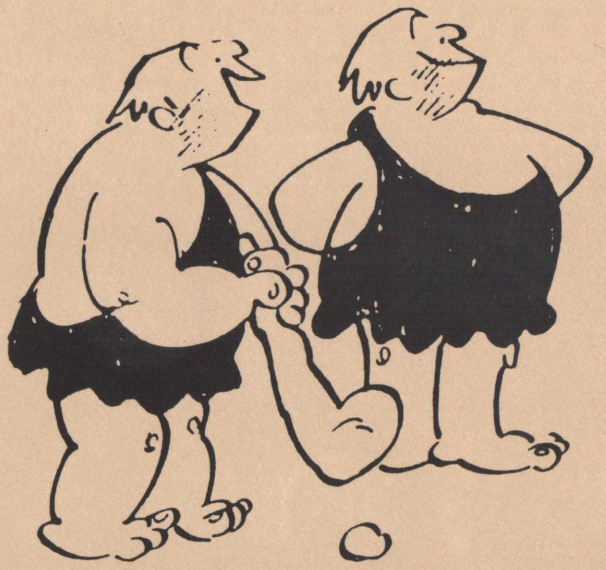
Montauk Golf and Raquet Club
Montauk PT., Long Island, New York

The Montauk Golf and Raquet Club is much larger than what this thesis is proposing; however, it has some good characteristics that should be considered for the project in Cheyenne. One point not considered yet is the detached pro shop. This club utilizes the pro shop that is not directly related to the clubhouse because it serves not only golf, but tennis as well. The project in Cheyenne does not need this, but it is a consideration that might work. The main characteristics that this club has that will work well with this thesis project in Cheyenne are: the Montauk Club is located on the highest hill in the area, thus making it a landmark to the surrounding development; the building is functional and sensitive to the environment; the building has divided functions vertically, with entertainment areas on the upper level and utility areas on the ground level; materials used are simple and reflect surrounding uses; cart storage is in the basement based on the topography of the land; berming is used to control weather conditions; and large amounts of exterior sitting in dining room and bar give a 360 degree view over the countryside.

MONTAUK G.C.







"It's a nice simple game without a lot of rules. You just hit it into that hole."
GOLF DIGEST 82

THE GOLF COURSE

THE GOLF COURSE

The golf course should be designed and constructed so no major changes will ever be needed. However, no matter how much time and effort is spent on designing the ideal course, changes or revisions will eventually come about.

What is needed first for designing a course is a site. Size of the site is important in allowing enough room for the construction of the course. A minimum of fifty acres is needed for a nine hole course and a minimum of 118 acres is needed for eighteen holes.[1] These minimums do involve a high risk of players being struck by balls from other golfers on separate holes. The better golf courses average 80 acres for nine hole courses, and 160 acres for eighteen holes.[2] Sites that are irregular in shape offer more opportunities in designing a course with interesting features. Topography of the land should be minimal. Land that is too rugged or hilly will be tiring to the golfers, can cause an excessive amount of blind shots, and is costly to keep turfed and maintained.[3] The course should have practice greens and a driving range located close to the clubhouse. Lighting the driving range for night use can increase income, and market golfers for day play at the course. Unless it is unavoidable, a golf course should not be located remotely. There should be good transportation roads for all members and visitors. Locating the golf course near town and especially near highways can be more inviting to out-of-town golfers. The course should also locate one or two holes parallel to a major road which is good advertising.[4]

A final consideration in selecting a site is whether or not it has natural hazards. Natural hazards include trees, rolling terrain, creeks, ponds, ravines, etc. These features make it easier to design an interesting course, but they can be duplicated simply with artificial hazards.

Design of the golf course has many features also that should be considered before actual construction begins. What is the "ideal" course for nine holes? Most experts agree that such a course should measure over 3,000 yards, and preferably around 3,200 yards.[5] The experts also agree that the best par for the course should be 35, 36, or 37, with par 35 being the most preferred.[6] The holes that make up this total par are suggested by experts to be two par-3 holes, two par-5 holes, and the remaining five holes to be par-4s.[7]

Distances on pars established by the United States Golf Association are as follows. Men: par-3, holes up to 250 yards inclusive; par-4, 251 to 445 yards inclusive; par-5, 446 to 600 yards inclusive; par-6, over 600 yards. Par-6 holes should try to be avoided. Women: par-3 holes, up to 210 yards inclusive; par-4, 211 to 400 yards inclusive; par-5, 401 to 575 yards inclusive; par-6, 576 yards and over. Women's par-6 holes should also be avoided.[8] The holes should all vary in length, especially if there are only two par-3s, or two par-5s. One should consist of 180 yards or more.[9]

The layout of the golf course should have mixed pars from one hole to the other. Golf Course Architect Robert Bruce Harris suggests that the pars should be laid out in this manner: 4-5-4-3-4-5-4-3-4, which he has found to be highly satisfactory to golfers.[10]

There are standard practices that should be observed in designing a course layout. Distances between the tee of one hole and the green of another hole should never be more than 225 feet, and a distance of 60 to 90 feet is recommended; the first and tenth tees, and the ninth and eighteenth greens should be located adjacent to the clubhouse. The sixth green, if possible, should also be located near the clubhouse. This is for the golfer who has only an hour to play, as six holes can be comfortably played in one hour, and finishing close to the clubhouse is preferred by the golfer. No holes should be laid out in the east-west

direction, because the maximum volume of play in a golf course is in the afternoon, and golfers will be looking directly into the setting sun. If the east-west hole is unavoidable, it should be located among the first two or three holes to the golfer will play it as early in the round as possible. The first hole on the course should be a relatively easy par-4, around 380 to 400 yards in length. There should be a minimum of hazards or heavy rough where ball can be lost, and there should be no features that will delay the golfer on the first hole. Holes on the course should increase in difficulty as the round is played. Golfers don't appreciate a difficult hole right off the start, especially when the golfer is not warmed up. Greens and hazards should be plainly visible, from the approach area, which is the portion of the fairway approximately 375 fee in front of the green. Fairways sloping directly up or down a hillside can be bad for several reasons. To the majority of players, playing this shot is more a matter of luck than skill. The up and down climbing is tiring to some golfers, and turf is difficult to maintain. Par three holes should not be consecutive.[11]

Not all of these features listed can be achieved every time, but care should be taken to fulfill most of them. The user shall be the major influence for the design of the golf course.

CHAPTER REFERENCES

[1]National Golf Foundation, Planning and Building The Golf Course (Chicago 54, Ill.: National Golf Foundation, Inc.), p.3.

[2]Ibid.

[3]Ibid.

[4]Ibid., p.4

[5]Ibid., p.6

[6]Ibid.

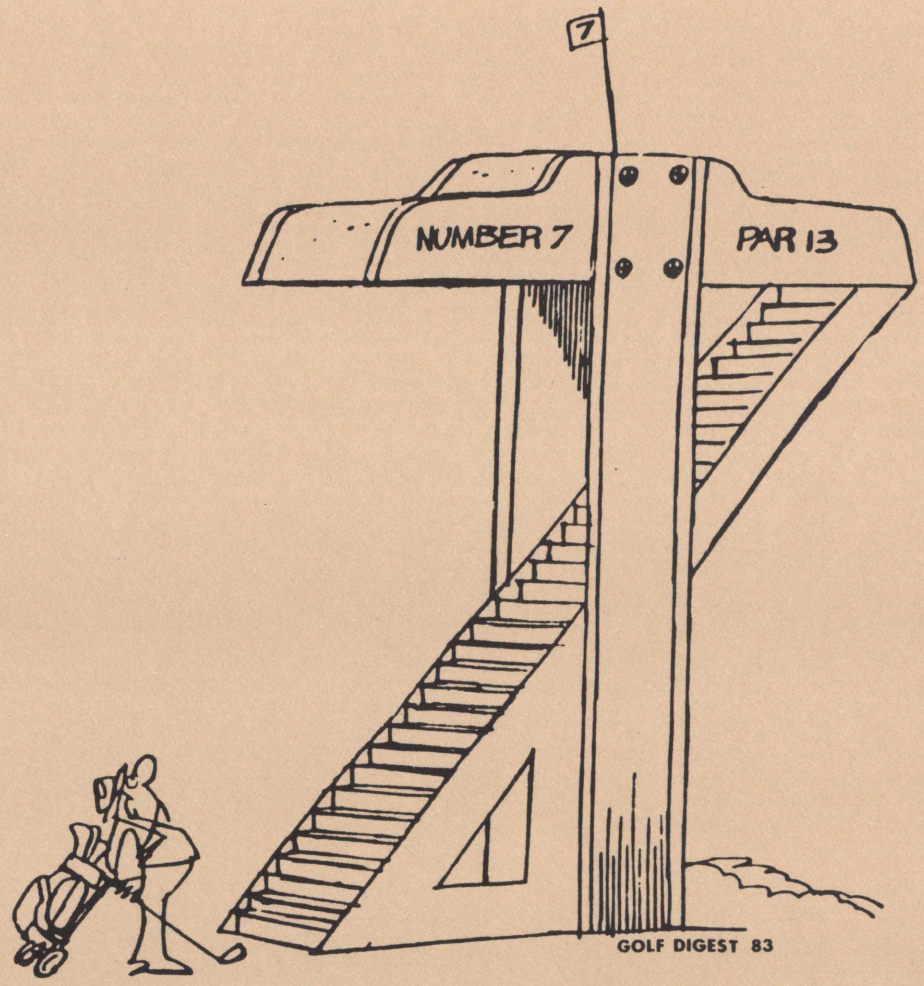
[7]Ibid.

[8]United States Golf Association

[9]National Golf Foundation, Planning and Buildings The Golf Course (Chicago 54, Ill.: National Golf Foundation, Inc.), p.6.

[10]Ibid., p.7.

[11]Ibid., pp. 7-10.

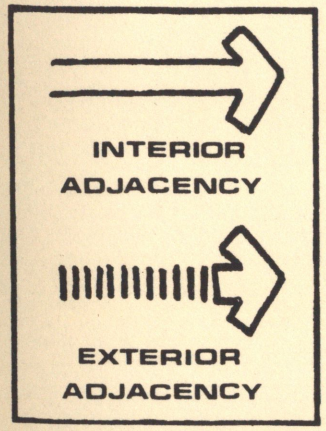


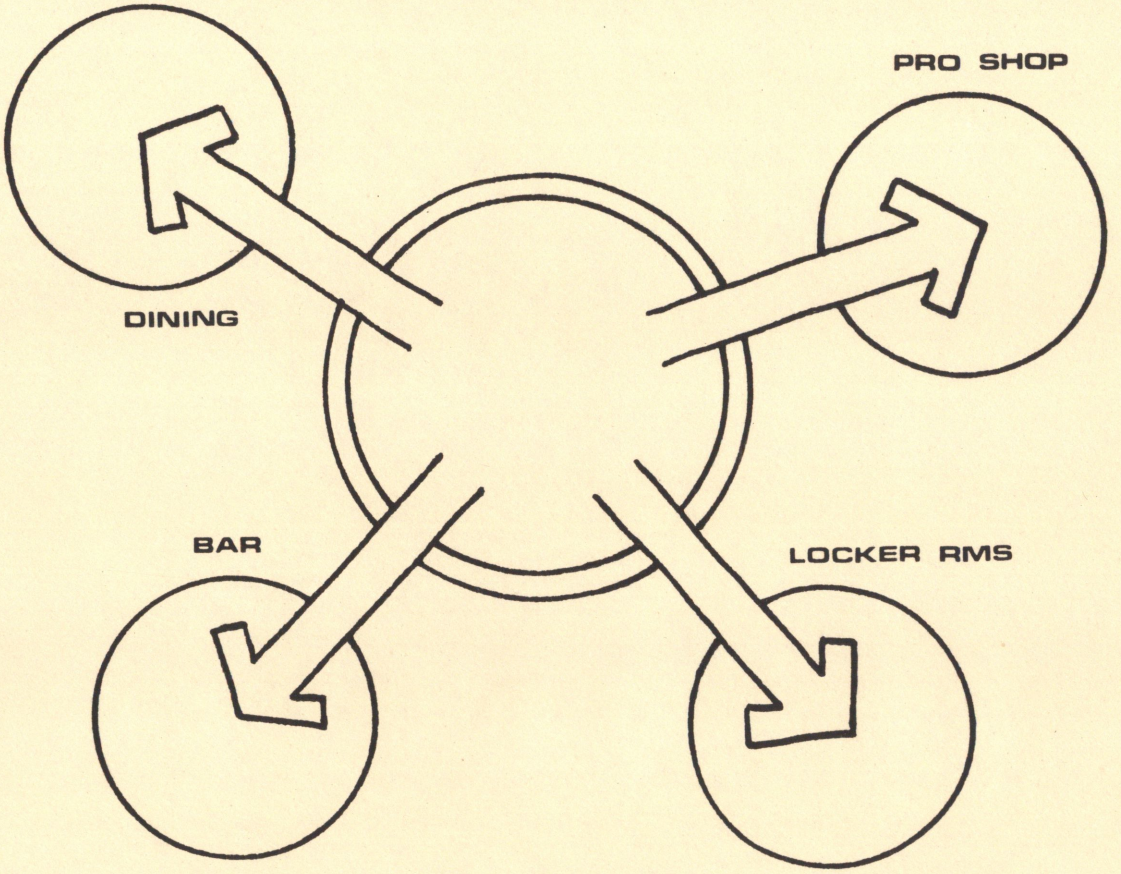
BUILDING PROGRAM

ENTRANCE/FOYER

REQUIRED SQ. FT.	-	>300
FUNCTION	-	>Transition zone from exterior to interior.
QUALITIES	-	>Inviting >Spatial >Warm >Welcoming
USER	-	>General Public
# OF OCCUPANTS	-	>0 to 20
HARD	-	>Trophy Case >Public Telephones >Chairs/End tables
VIEWS	-	>To Golf Course >To Adjoining Spaces
LIGHTING	-	>Natural >Directional Task Lighting
SPECIAL	-	>Circulation between other spaces
ADJACENCIES	-	>Dining Room >Bar >Locker Rooms >Pro Shop

FOYER


INTERIOR
ADJACENCY
EXTERIOR
ADJACENCY


PRO SHOP
DINING
BAR
LOCKER RMS

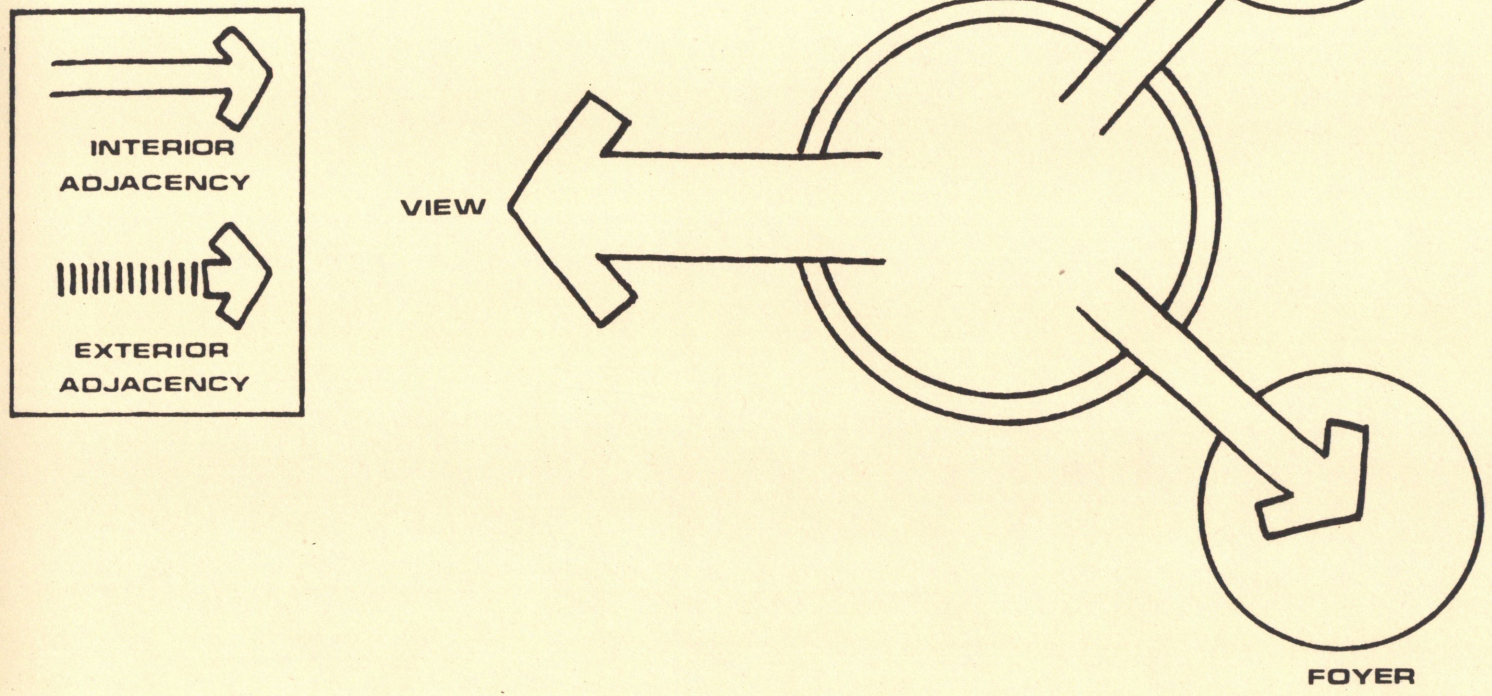
BAR & LOUNGE

REQUIRED SQ.FT.	-	>1125
FUNCTION	-	>Gathering place for people. >Lunch/Snacks >Drinking of all Beverages
QUALITY	-	>Inviting >Pleasant >Social Atmosphere >Warm
USER	-	>General Public
# OF OCCUPANTS	-	>75
HARD	-	>Bar (30 Lineal ft.) >Barstools >Tables/End Tables >Chairs >Television >Jukebox

Bar and Lounge (cont)

VIEWS	-	>Golf Course >Adjacent Neighborhoods >Ball Parks
LIGHTING	-	>Natural >Directional Task >Overhead
SPECIAL	-	>Equipped with PA system to inform golfers of tee time. >Storage for Liquor, Glasses, Misc. >Fireplace
ADJACENCIES	-	>Foyer >Dining Room

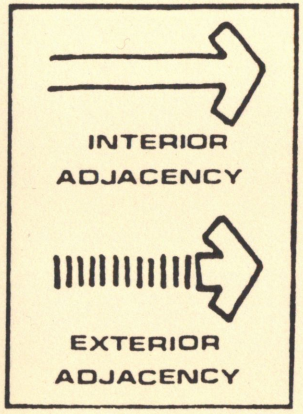
BAR/LOUNGE

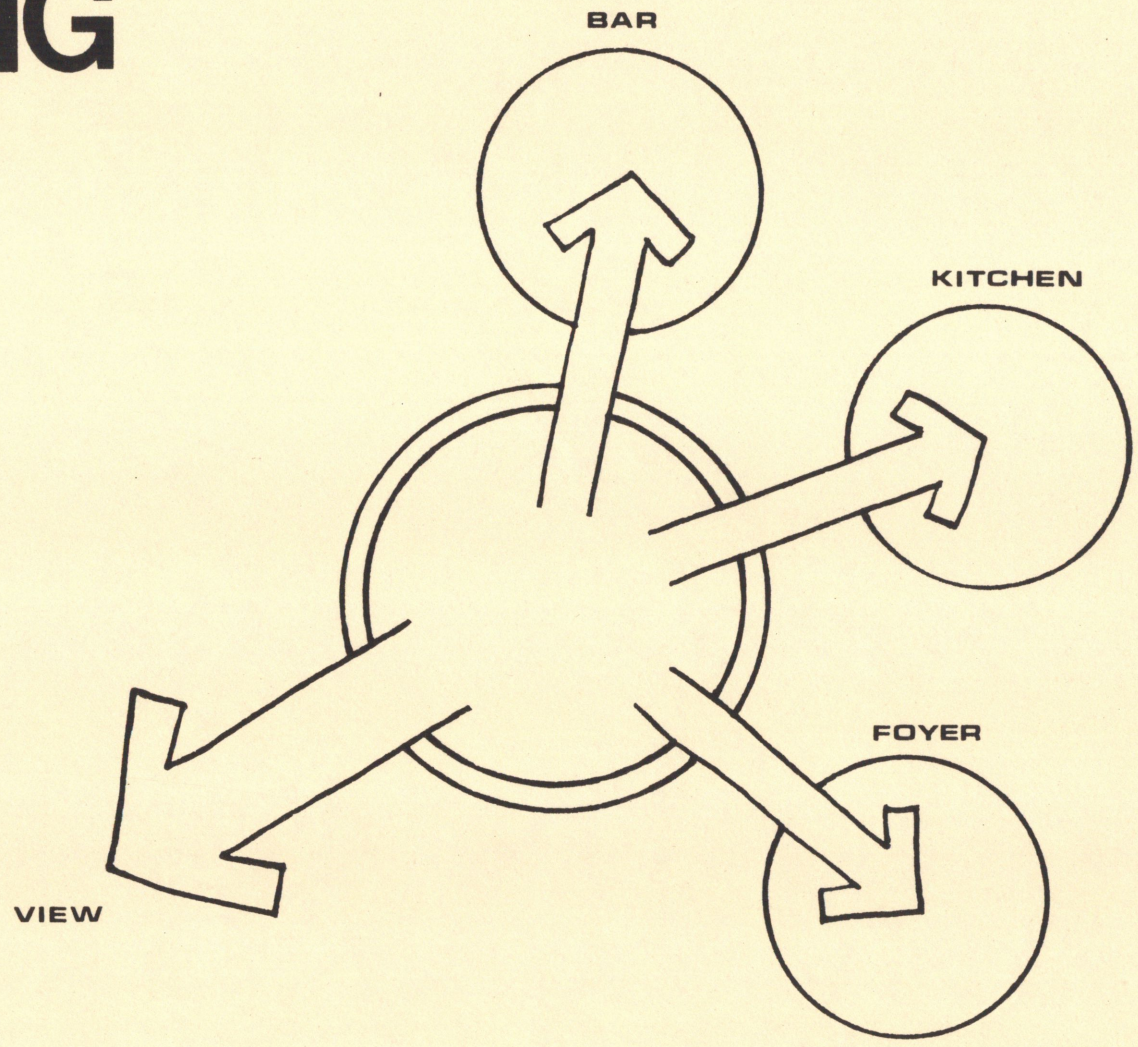


DINING ROOM

REQUIRED SQ.FT.	-	>1500
FUNCTION	-	>Serving Breakfast, Lunch, Dinner >Social Gatherings >Card Playing (Games in General)
QUALITY	-	>Efficient >Inviting >Colorful
USER	-	>General Public
# OF Occupants	-	>100
HARD	-	>Tables and Chairs >Television >Radio >Waitress/Waiter Stations
VIEWS	-	>Golf Course >Neighborhoods
LIGHTING	-	>Natural >Direct >Overhead
SPECIAL	-	>Allocated area for game playing >PA System >Fireplace
ADJACENCIES	-	>Foyer >Bar >Kitchen

DINING


INTERIOR
ADJACENCY
EXTERIOR
ADJACENCY


BAR
KITCHEN
FOYER
VIEW

MEN'S LOCKER ROOM

REQUIRED SQ. FT.	-	>1200
FUNCTION	-	>Storage for golfers equipment >Showering after play >Card playing
QUALITY	-	>Warm >Colorful >Clean >Attractive >Inviting
USER	-	>Men Golfers
# OF OCCUPANTS	-	>4 - 20
HARD	-	>Lockers - 80 >Benches >Showers - 4 >Lavatories - 2 >Toilets - 3 >Urinals - 2
VIEWS	-	>None >As Necessary

Men's Locker Room (cont)

LIGHTING	-	>Natural >Overhead >Waterproofed
SPECIAL	-	>Use of sunlight with no transparent outer windows >Good Ventilation >Storage for Cleaning Equipment >Custodian's Closet >PA System
ADJACENCIES	-	>Foyer >Proshop >1st Tee >18th Green >Parking Area

WOMEN'S LOCKER ROOM

REQUIRED SQ. FT.	-	>950
FUNCTION	-	>Storage for Golfers Equipment >Showering after play >Make-up
QUALITY	-	>Warm >Colorful >Clean >Attractive >Inviting
USER	-	>Women Golfers
# OF OCCUPANTS	-	>4 - 12
HARD	- -	>Lockers - 50 >Benches >Showers - 3 >Toilets - 3 >Lavatories - 2
VIEWS	-	>None >As Necessary

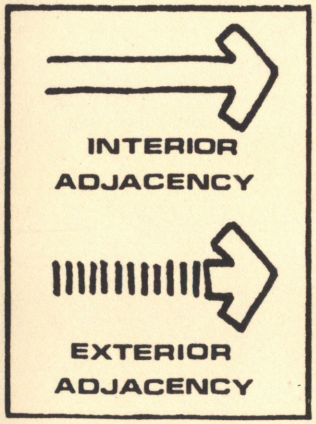
Women's Locker Room (cont)

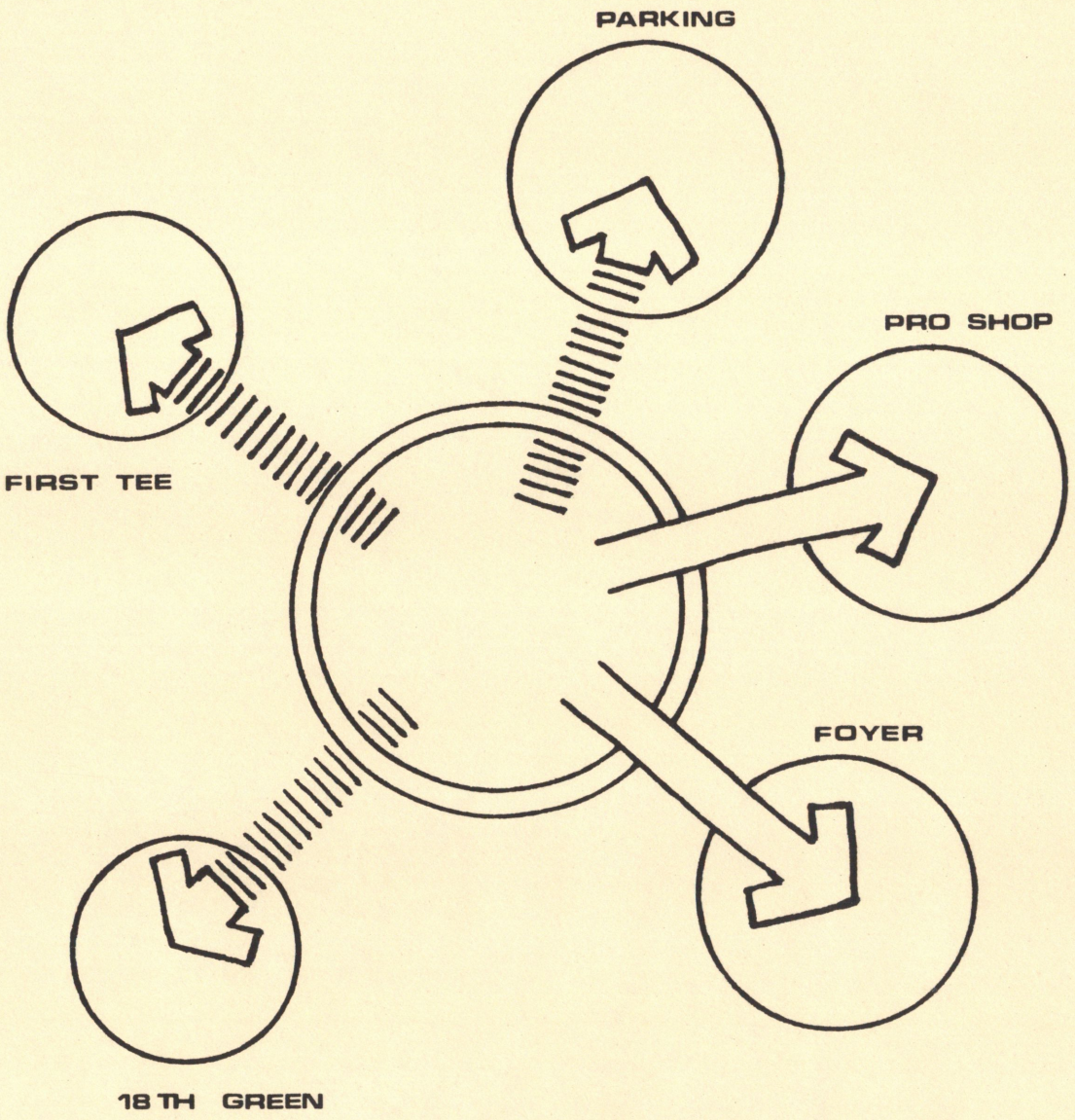
LIGHTING – >Natural
>Overhead
>Waterproofed

SPECIAL – >Use of sunlight with no transparent windows
>Good Ventilation
>Storage Area
>PA System

ADJACENCIES – >Foyer
>Proshop
>1st Tee
>18th Green
>Parking Area

LOCKERS


INTERIOR
ADJACENCY
EXTERIOR
ADJACENCY


PARKING
PRO SHOP
FIRST TEE
FOYER
18 TH GREEN

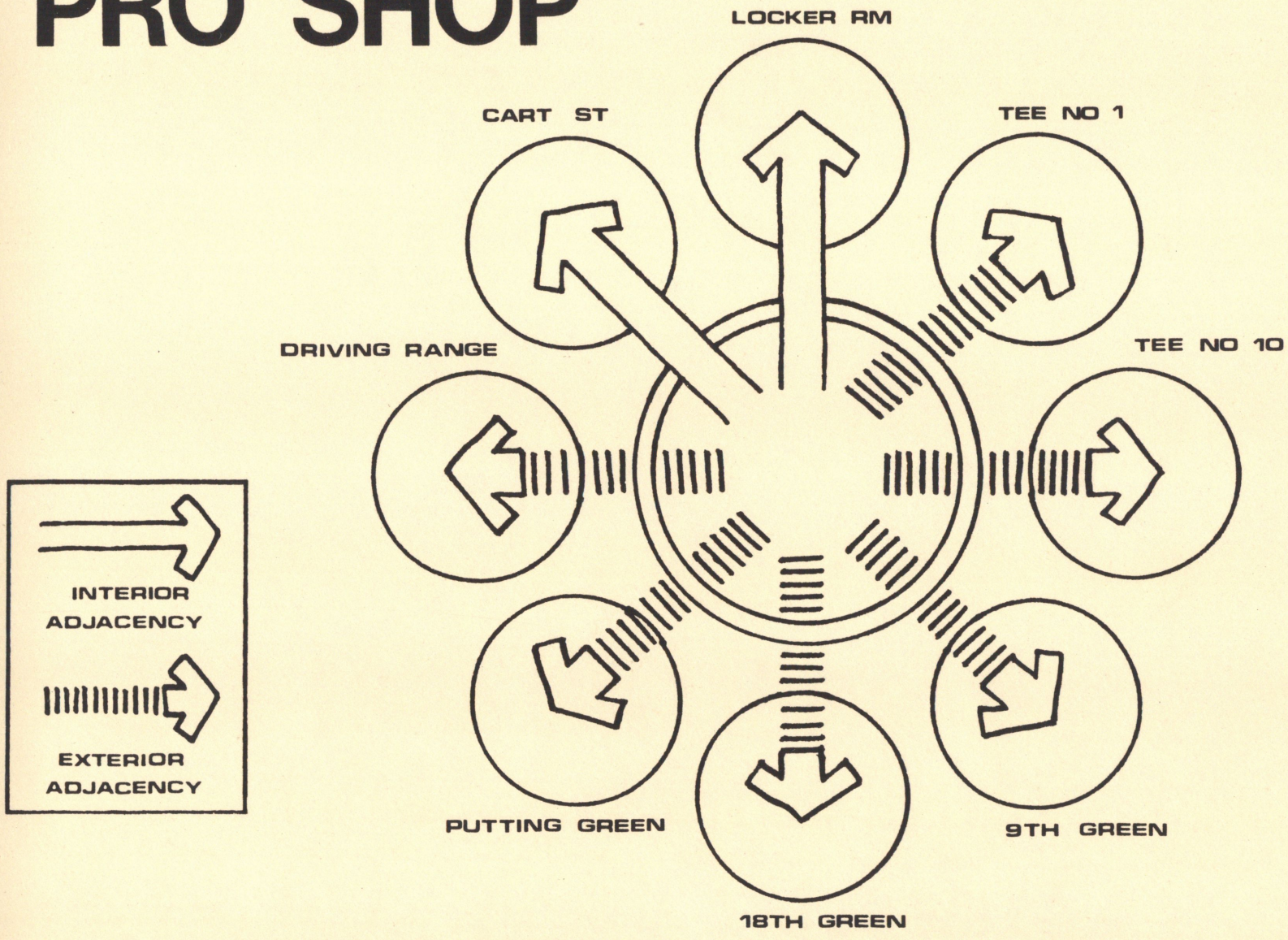
PROSHOP

REQUIRED SQ.FT.	-	>800
FUNCTION	-	>Display and Sales of Golf Equipment >Purchasing of Practice Range Balls >Payment of Green Fees >Registration to Play - Tee Times
QUALITY	-	>Inviting >Bright >Warm >Spacious
USER	-	>Golf Professionals >General Public
# OF OCCUPANTS	-	>2 - 70
HARD	-	>Display Shelves >Sales Counter >Hanging Displays
VIEWS	-	>To Tee of Hole #1 >To Tee of Hole #10 >Driving Range >Putting Green >Golf Course

Proshop (cont)

LIGHTING	-	>Natural >Directional Task >Overhead
SPECIAL	-	>High ceiling in one area for golf swinging >Cabinets for storing extra merchandise
ADJACENCIES	-	>Locker Rooms >Tee #1 >Tee #10 >North Green >Eighteenth Green >Cart Storage >Putting Green >Driving Range

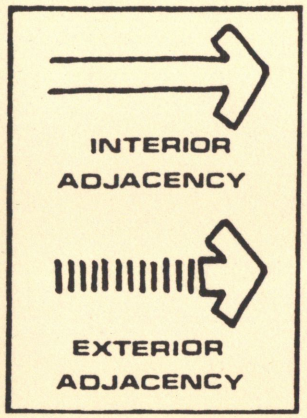
PRO SHOP

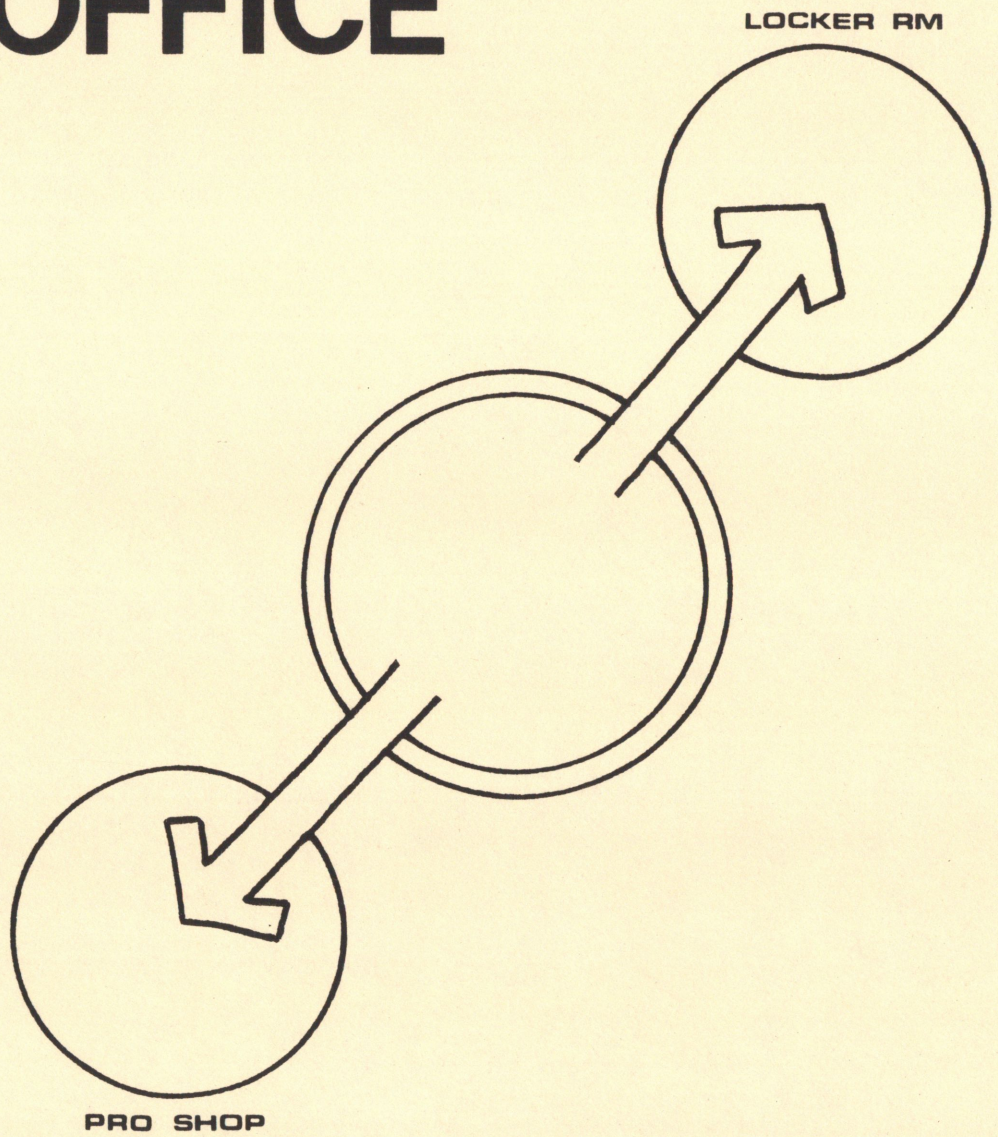

LOCKER RM
CART ST
TEE NO 1
DRIVING RANGE
TEE NO 10
INTERIOR ADJACENCY
EXTERIOR ADJACENCY
PUTTING GREEN
9TH GREEN
18TH GREEN

PROFESSIONAL'S OFFICE

REQUIRED SQ.FT.	-	>200
FUNCTION	-	>Private use for the pro
QUALITY	-	>Comfortable
USER	-	>Golf Course Professional
# OF OCCUPANTS	-	>One
HARD	-	>Desk >File Cabinets >Chairs >End Tables
VIEWS	-	>Outside window preferred
LIGHTING	-	>Overhead >Natural
SPECIAL	-	>Access from Sales Counter >Access from Locker Room
ADJACENCIES	-	>Pro-Shop

PROS OFFICE





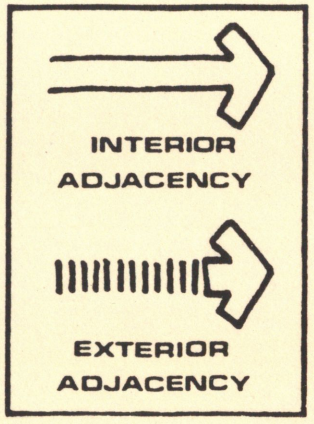
KITCHEN

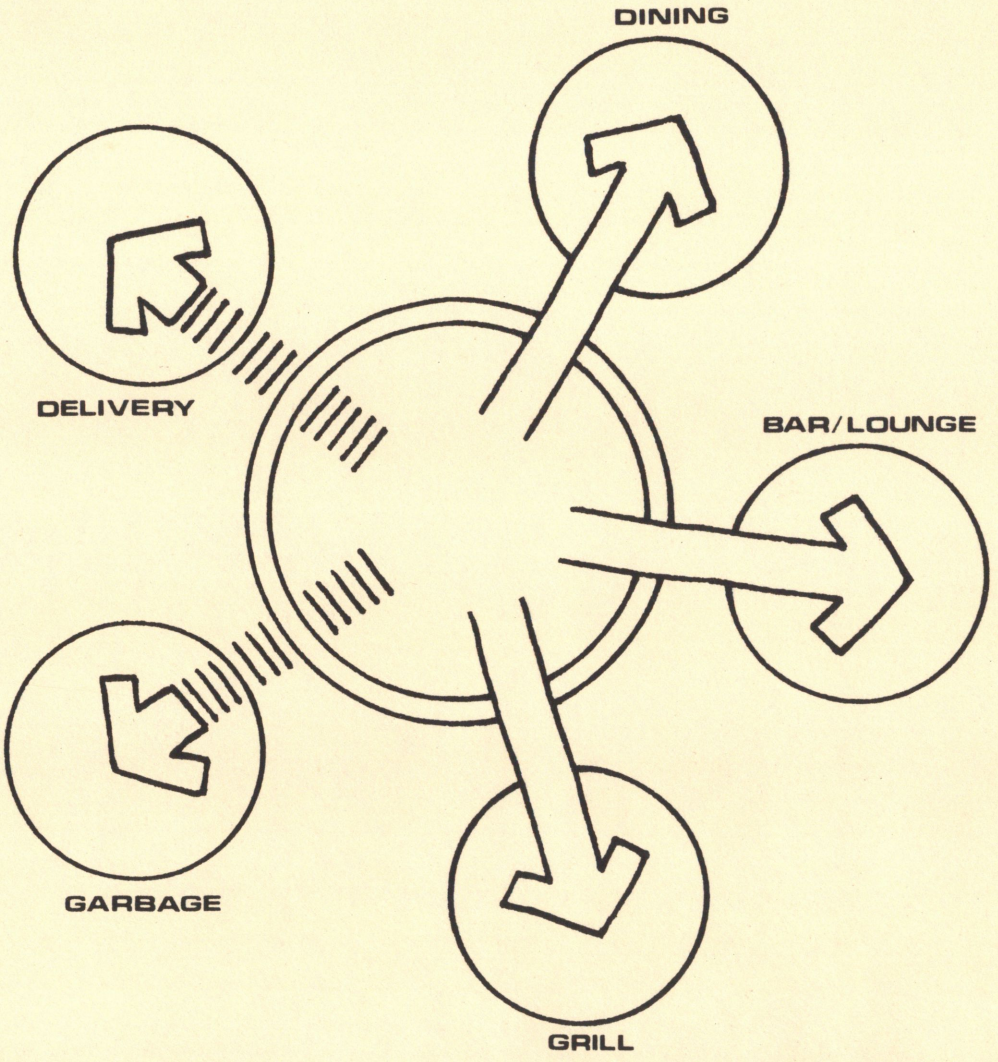
REQUIRED SQ. FT.	-	>600
FUNCTION	-	>Food Service >Breakfast >Lunch >Dinner
QUALITY	-	>Clean >Functional >Bright
USER	-	>Staff Only
# OF OCCUPANTS	-	>2 - 7
HARD	-	>Cold Storage >Dry Storage >Oven >Sinks >Dishwasher >Lined Counter Top >Pantry >Box and Wall Storage Cabinets
VIEWS	-	>Dining Room >Bar/Lounge

Kitchen (cont)

LIGHTING	–	>Natural >Directional >Overhead
SPECIAL	–	>Good Ventilation >One Level Operation >Pantry
ADJACENCIES	–	>Dining Room >Grill >Delivery >Garbage >Bar/Lounge

KITCHEN

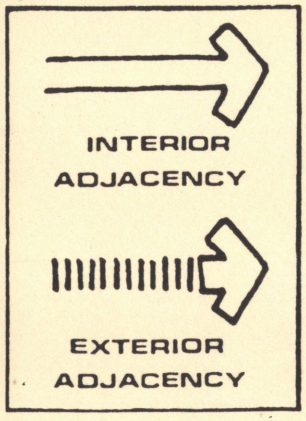

INTERIOR
ADJACENCY
EXTERIOR
ADJACENCY

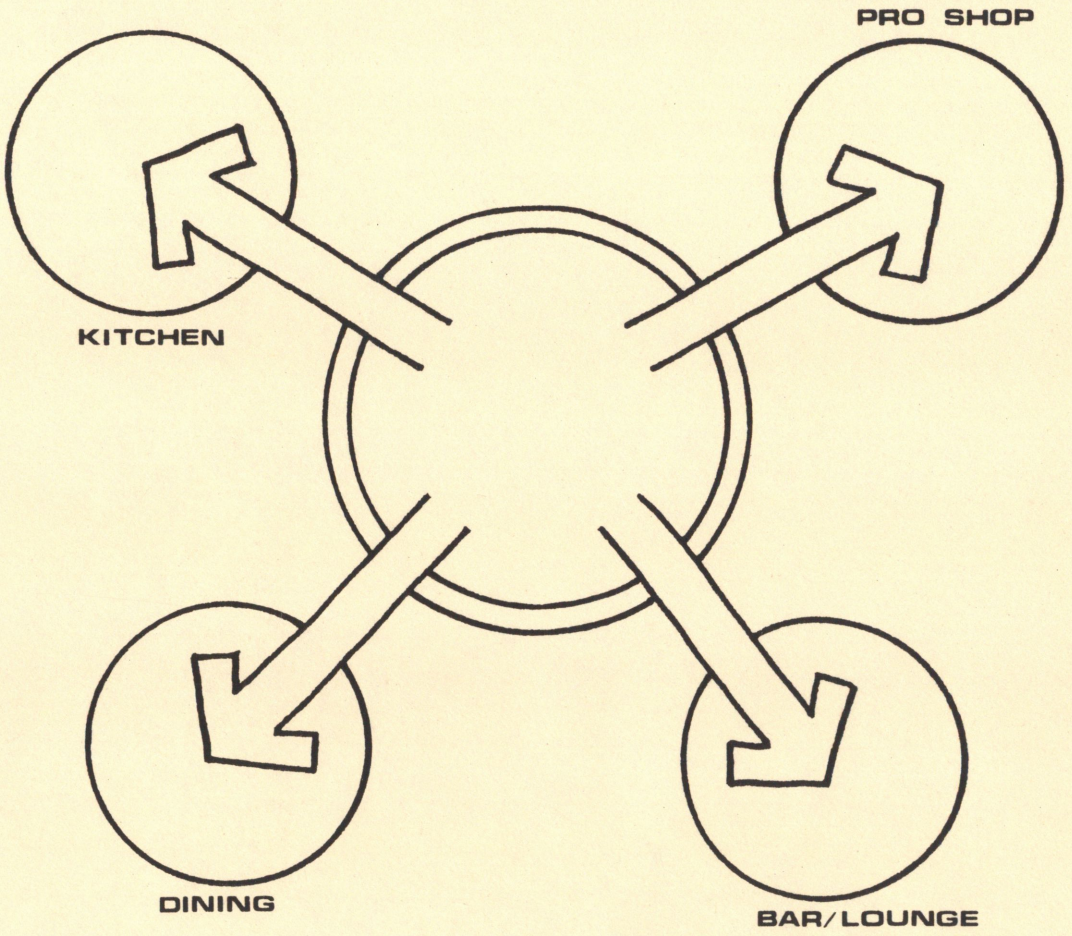

DINING
DELIVERY
BAR/LOUNGE
GARBAGE
GRILL

STORAGE

REQUIRED SQ. FT.	–	>300
FUNCTION	–	>Storage of Miscellaneous Items
QUALITY	–	>Open >Easy Access >Clean
USER	–	>Employees
# OF OCCUPANTS	–	>As Needed
HARD	–	>Shelving >Filing Cabinets >Hanging (Hooks, Etc.)
VIEWS	–	>None
LIGHTING	–	>Overhead >Directional
SPECIAL	–	>Provide small and large storage areas
ADJACENCIES	–	>Kitchen >Bar/Lounge >Pro Shop >Dining Room

STORAGE

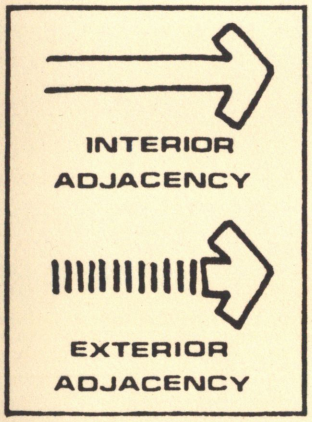

INTERIOR
ADJACENCY
EXTERIOR
ADJACENCY

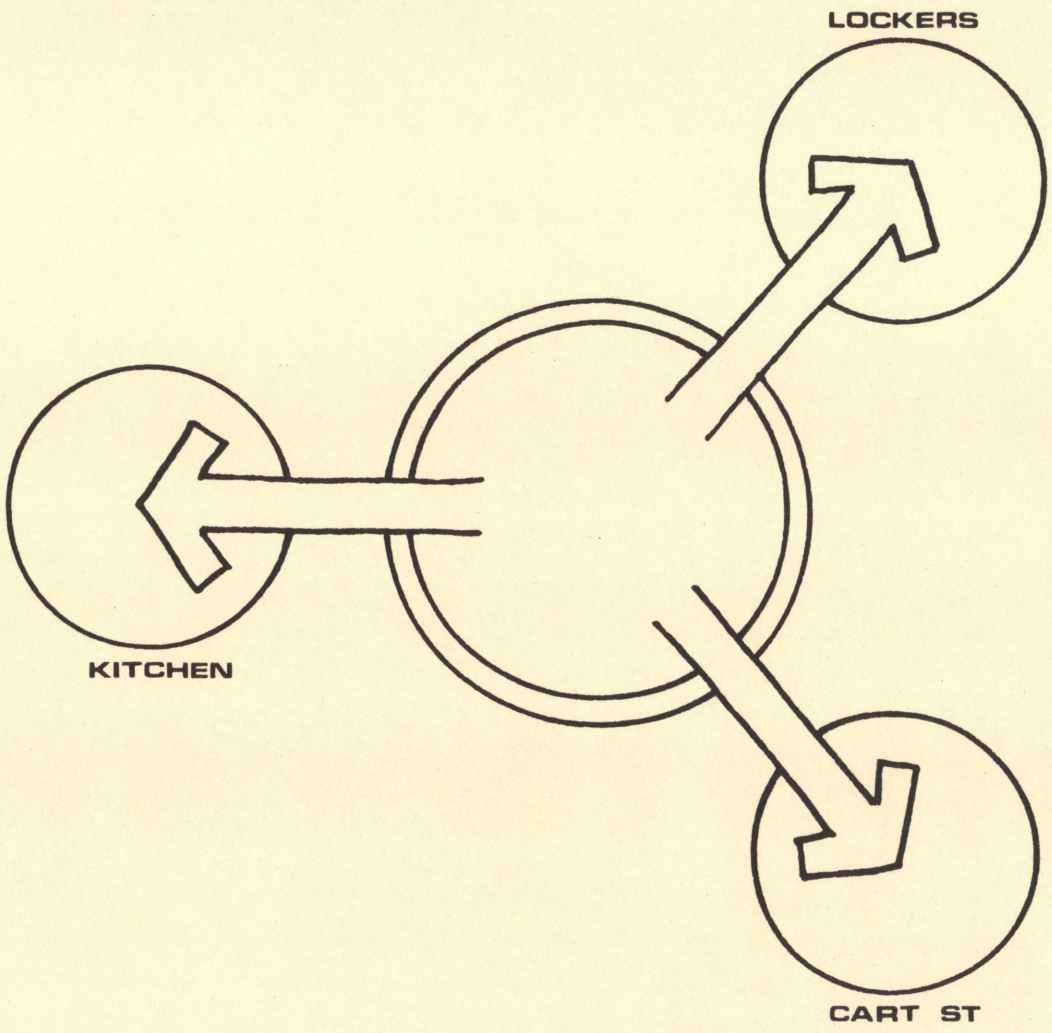

PRO SHOP
KITCHEN
DINING
BAR/LOUNGE

MECHANICAL

REQUIRED SQ. FT.	–	>700
FUNCTION	–	>Source of Heat, Water, and Power
QUALITY	–	>Easy Access >Clean >Functional
USER	–	>Employees >Repairmen
# OF OCCUPANTS	–	>As Needed
HARD	–	>Water Heater >Forced Air Unit >Electrical Breaker Box
VIEWS	–	>None
LIGHTING	–	>Overhead >Directional
SPECIAL	–	>Away from Social Spaces
ADJACENCIES	–	>Cart Storage >Kitchen >Locker Room

MECHANICAL

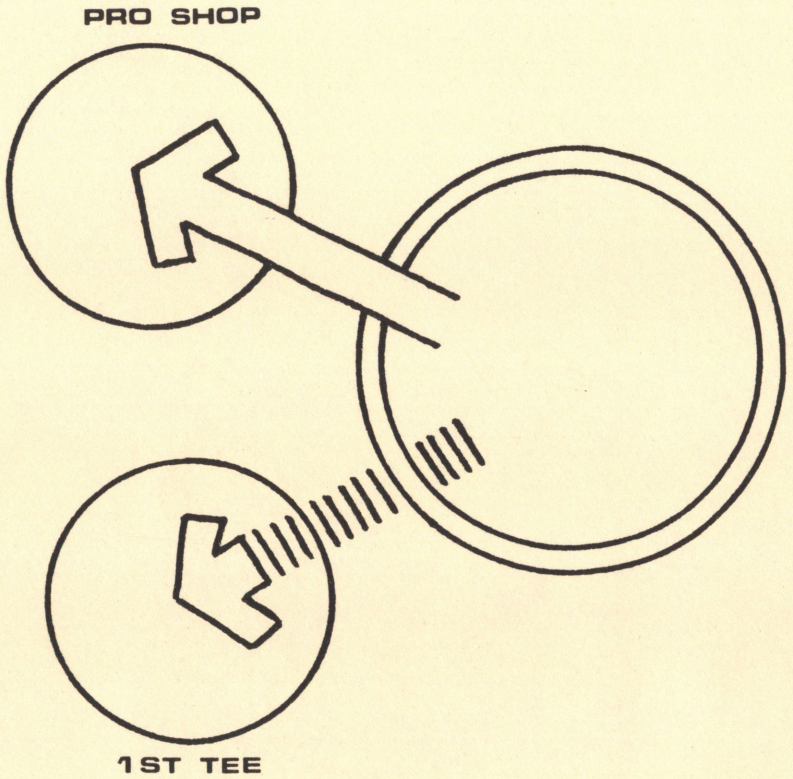

INTERIOR
ADJACENCY
EXTERIOR
ADJACENCY

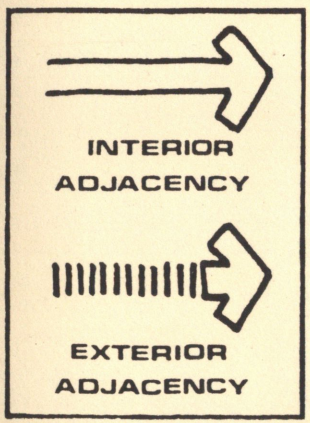

LOCKERS
KITCHEN
CART ST

CART STORAGE

REQUIRED SQ. FT.	-	>2000
FUNCTION	-	>Protection of Golf Carts From the Weather and Vandalism >Cart Maintenance
QUALITY	-	>Functional >Spacious >Bright
USER	-	>Employees
# OF OCCUPANTS	-	>As Needed
HARD	-	>Receptacles for Re-Charging >Work Tables >Tool Storage (Cabinets, Shelves, and Drawers)
VIEWS	-	>None Needed
LIGHTING	-	>Natural >Overhead >Directional
SPECIAL	-	>Attached to Clubhouse for Supervision and Control >Storage for Parts and Tools
ADJACENCIES	-	>Pro Shop >1st Tee

CART STORAGE

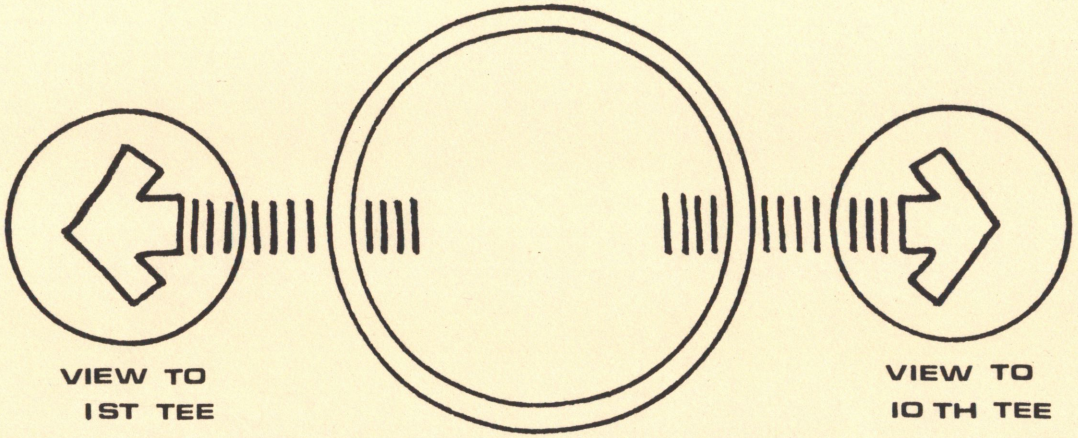


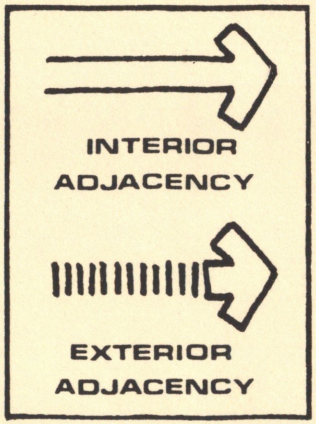


STARTER'S SHACK

REQUIRED SQ. FT.	-	>75
FUNCTION	-	>Control of Golf Play
QUALITY	-	>Clean >Attractive >Bright
USER	-	>Employees
# OF OCCUPANTS	-	>One
HARD	-	>PA System >Counter Top desk >Stool for Sitting
VIEWS	-	>First Tee >Tenth Tee
LIGHTING	-	>Natural
SPECIAL	-	>PA System Connected to Pro shop, Dining, Lounge, and Locker Rooms, Exterior Speakers Around Putting Green Driving Range
ADJACENCIES	-	>Tee Number One >Tee Number Ten

STARTERS SHACK

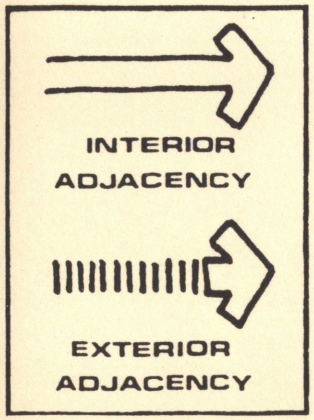


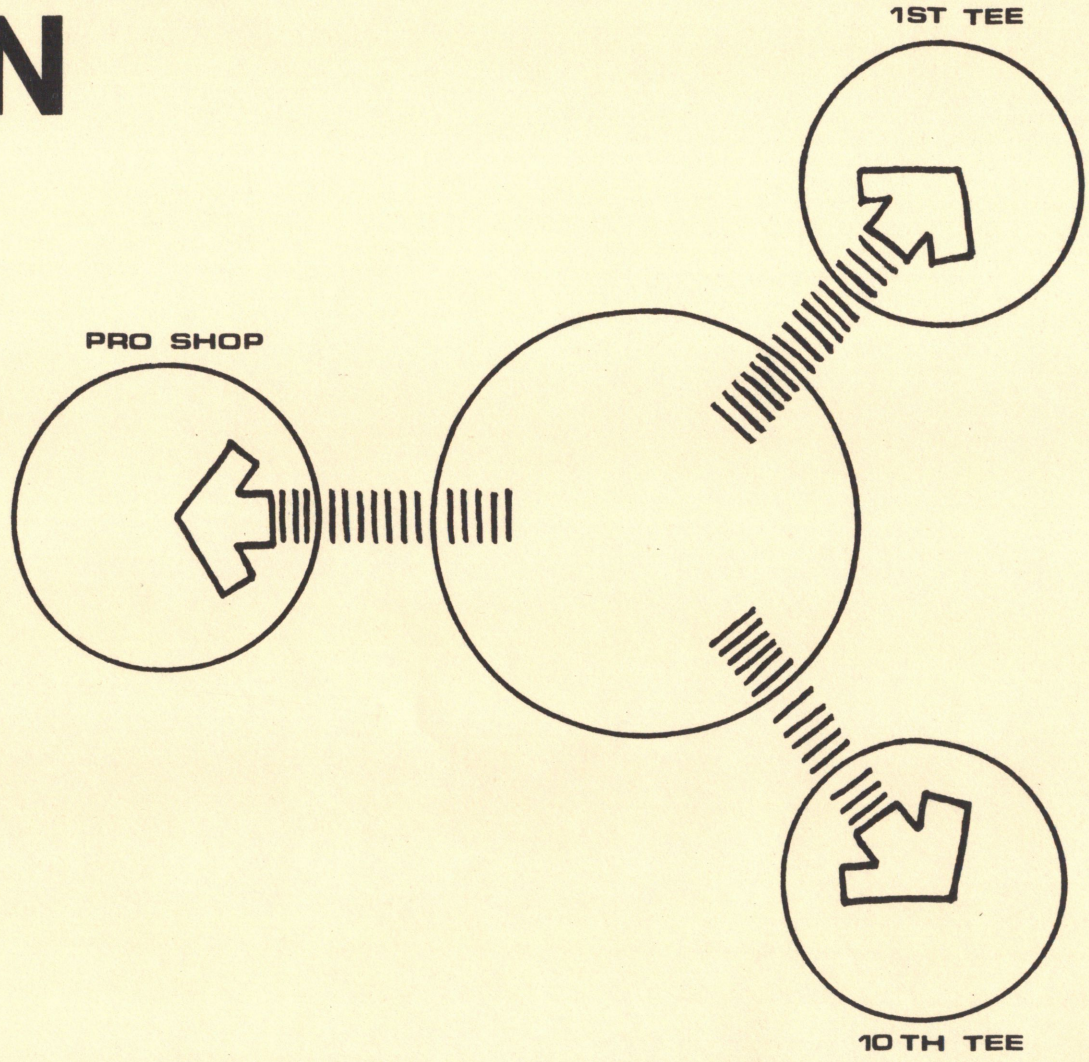


PUTTING GREEN

REQUIRED SQ. FT.	–	>5000-6000
FUNCTION	–	>Practicing Putting >Practicing Short Chip Shots
QUALITY	–	>Uncrowded feeling
USER	–	>Golfers
# OF OCCUPANTS	–	>As needed
HARD	–	>Flagstick >Golf cups
VIEWS	–	>Hole Number One's Tee >Hole Number Ten's Tee >Golf course
LIGHTING	–	>All Natural
SPECIAL	–	>3% Slope on Putting Green >PA System Speaker Close by
ADJACENCIES	–	>Number One Tee >Number Ten Tee >Pro Shop

PUTTING GREEN

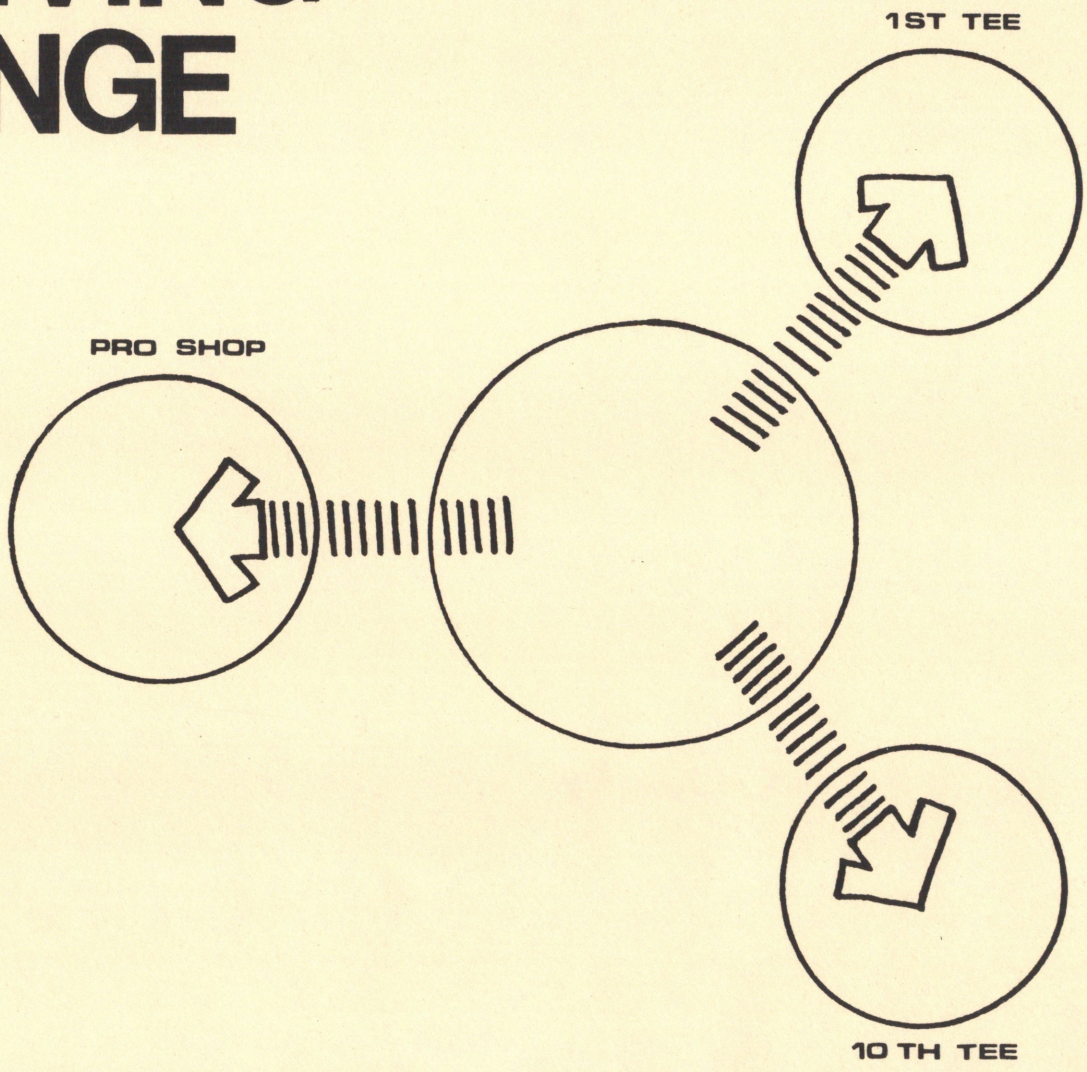


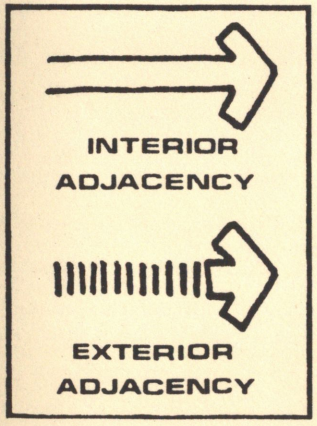


DRIVING RANGE

REQUIRED SQ. FT.	–	>18,000+
FUNCTION	–	>To Practice with the Golf Clubs, Wood and Irons Only, No Putters
QUALITY	–	>Uncrowded
USER	–	>Golfers
# OF OCCUPANTS	–	>0-20
HARD	–	>Markers to Separate Golfers >Flagsticks or yardage billboards
VIEWS	–	>Tee Number One >Tee number ten
LIGHTING	–	>Natural
SPECIAL	–	>PA System Speakers >Away from any Fairways >Possible Lighting for Night Use
ADJACENCIES	–	>Pro Shop >Hole #1 tee >Hole #10 tee

DRIVING RANGE

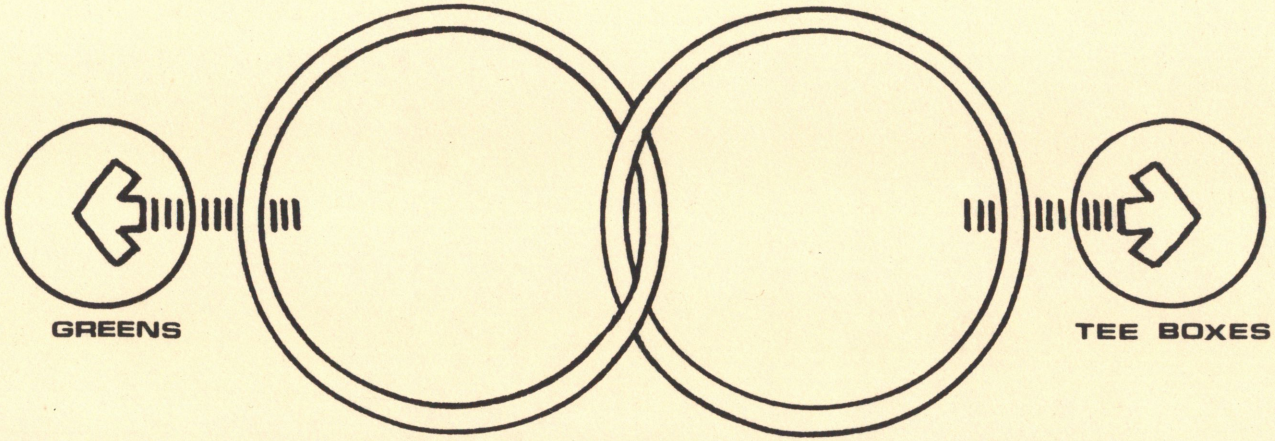


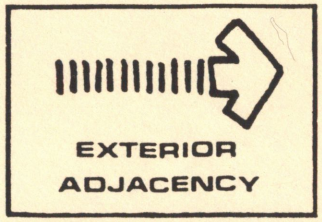


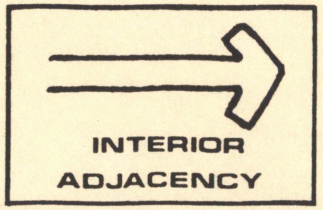
REST ROOM & SHELTERS

REQUIRED SQ. FT.	-	>225
FUNCTION	-	>Provide Toilet Facilities and Shelter From the Weather to Golfers on Course.
QUALITY	-	>Attractive >Bright >Clean >Inviting
USER	-	>Golfer and the General Public
# OF OCCUPANTS	-	>0-10
HARD	-	>Toilets - One for Men, One for Women >One Urinal >Sinks >Sitting benches
VIEWS	-	>None Needed
LIGHTING	-	>Natural
SPECIAL	-	>Located Between as Many Holes and Greens as Possible >Located Away From Clubhouse
ADJACENCIES	-	>Golf Course Greens >Golf Course Tees

REST RMS & SHELTERS







SQUARE FOOTAGE SUMMATION

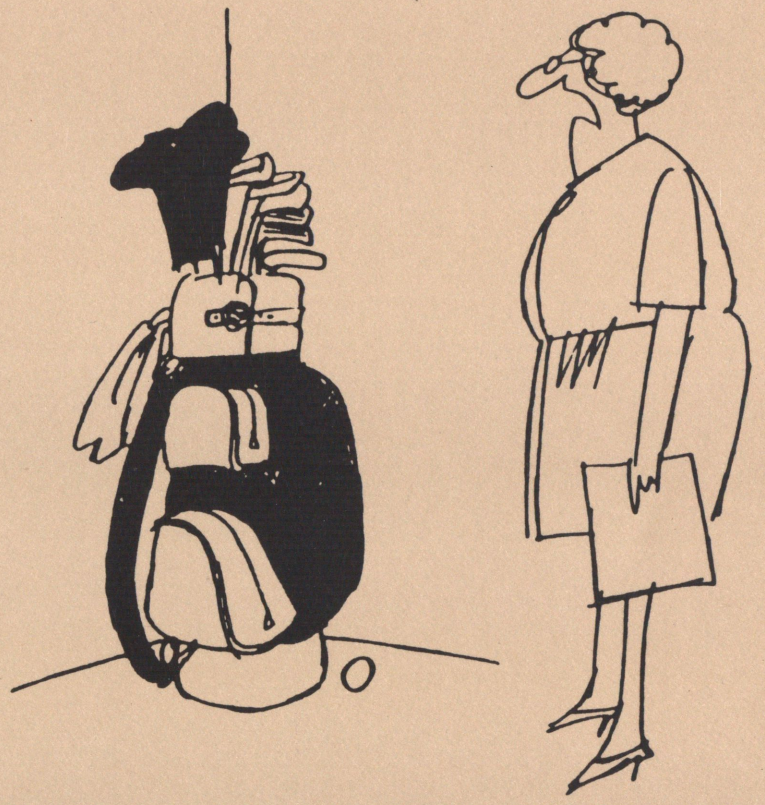
CLUBHOUSE

Entrance/Foyer	300
Bar/Lounge	1125
Dining Room	1500
Men's Locker Room	1200
Women's Locker Room	950
Proshop	800
Professional's office	200
Kitchen	600
Storage	300
Mechanical	700
Cart Storage	2000
Circulation	1450
Clubhouse Square Feet	11,125

EXTERIOR SQUARE FOOTAGE SUMMATION

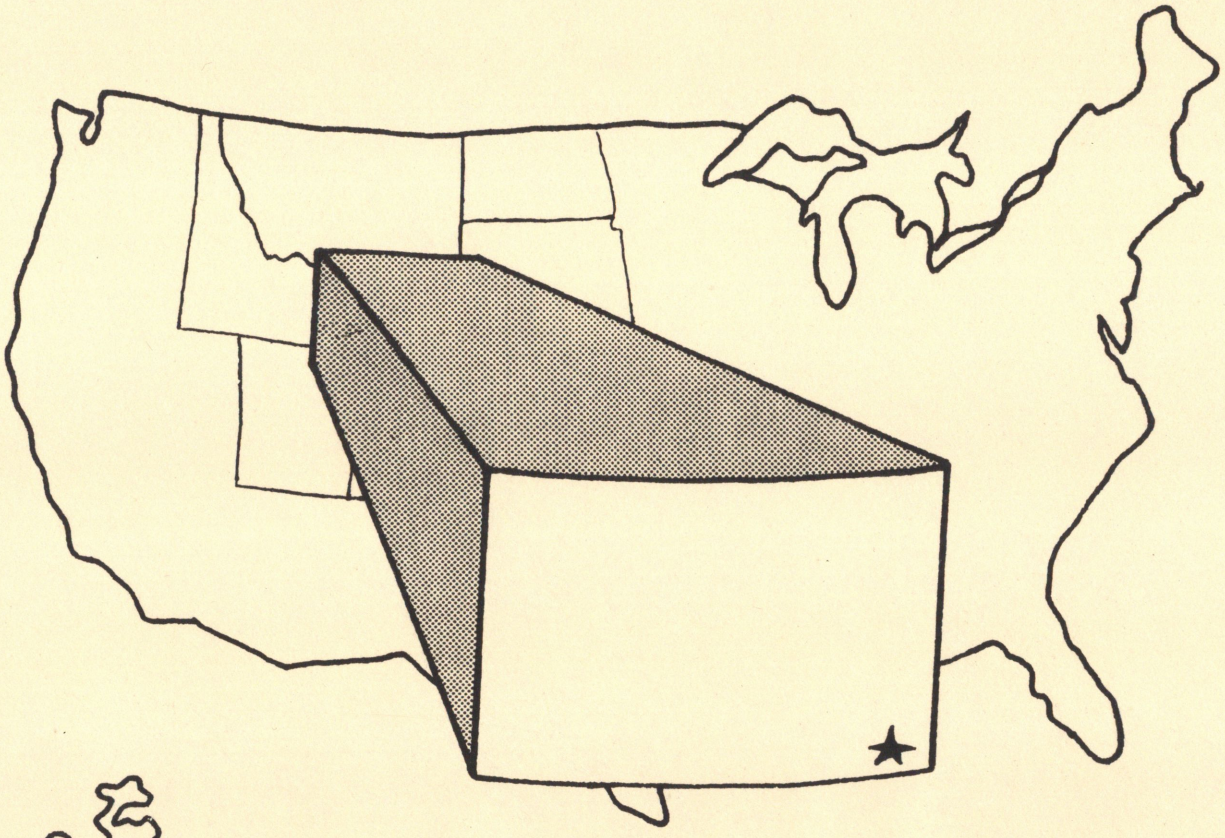
EXTERIOR

Starters Shack	75
Putting Green	6,000
Driving Range	18,000
RR/Shelters	225
Circulation	1,000
Exterior Sq. Ft.	25,300
Total Sq. Ft.	36,425



"Next time you see my husband tell him I said hello."
GOLF DIGEST 83

SITE LOCATION

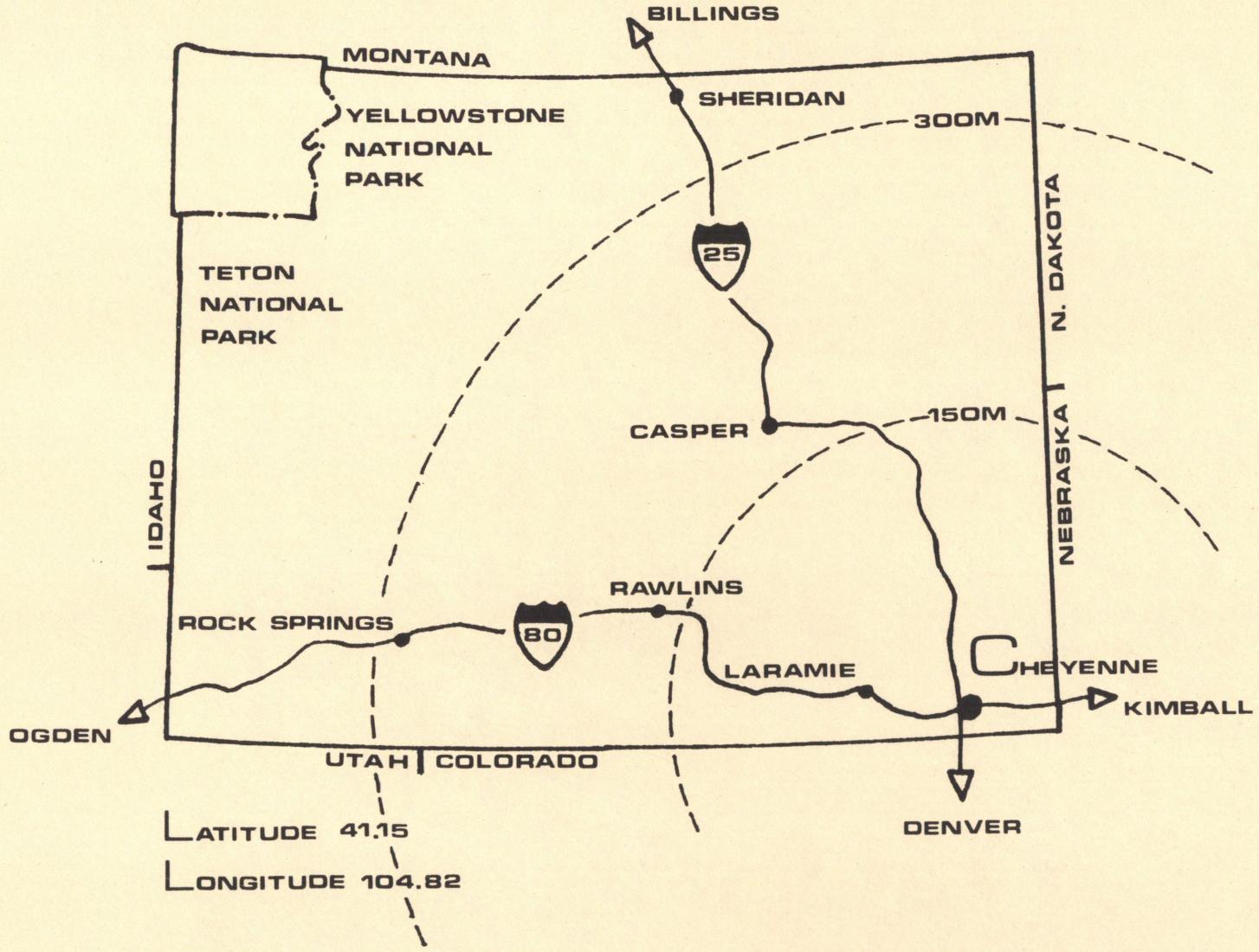




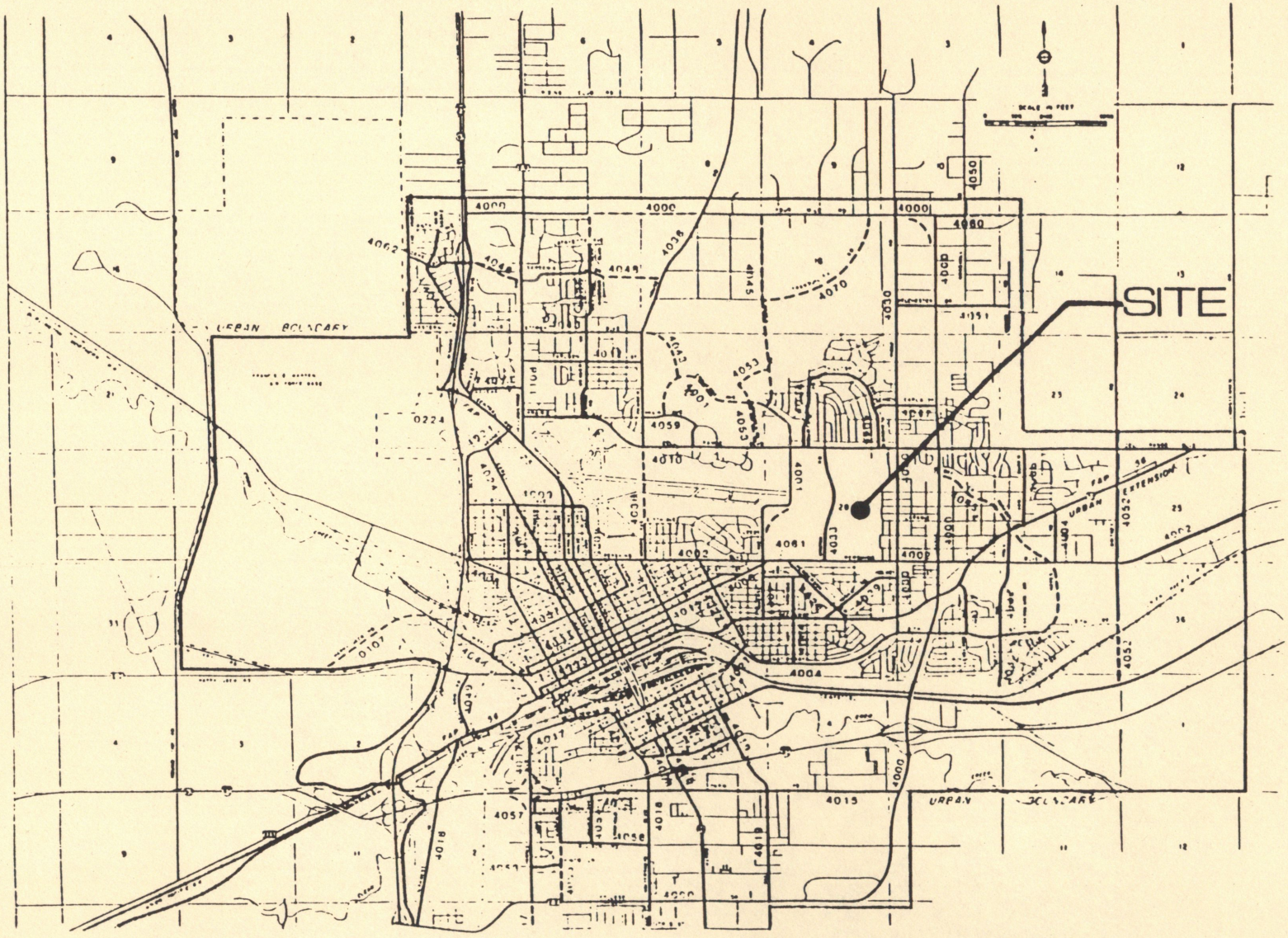
CHEYENNE WYOMING

WELCOME TO 6126 FEET

LOCATION OF CITY IN THE STATE

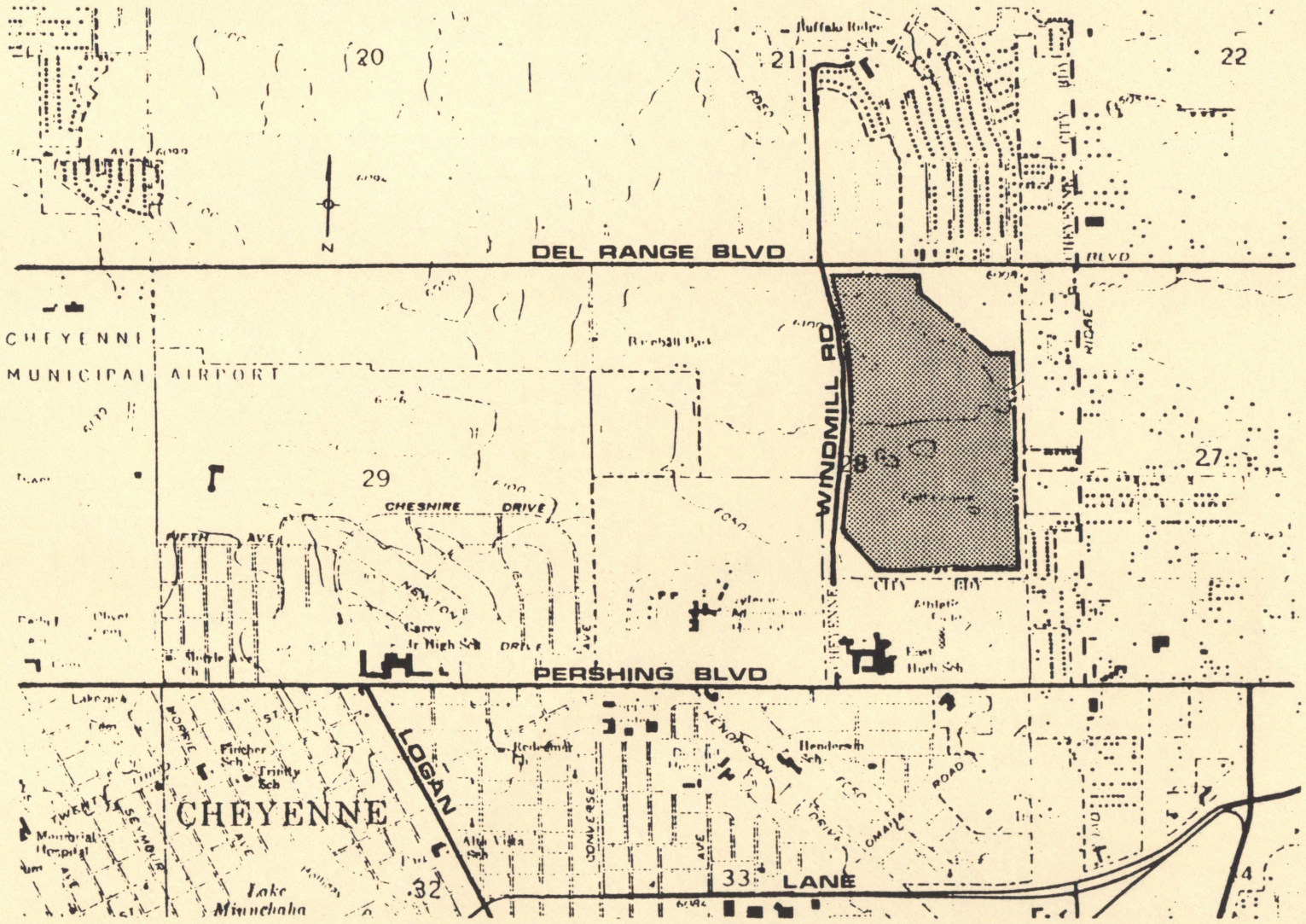


CITY OF CHEYENNE



LOCATION

SITE LOCATION WITHIN THE CITY

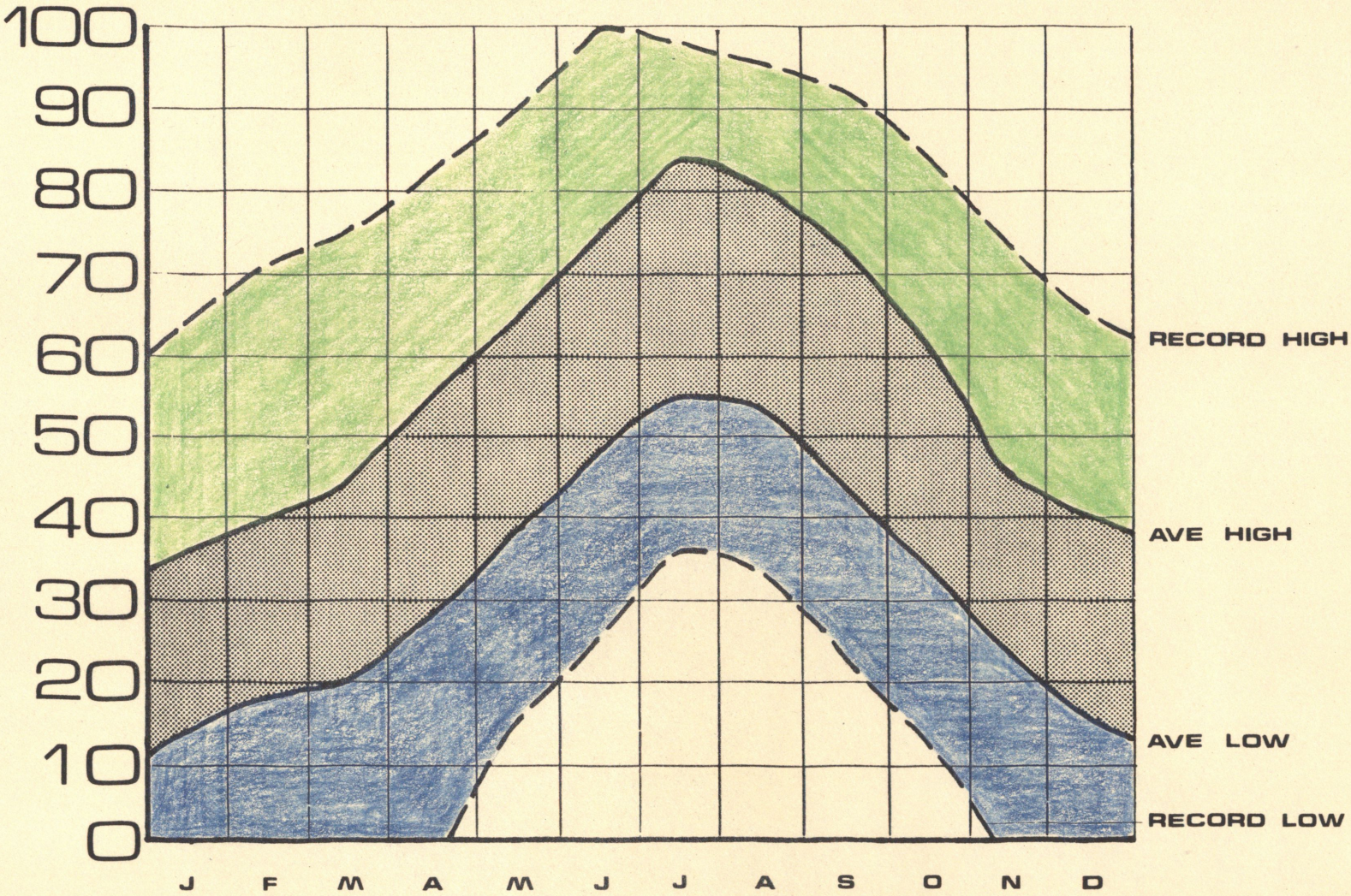




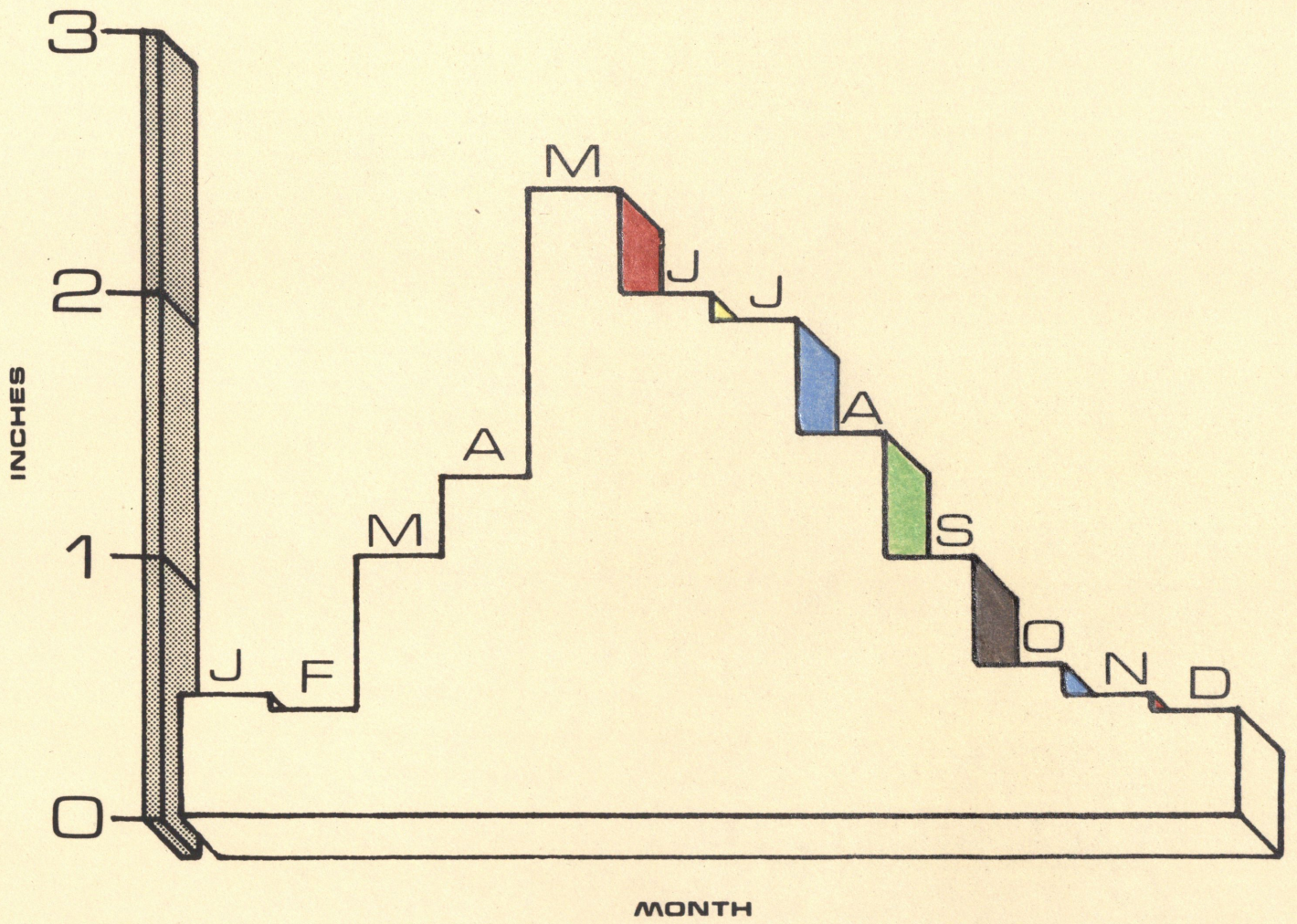
"No, I'm not playing an Ernie's Driving Range with a smile on it."
GOLF DIGEST 82

CLIMATE

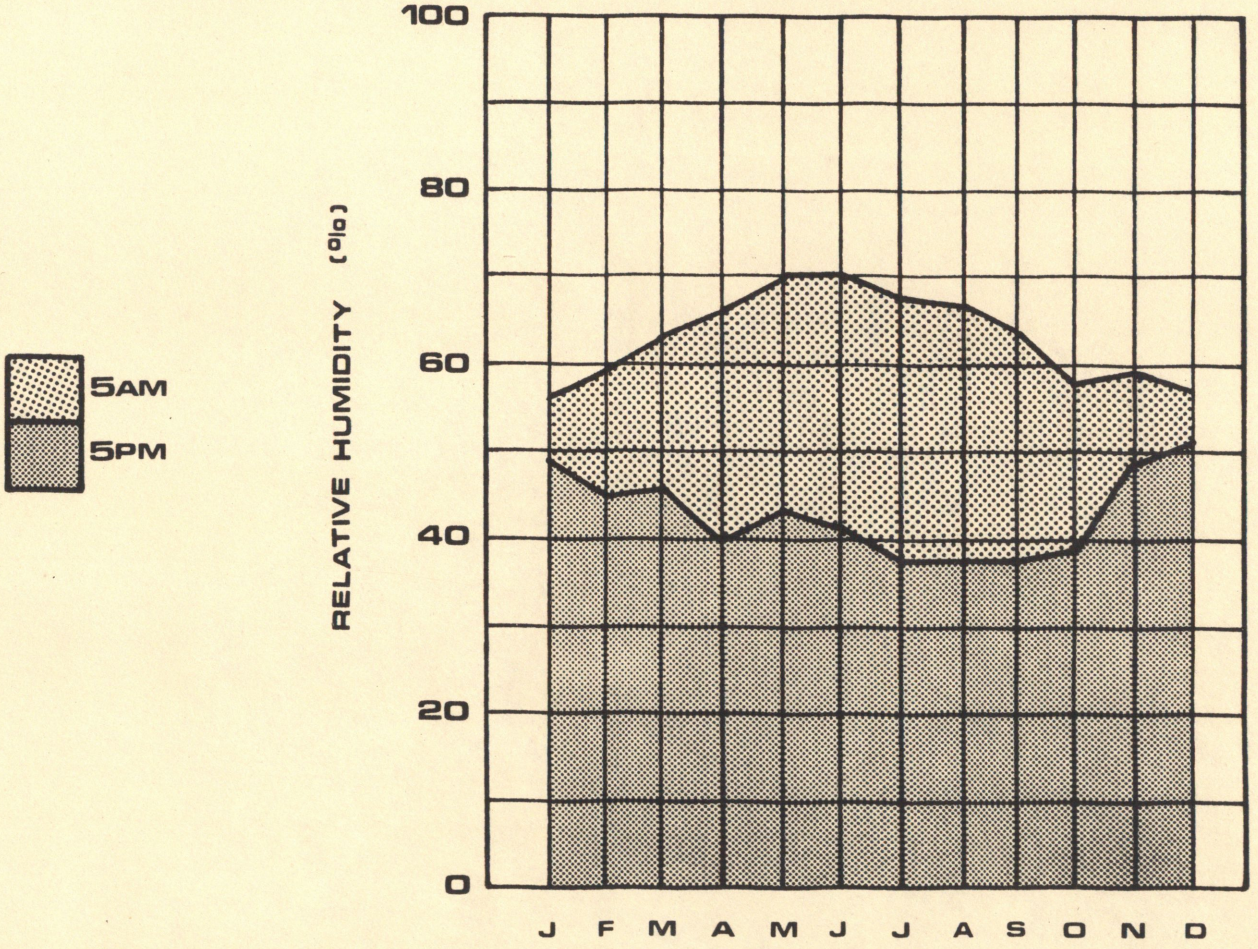
TEMPERATURE



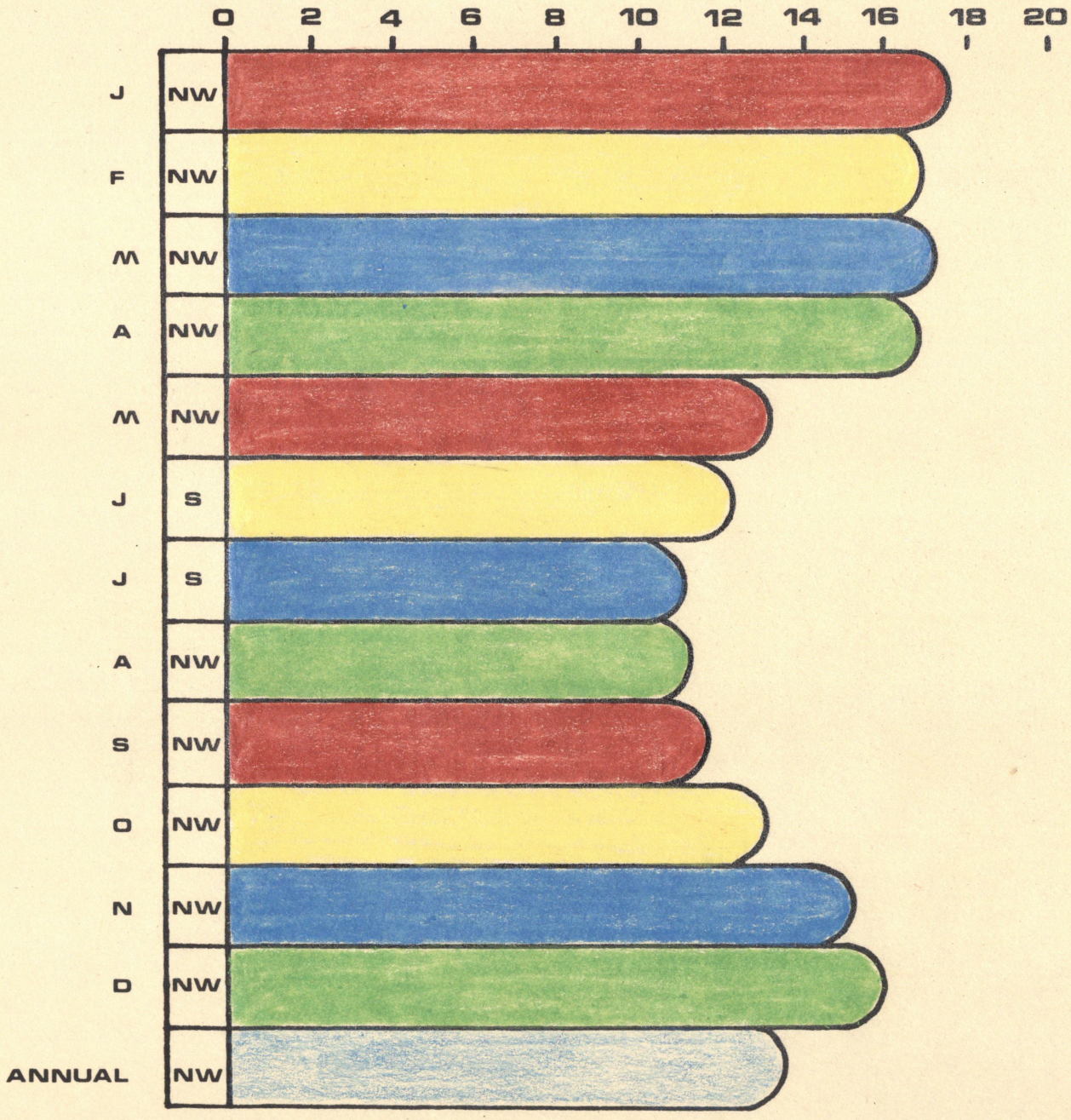
MEAN MONTHLY PRECIPITATION



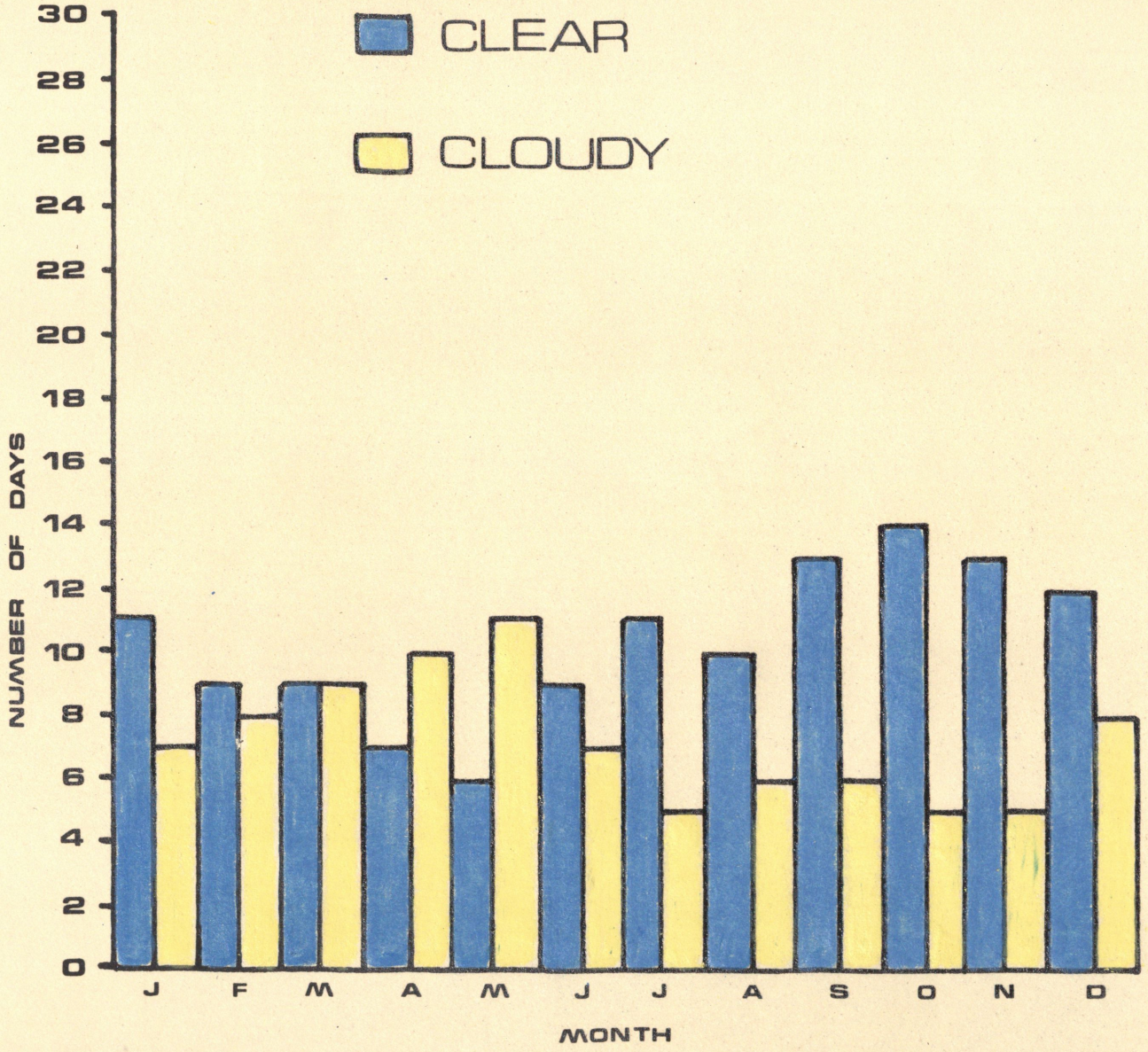
MEAN MONTHLY RELATIVE HUMIDITY



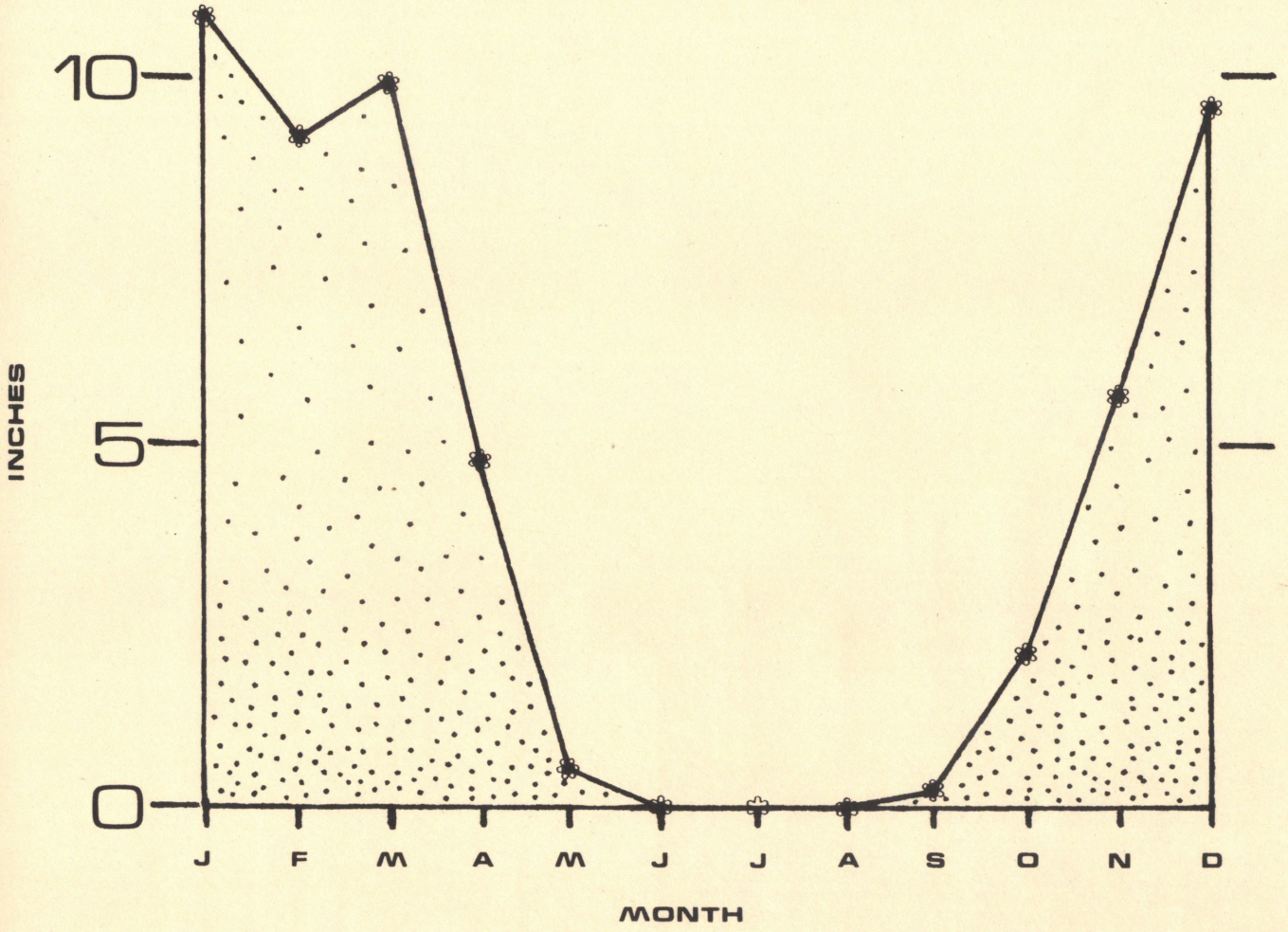
MEAN HOURLY WIND SPEED MPH



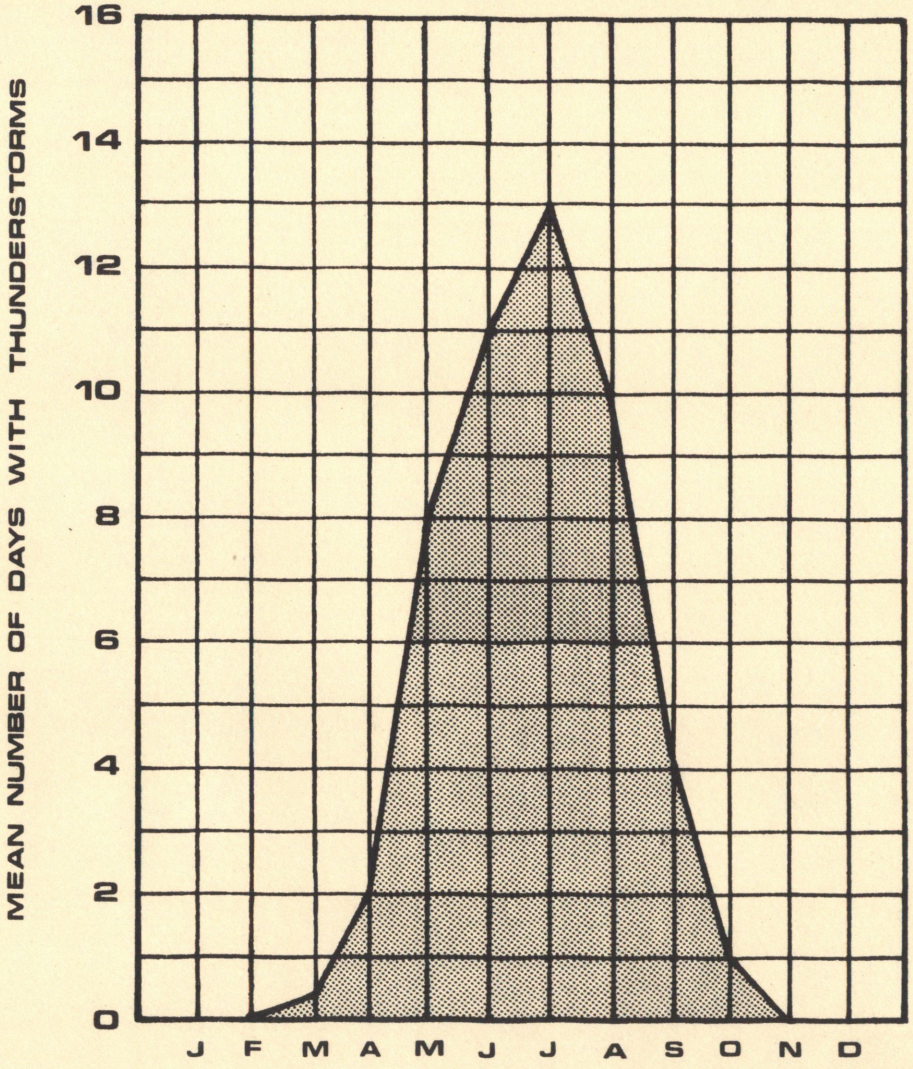
SKY COVERAGE



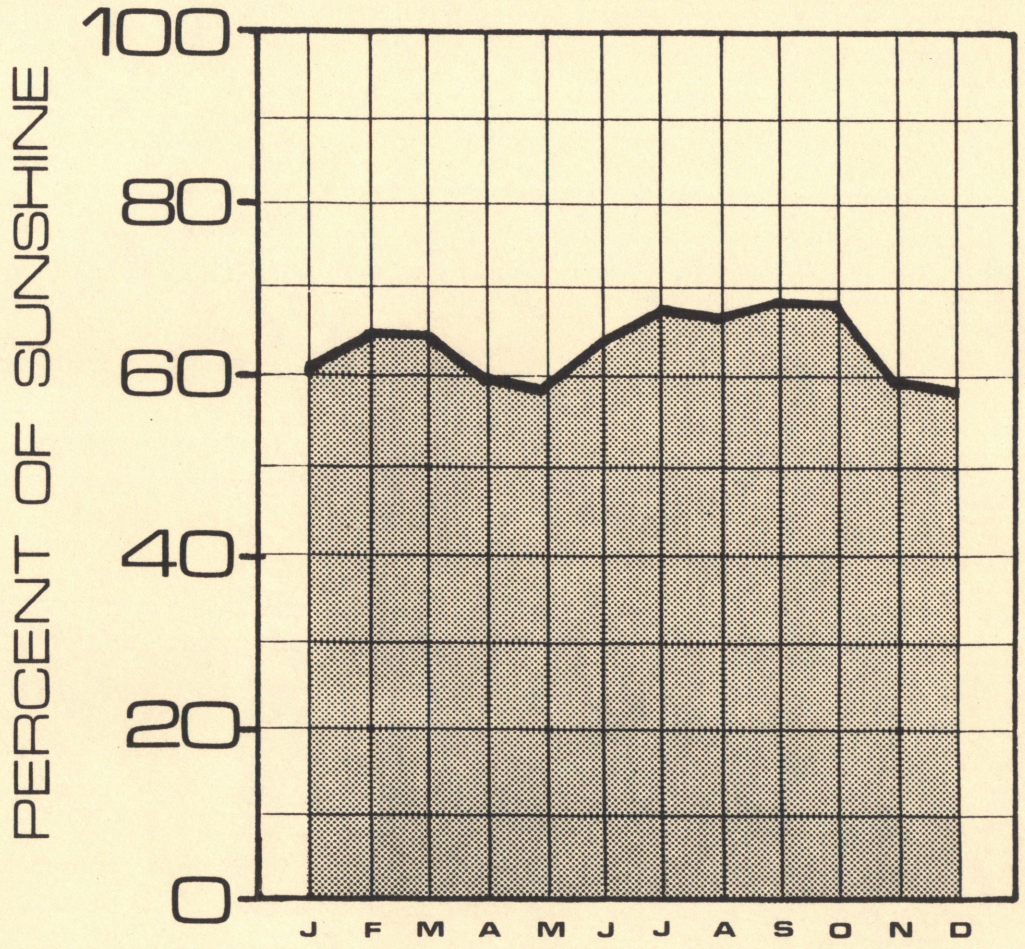
AVERAGE SNOW COVERAGE



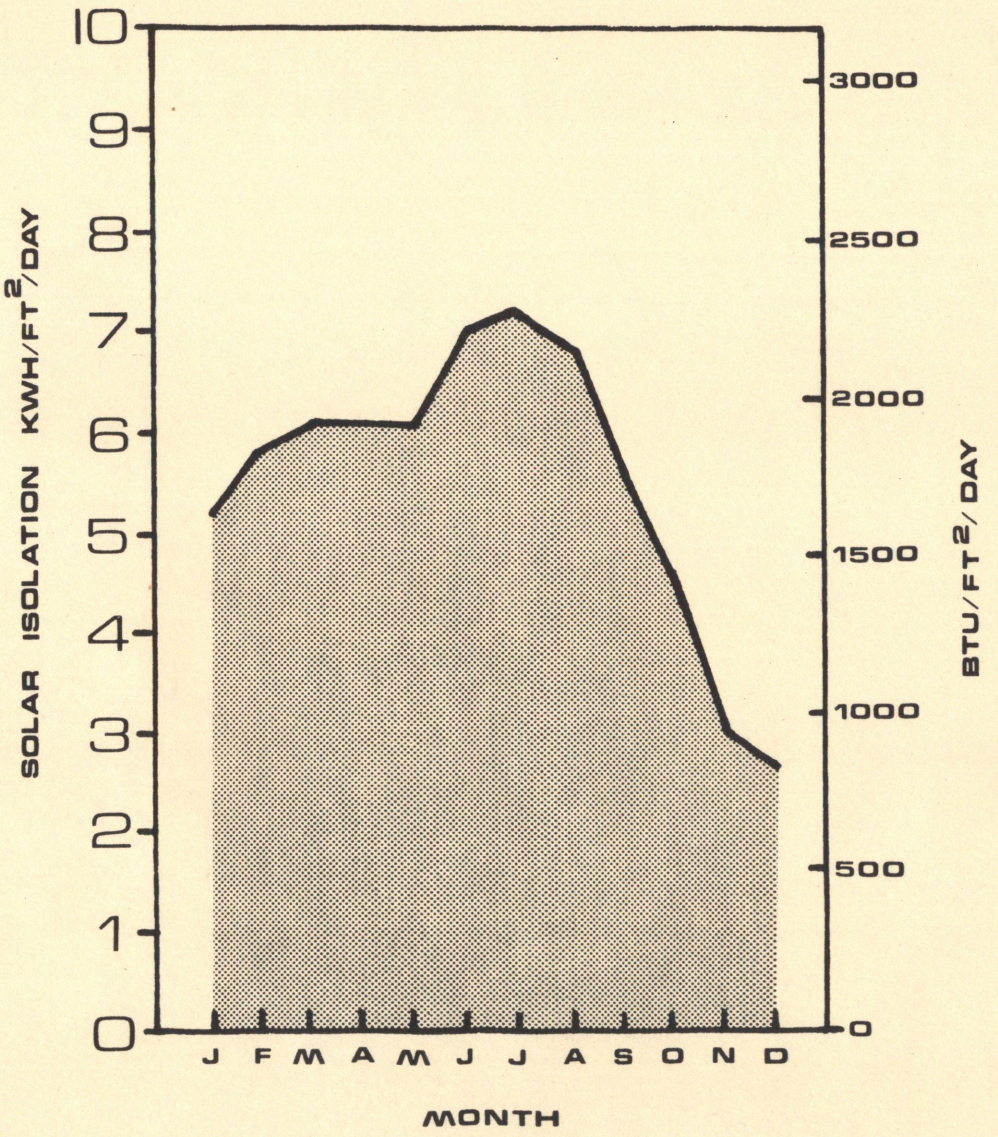
MEAN THUNDERSTORM DAYS

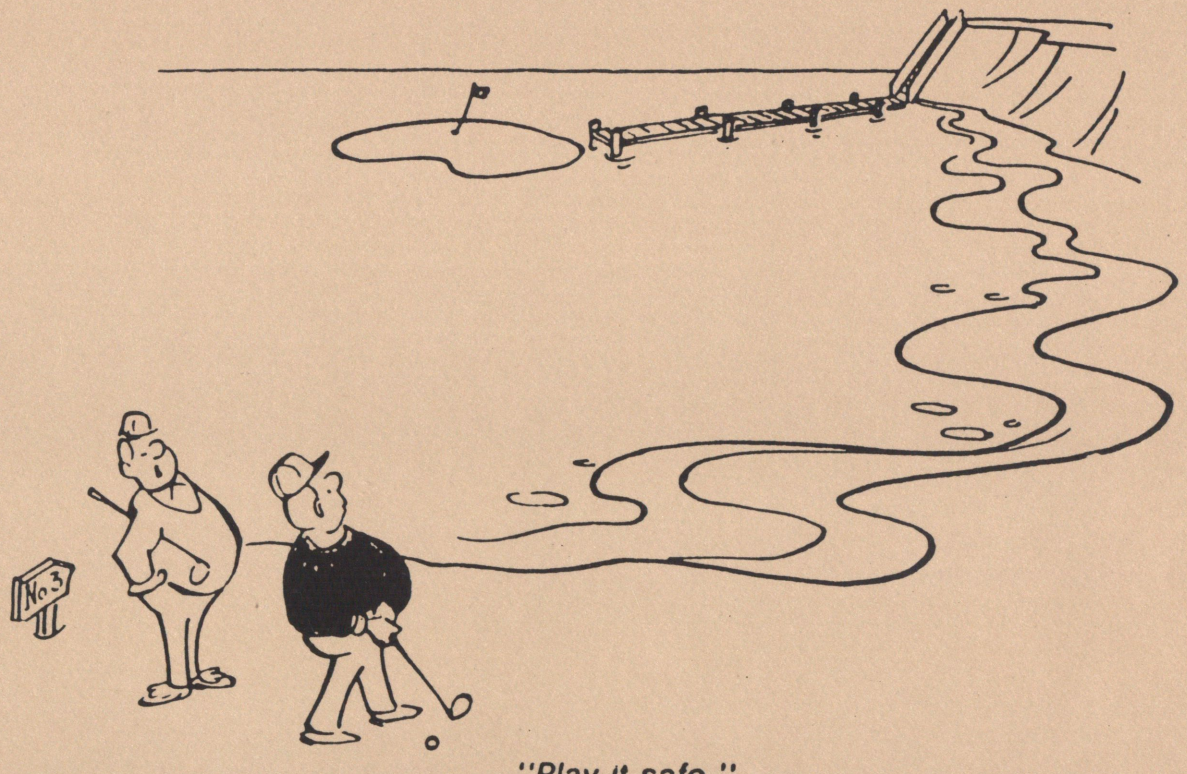


MEAN MONTHLY SUNSHINE



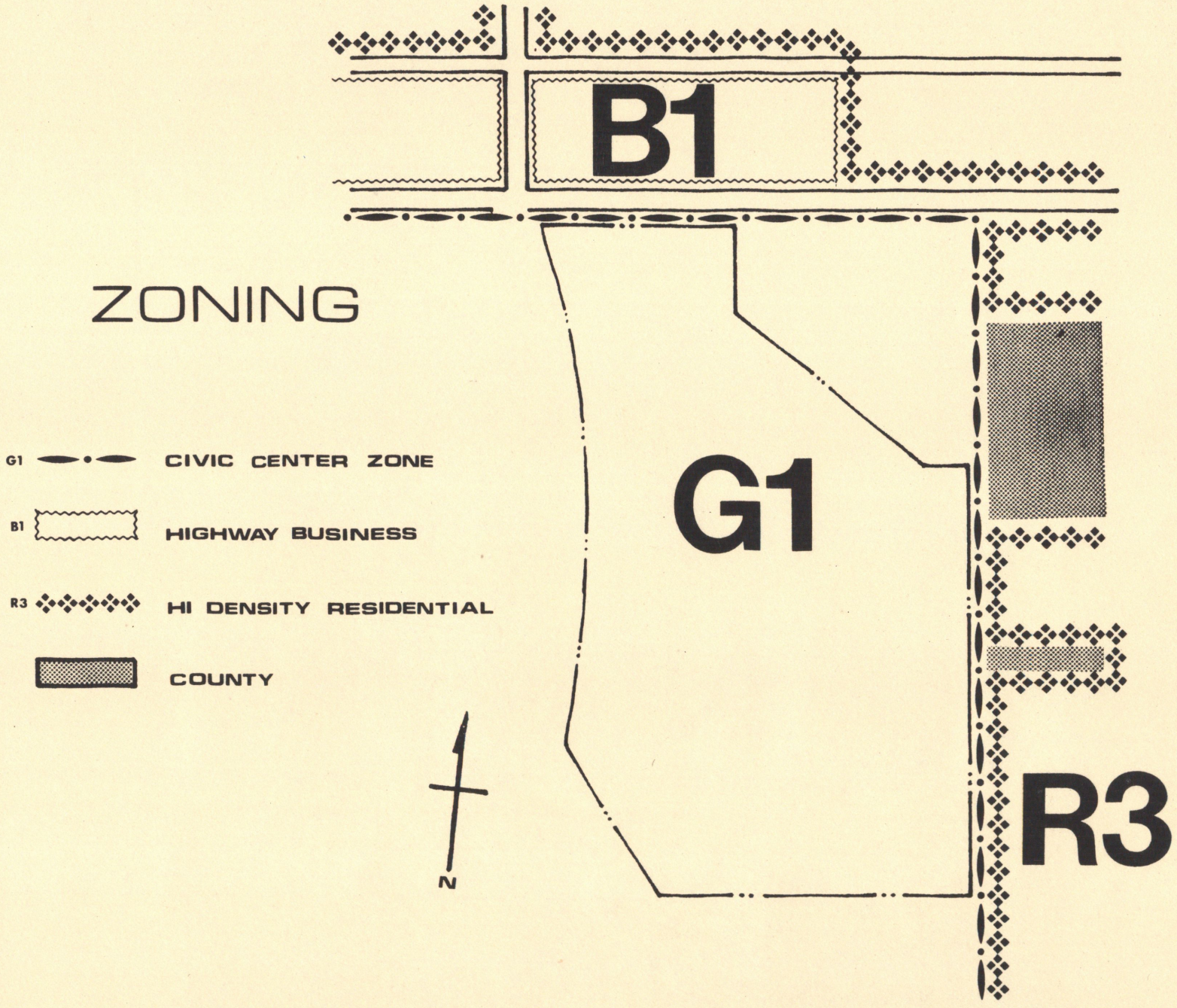
MEAN DIRECT SOLAR RADIATION ON SURFACES PERPENDICULAR TO SUN



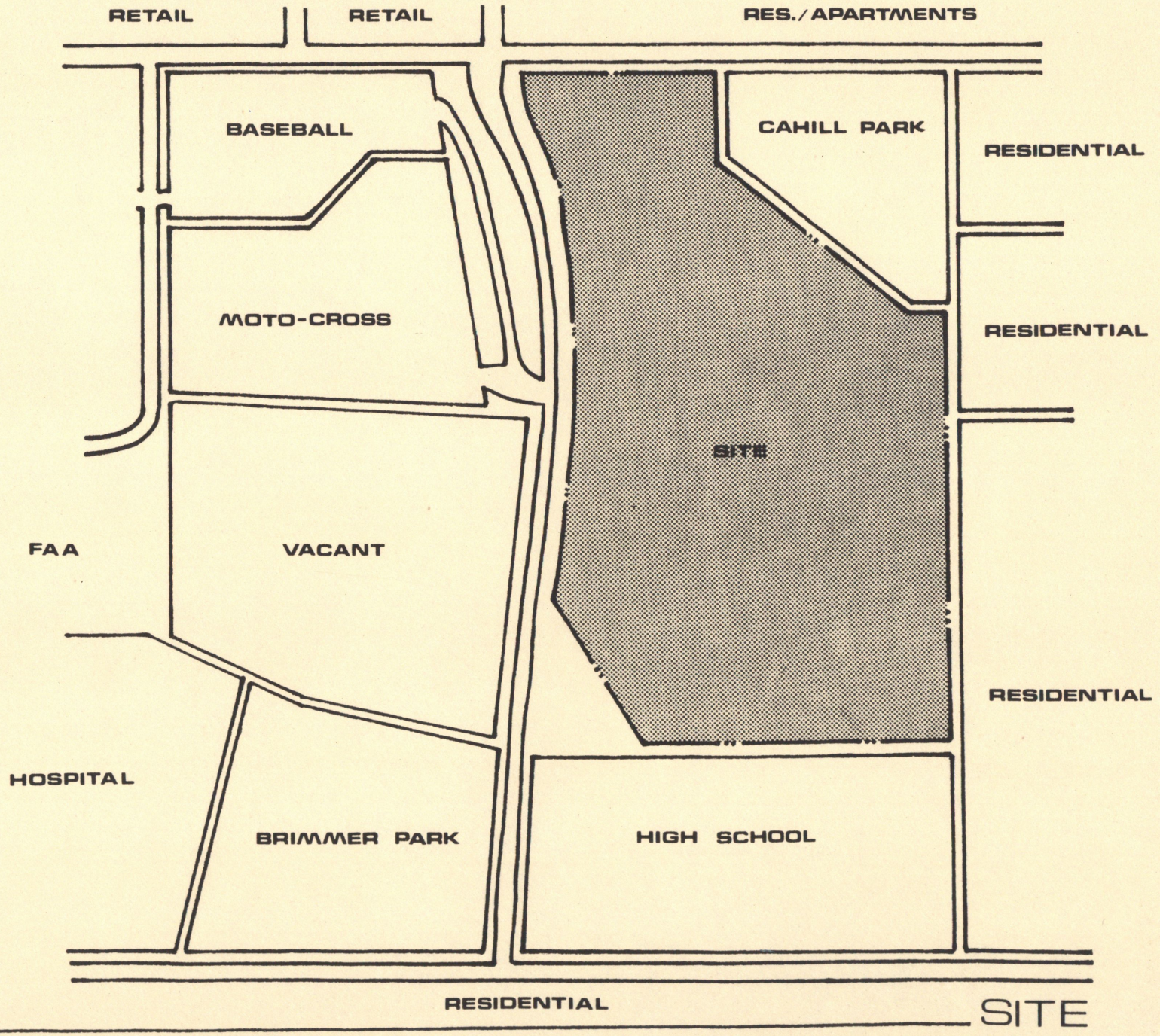


"Play it safe."
GOLF DIGEST 83

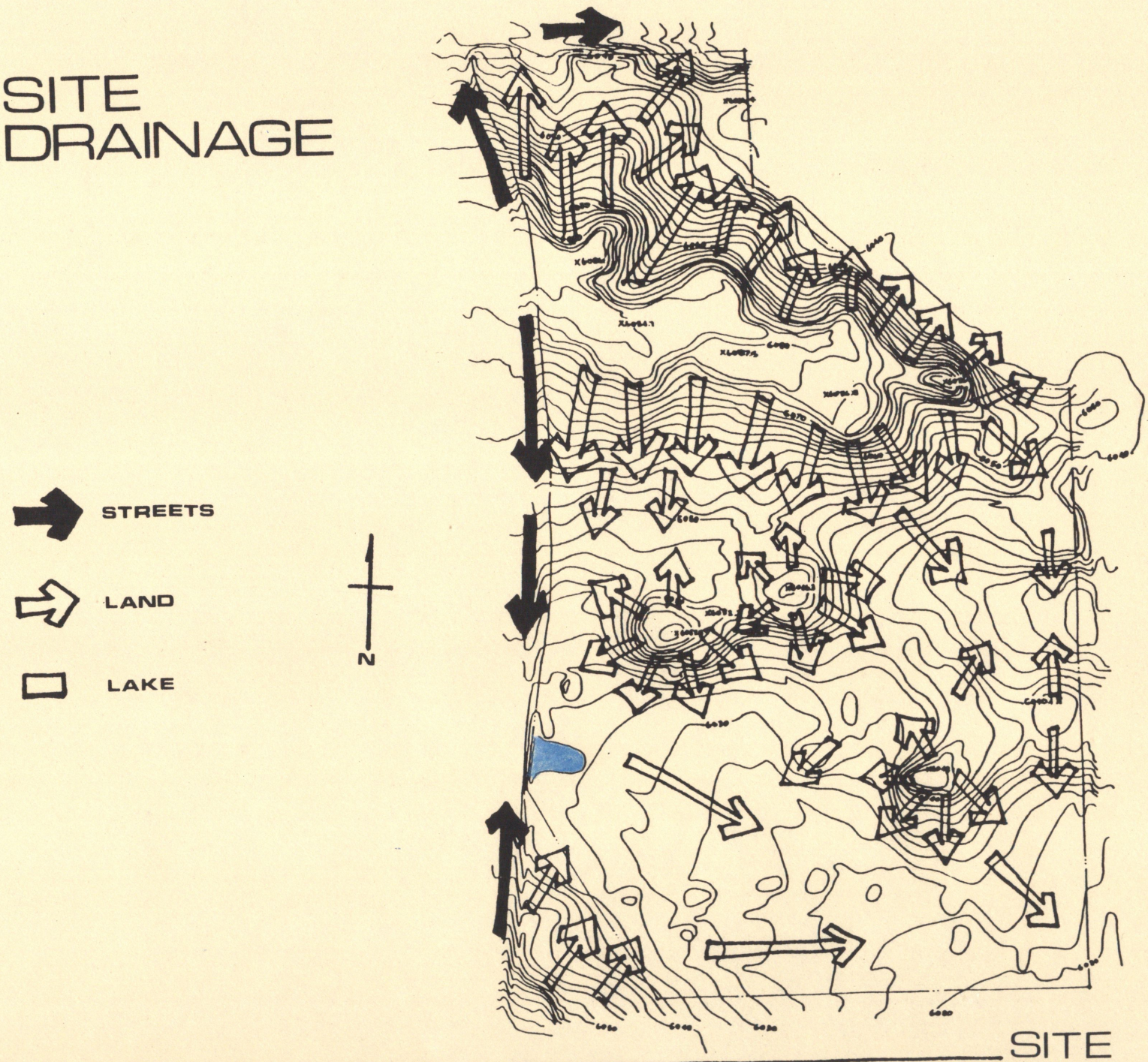
SITE ANALYSIS

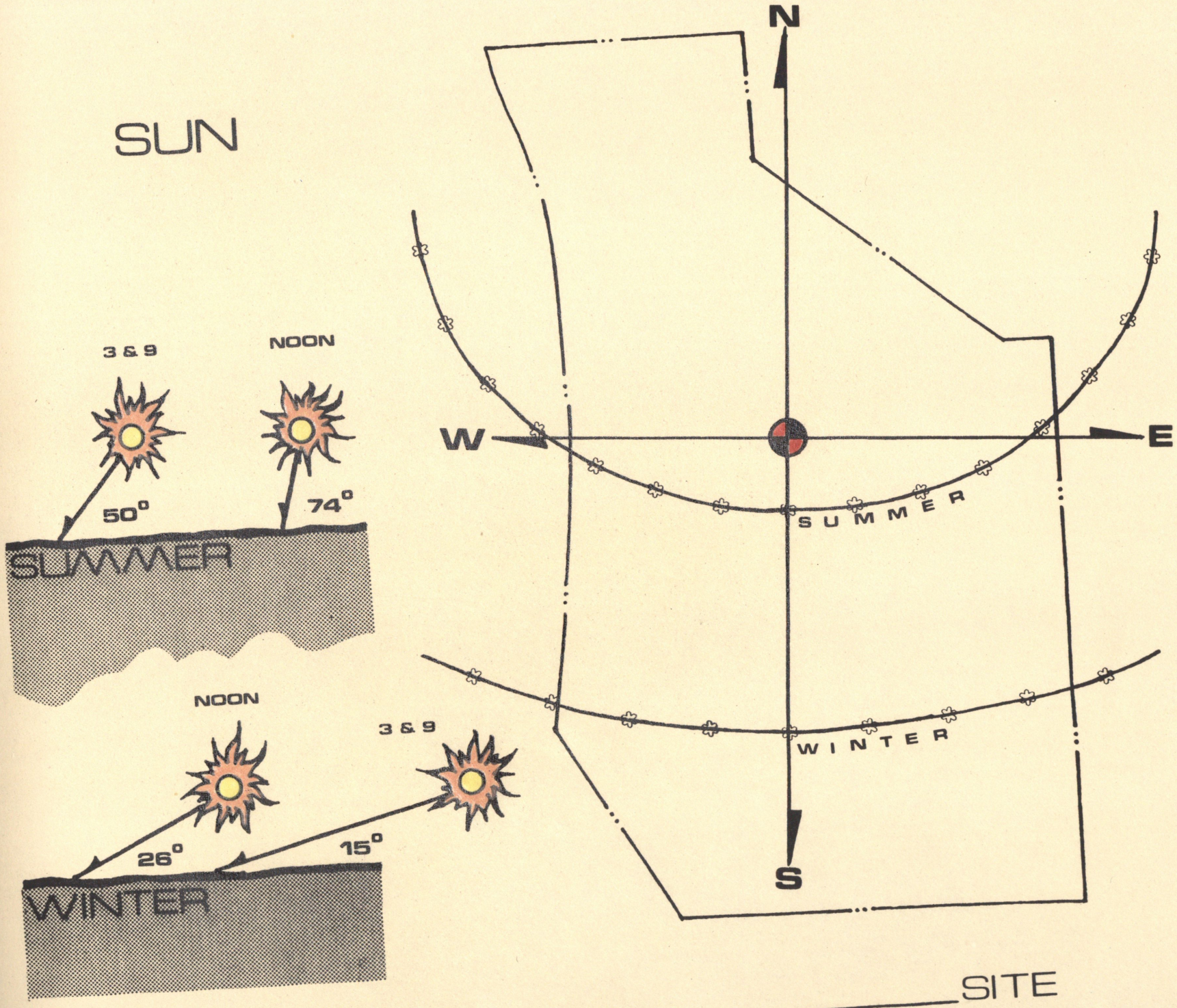

ZONING
G1
CIVIC CENTER ZONE
B1
HIGHWAY BUSINESS
R3
HI DENSITY RESIDENTIAL
COUNTY
N
B1
G1
R3
SITE

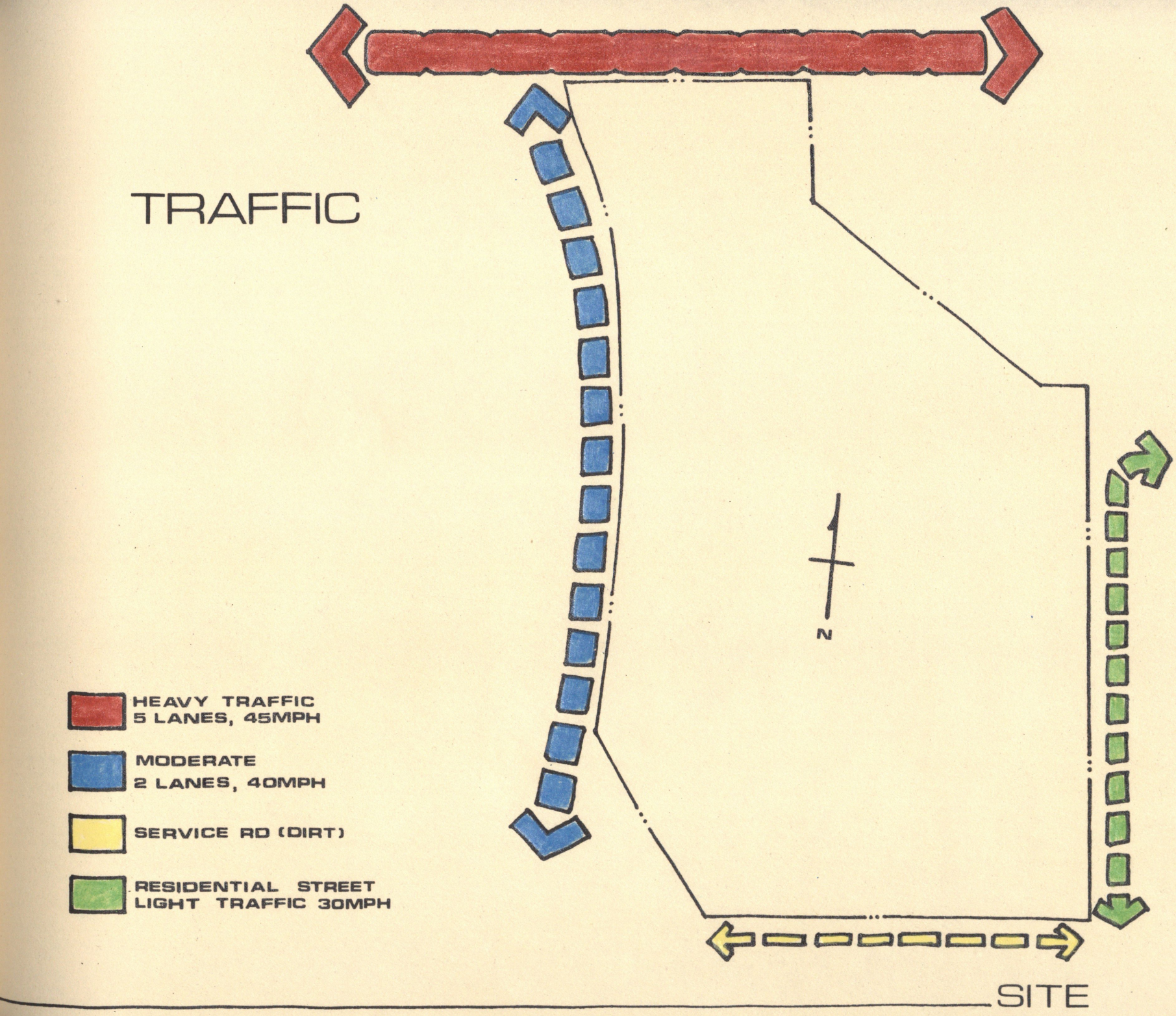
EXISTING USES



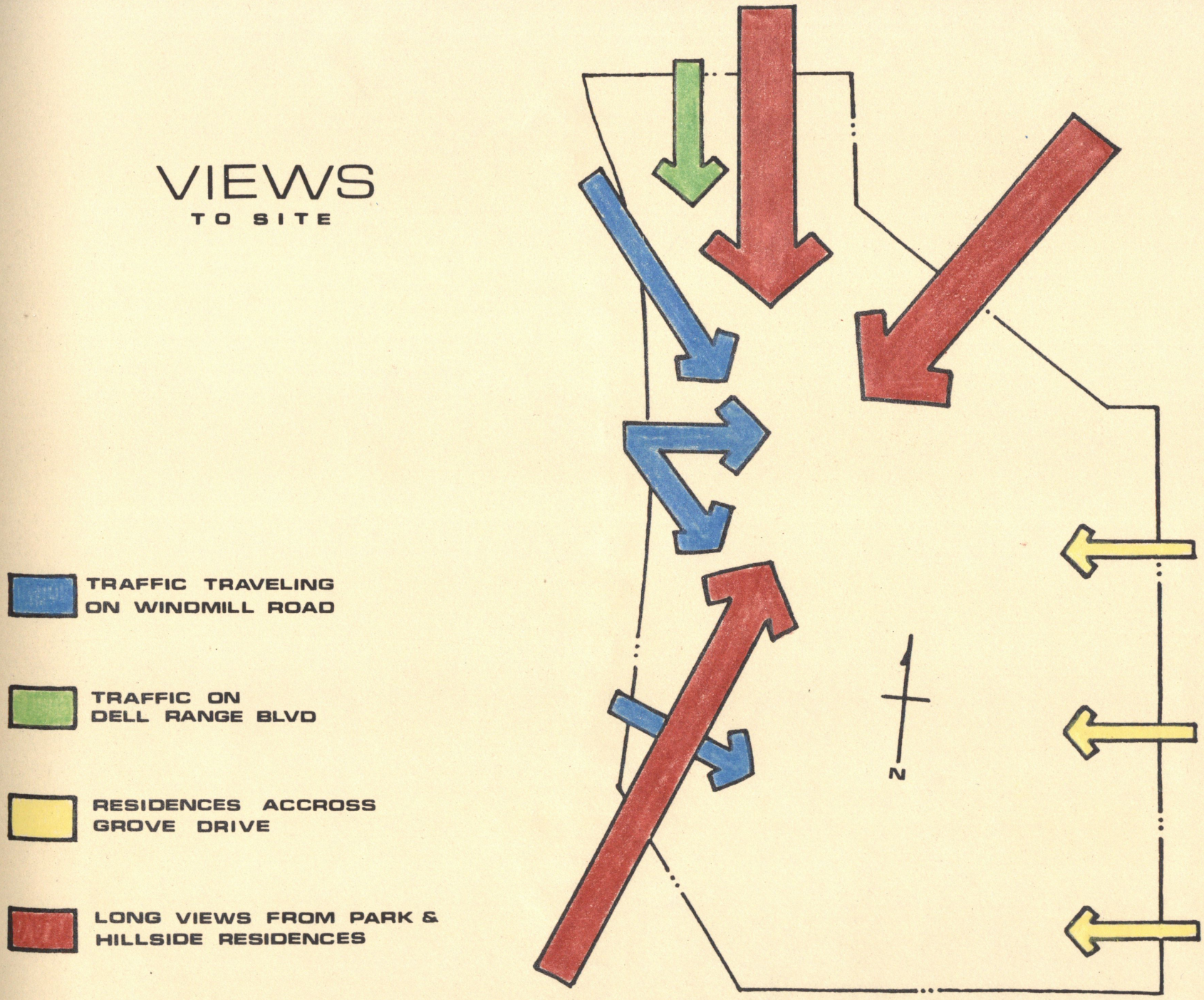
SITE DRAINAGE




SUN
3 & 9
NOON
50°
74°
SUMMER
NOON
3 & 9
26°
15°
WINTER
N
W
E
S
SUMMER
WINTER
SITE


TRAFFIC
HEAVY TRAFFIC
5 LANES, 45MPH
MODERATE
2 LANES, 40MPH
SERVICE RD (DIRT)
RESIDENTIAL STREET
LIGHT TRAFFIC 30MPH
N
SITE

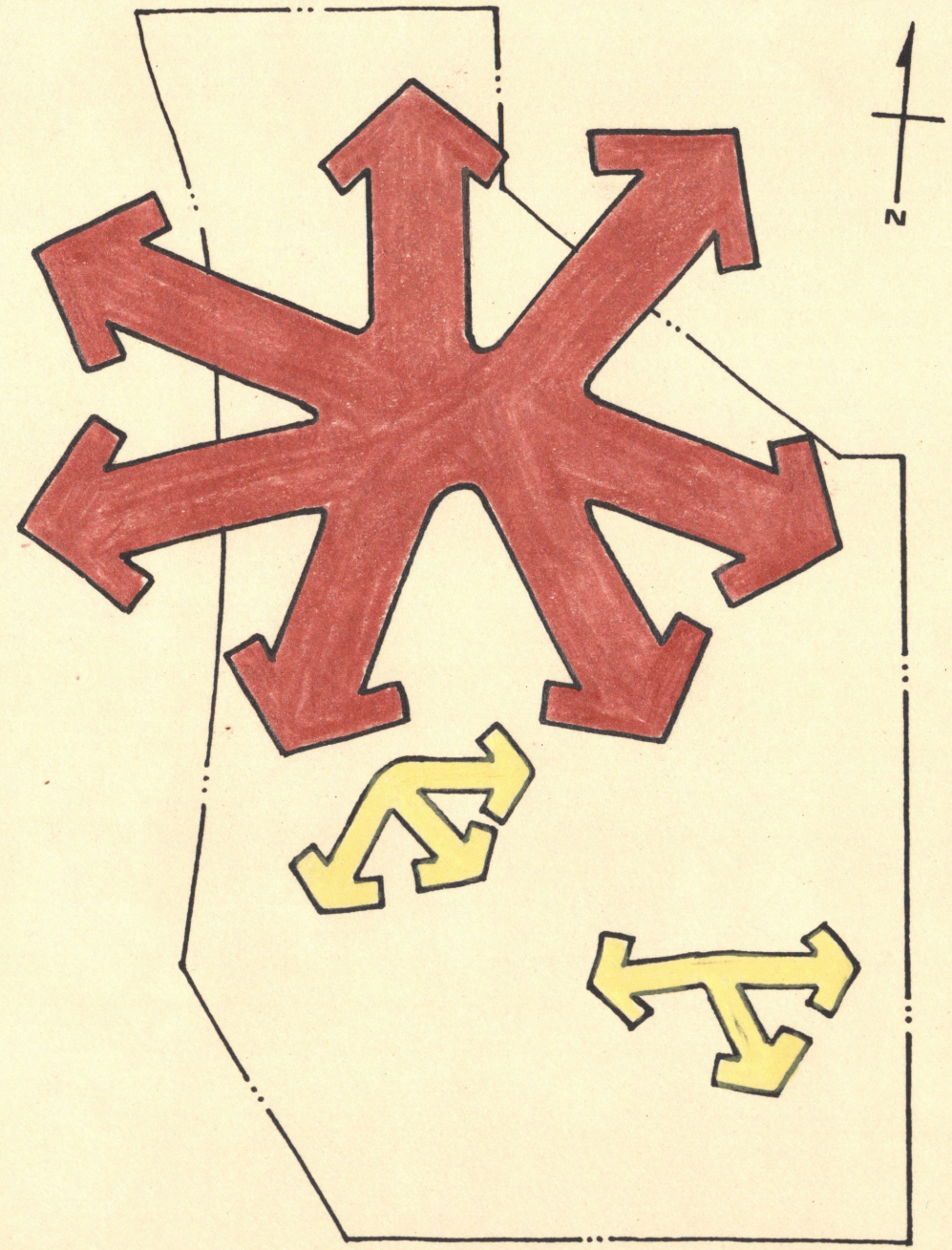
VIEWS
TO SITE



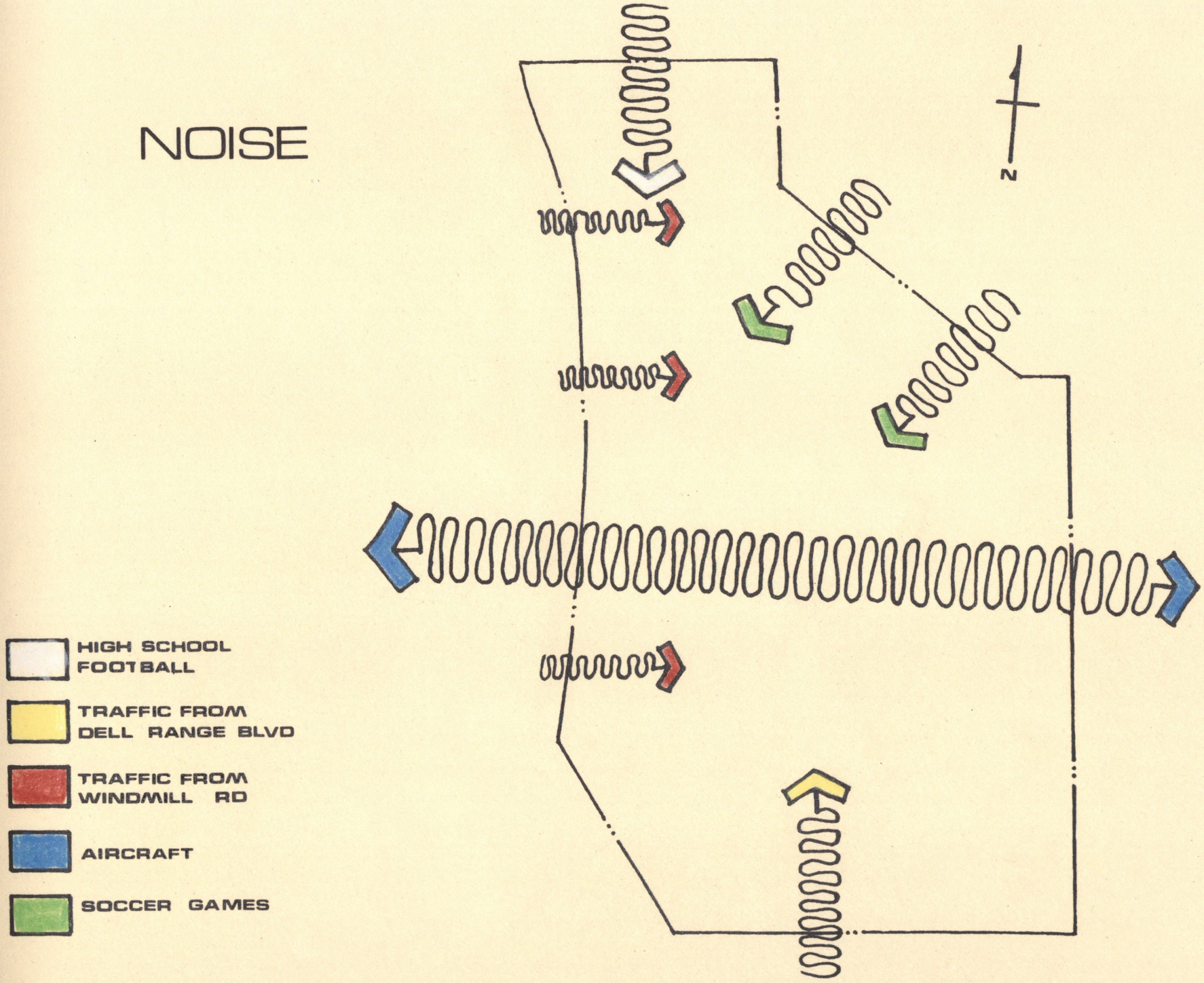
VIEWS
FROM SITE

LONG RANGE VIEWS

SHORT VIEWS OUT & BACK INTO SITE



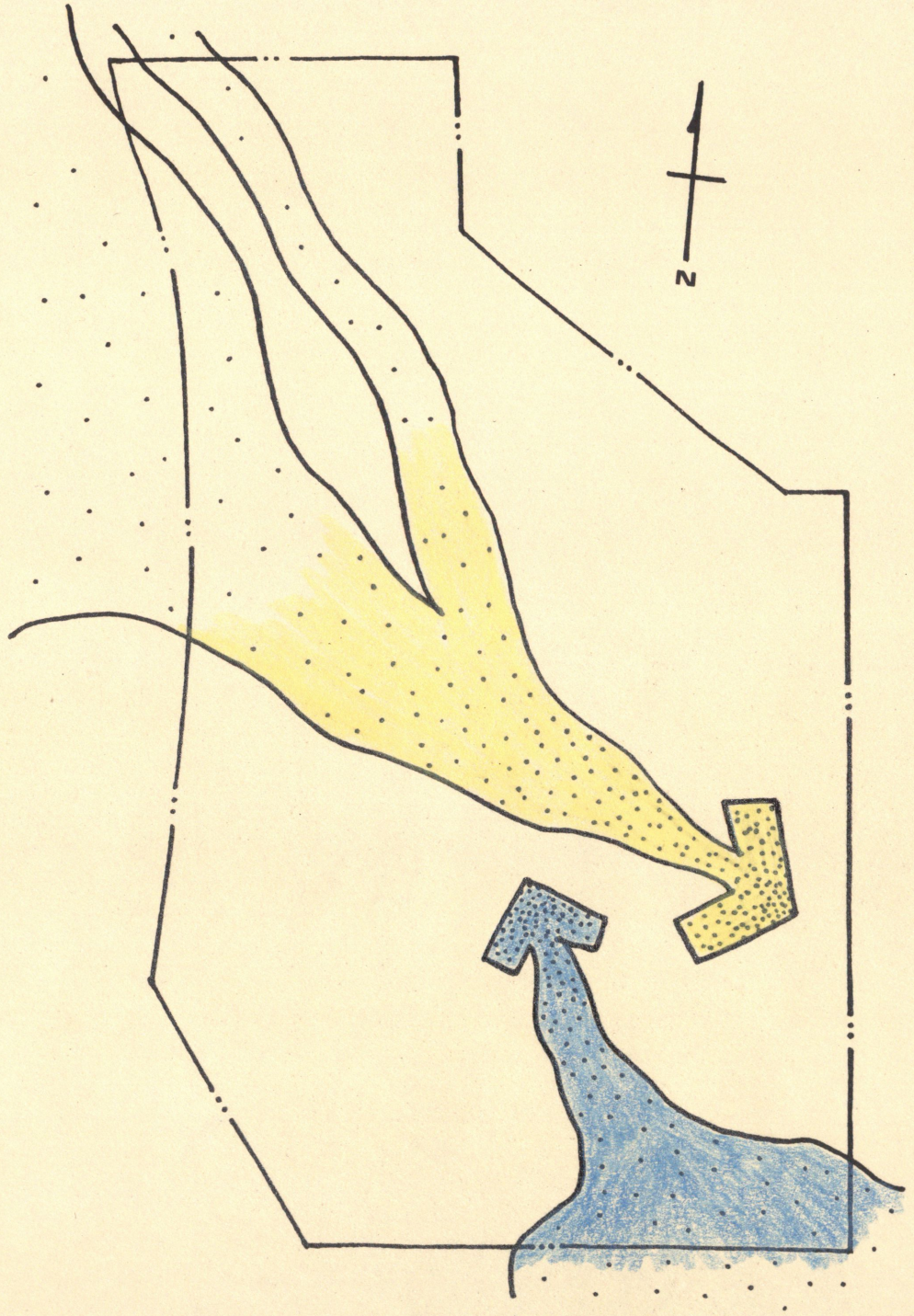
NOISE


N
HIGH SCHOOL FOOTBALL
TRAFFIC FROM DELL RANGE BLVD
TRAFFIC FROM WINDMILL RD
AIRCRAFT
SOCCER GAMES
SITE

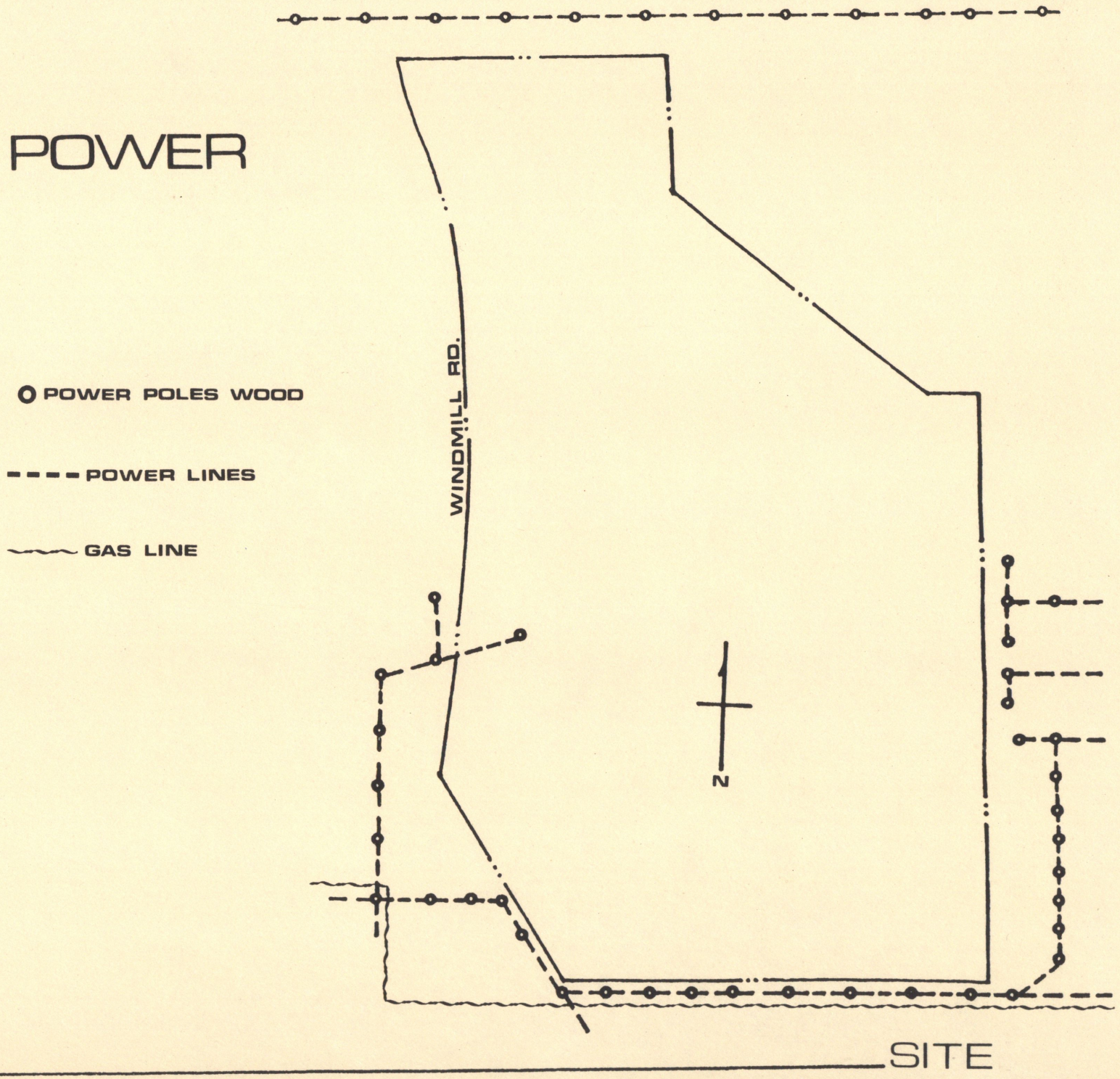
WIND

WINTER WINDS NNW

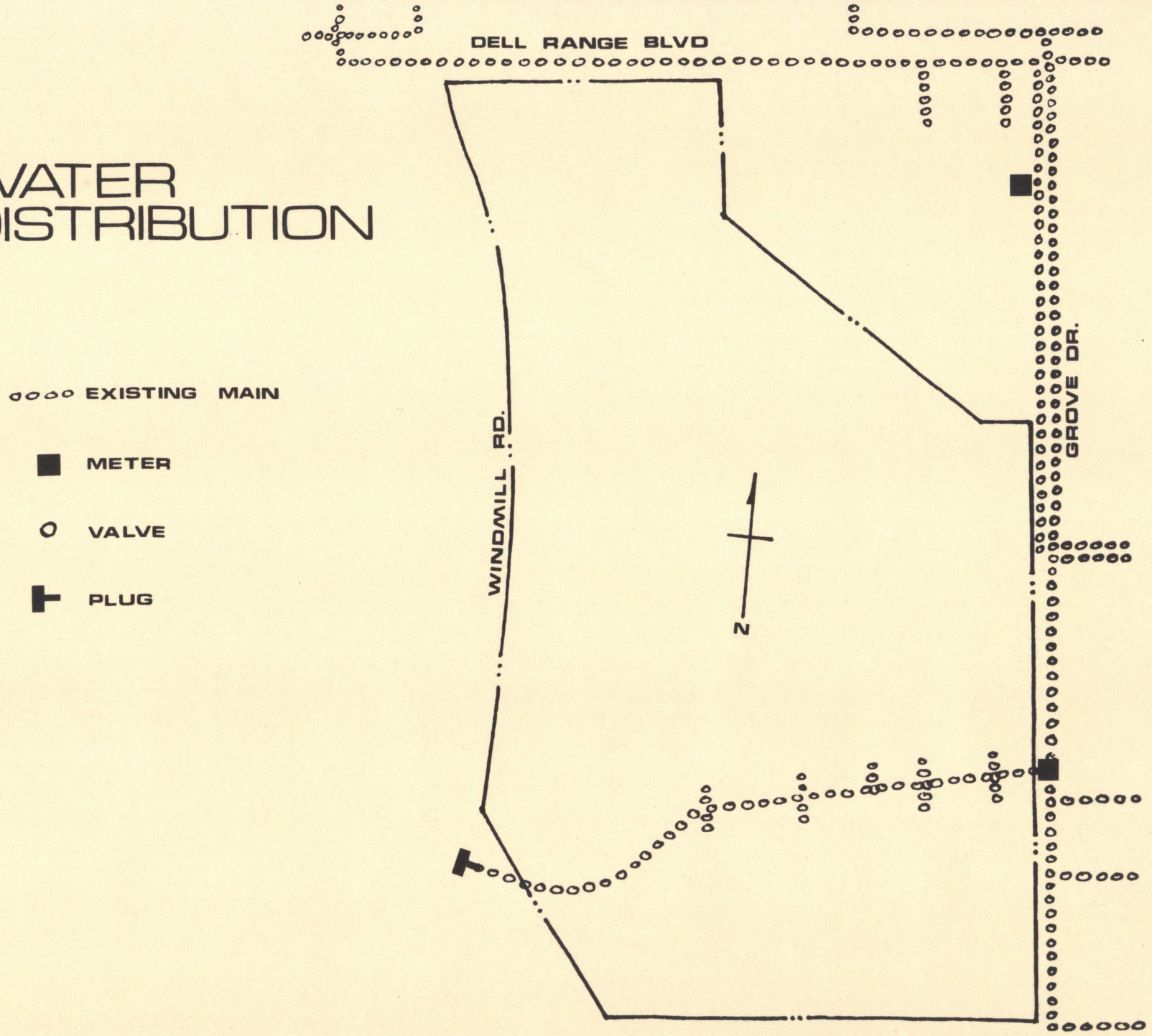
SUMMER BREEZES SSE



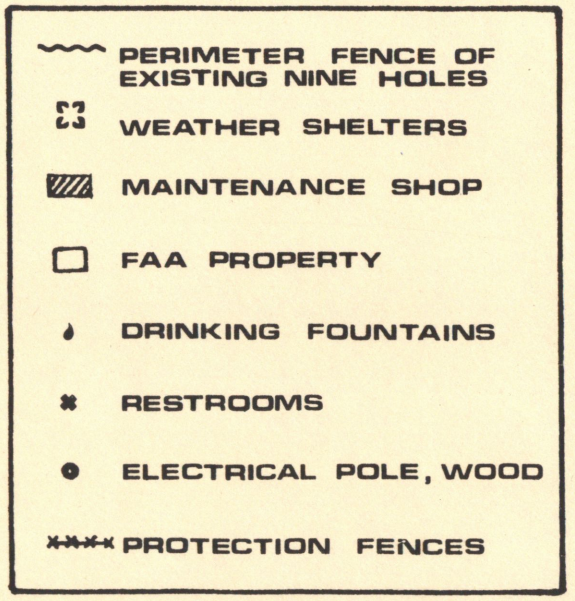
POWER

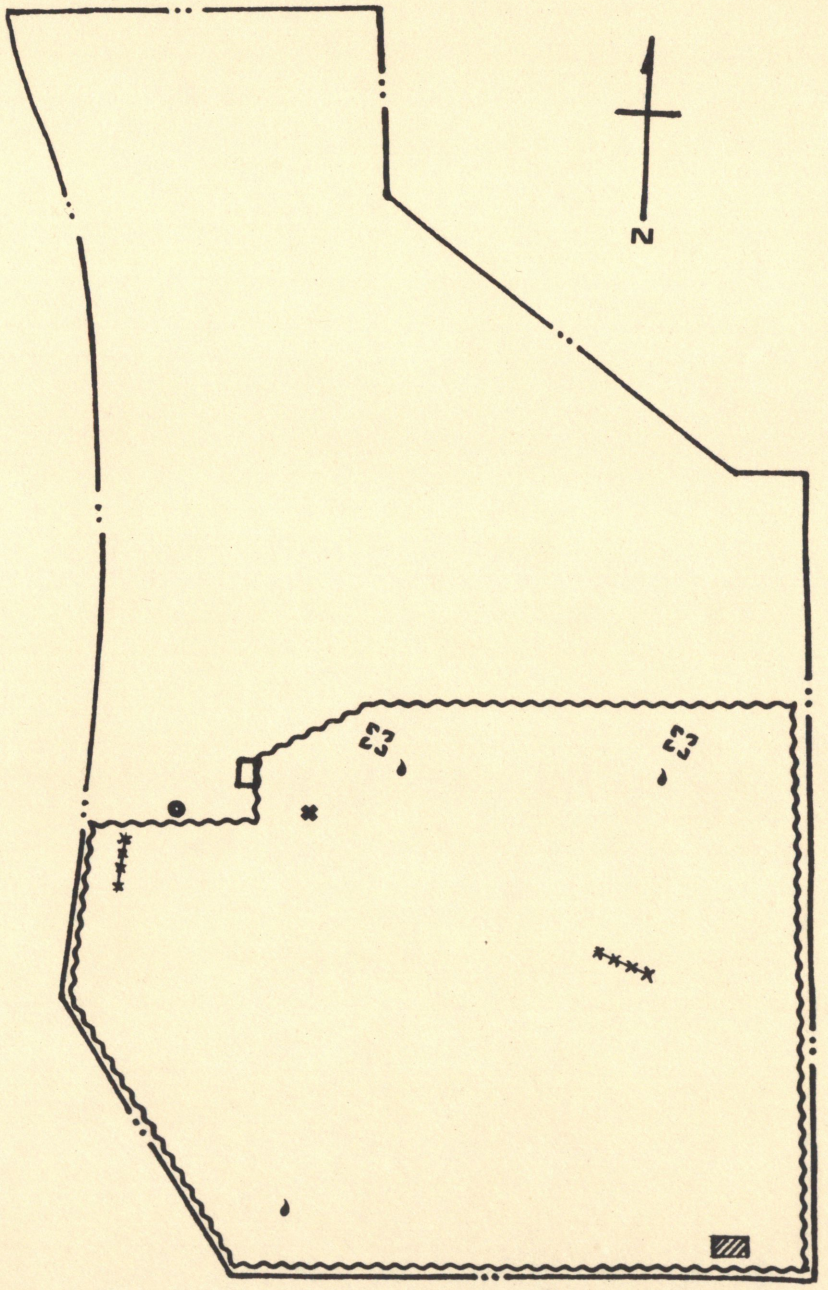


WATER DISTRIBUTION



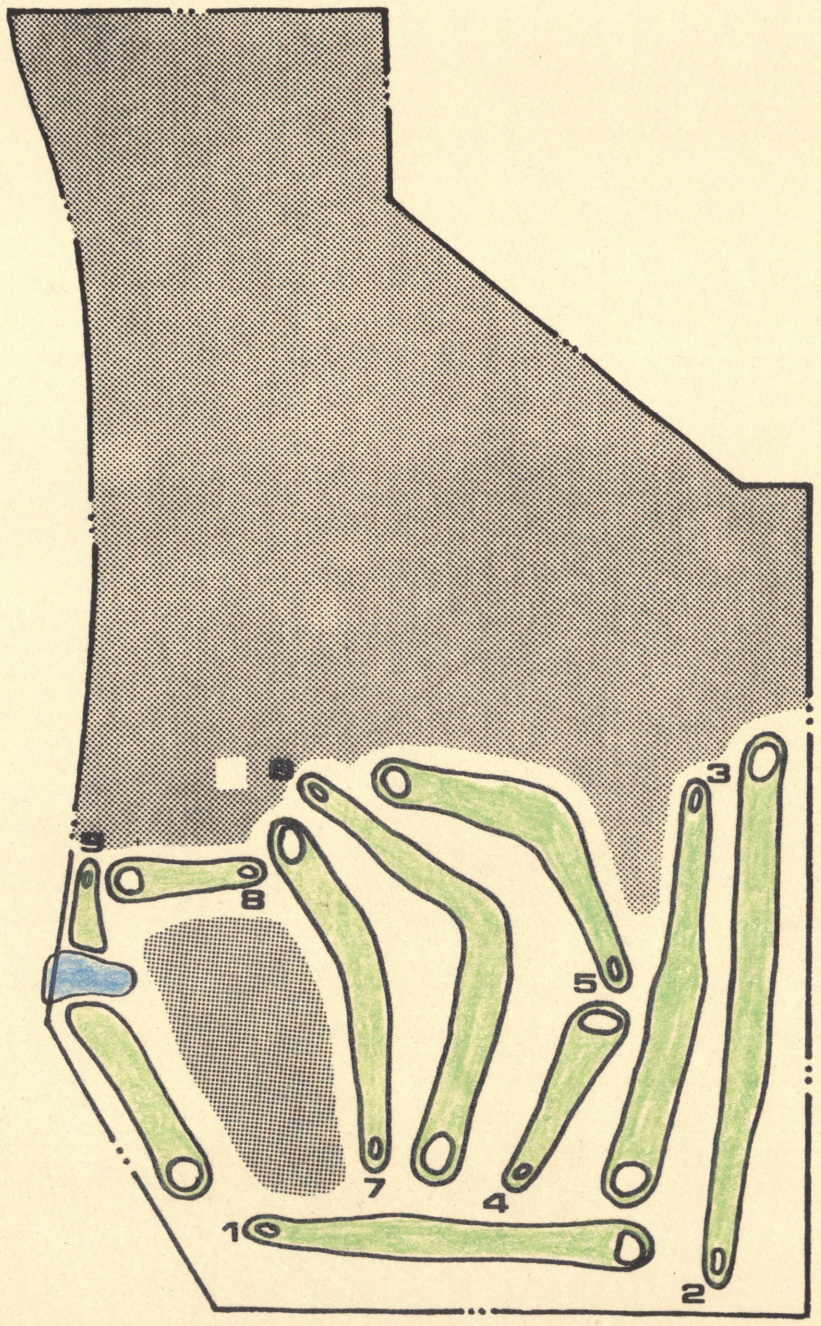
ARTIFICIAL HAZARDS



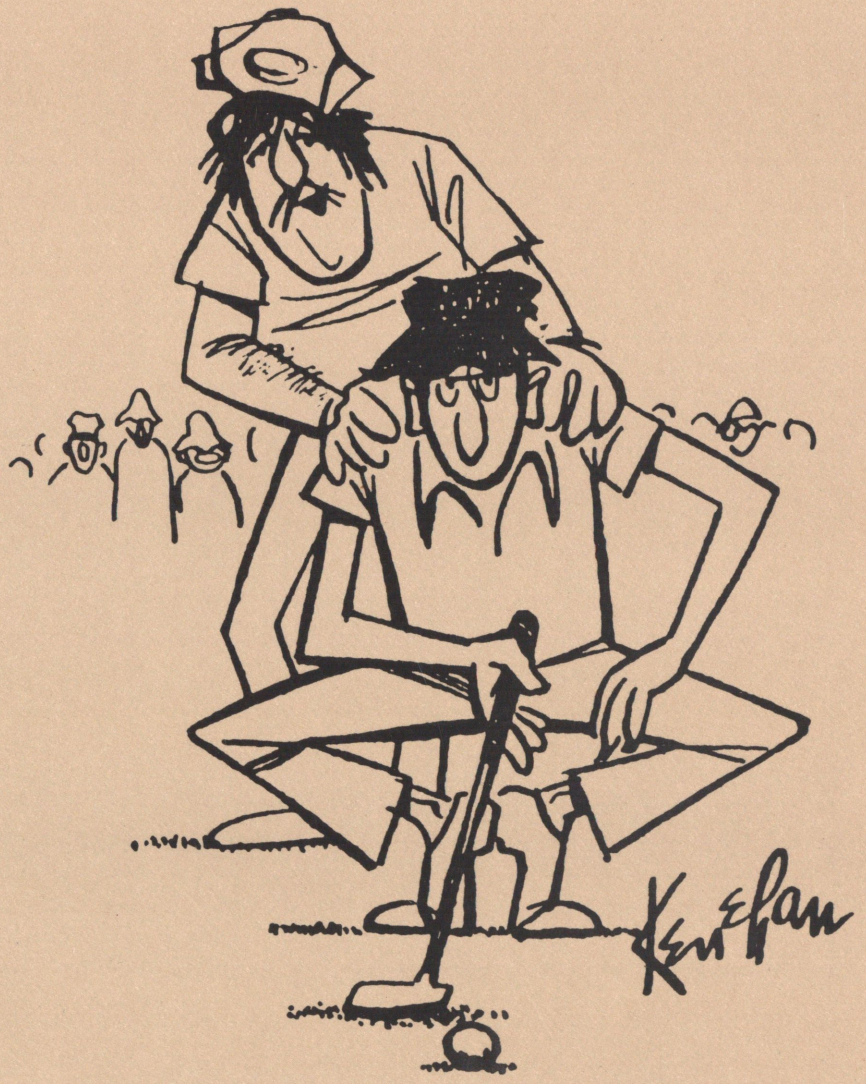


EXISTING NINE HOLE GOLF COURSE

BUILDABLE AREA FOR ADDITIONAL NINE HOLES



SITE



"You gotta be kiddin'. You compare her to the blonde in red?"
GOLF DIGEST 83

CODES

ZONING CODES

Project: Clubhouse/Golf Course
Location: Cheyenne, Wyoming

Zone	G-1
Use	Golf Clubhouse and Course
Permitted	Yes (existing use)
Lot Area	5000 SQ. FT.
Lot Width	50 FT.
Lot Coverage	No Requirement
Yards	
Front	10 Feet
Rear	10 Feet
Side	8 Feet Minimum Require
Building Height	No Requirement
Off Street Parking	Yes
Screening Required	Yes
Landscaping	
Required Yards	No Requirement
Number of Parking Spaces	
Required	1 per 120 SQ. FT. Gross Floor Area
Number of HC Spaces	
Required	No Requirement
Size of HC Spaces	10 FT. X 20 FT.
Compact Sizes Allowed	Yes
Number	20% of Total # Spaces
Off-Street Loading Required	No Requirement
Number	No Requirement

BUILDING CODE SEARCH

Project: Clubhouse
Location: Cheyenne, Wyoming

Required Codes

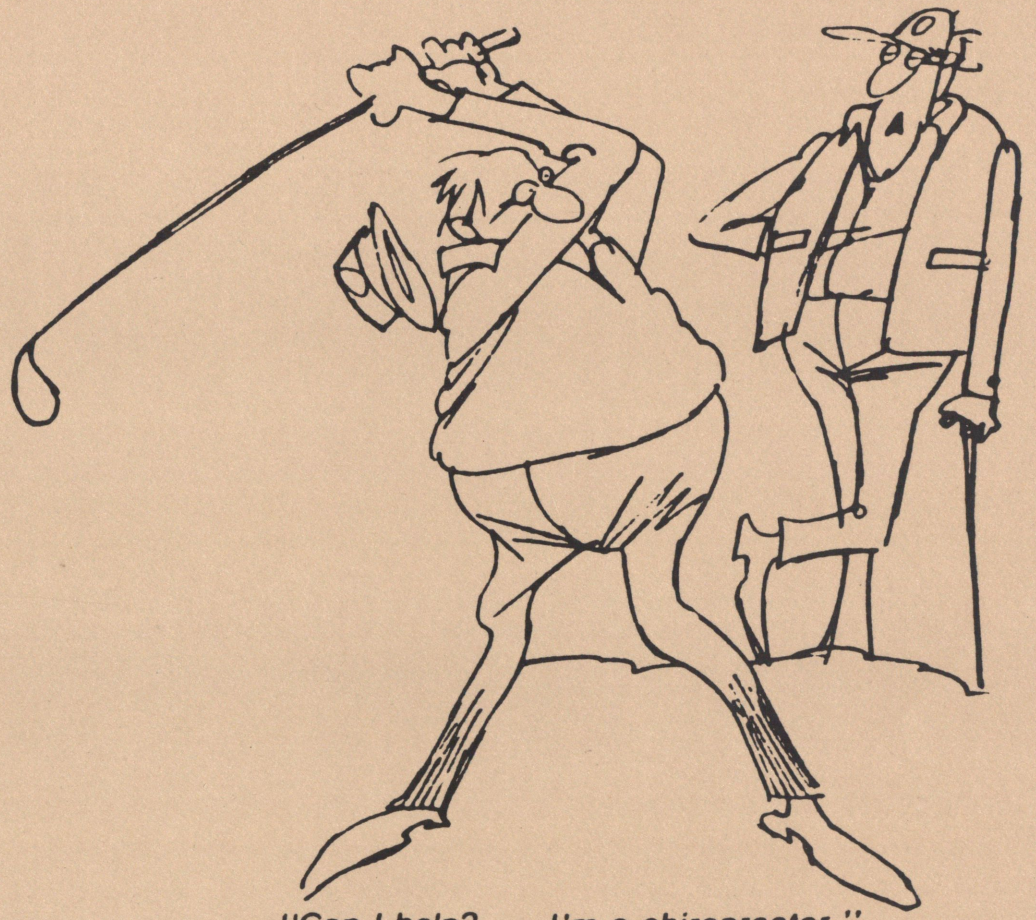
Building	UBC & Cheyenne Supplement
Fire	UFC
Mechanical	UMC
Plumbing	UPC
Electrical	NEC
Energy	
Barrier Free	

Occupancy Group(s)	>A Div. 3
Fire Resistance of Exterior Walls	>2 hours less than 5′, 1 hour less than 40′
Openings in Exterior Walls	>Not permitted less than 5 ft. protected less than 10 ft.
Occupancy Separation(s)	>NA
Construction Type	>5, one hour
Allowable Floor Area	>21,000 for two story bldg.
Area Separation Wall Required	>NA
Maximum Building Height	
Stories	>2
Fire Resistive Requirements	
Exterior Walls	>1 HR
Interior Walls	>1
Partitions	>1
Structural Frame	>1
Shafts	>1
Floors	>1
Roofs	>1

Parapet Required	>No
Roof Construction and Covering	
Class (UBC, UL, FM)	>C
Exits	
Use: Dining	
Occupant Load Factor	>15
Square Footage	>1200
Occupant Load	>80
# Of Exits Required	>2
Total Width of Required Exits	>1.6
Use: Lounges	
Occupant Load Factor	>15
Square Footage	>1125
Occupant Load	>75
# Of Exits Required	>3
Total Width of Required Exits	>1.5
Use: Kitchen	
Occupant Load Factor	>200
Square Footage	>600
Occupant Load	>3
# Of Exits Required	>1
Total Width of Required Exits	>.06
Use: Locker Rooms	
Occupant Load Factor	>50
Square Footage	>2150
Occupant Load	>43
# Of Exits Required	>2
Total Width of Required Exits	>.86

Use: Sales Rooms	
Occupant Load Factor	>50
Square Footage	>800
Occupant Load	>16
# Of Exits Required	>1
Total Width of Required Exits	>.32
Use: Others	
Occupant Load Factor	>50
Square Footage	>6125
Occupant Load	>122.5
# Of Exits Required	>2
Total Width of Required Exits	>2.45
Number of Exits Required	
From Second Floor	>3
Distance Between Exits	>Distance not less than one-half of the length of the maximum overall diagonal dimension of the building or area
Distance to Exits	>Not to exceed 150 feet
Doors	
Swing out required	>Yes
Special hardware required	>No
Corridors	
Width	>No less than 44 inches
Heighth	>Not less than 7 feet
Construction	>1 hour or more fire resistant
Openings	>Smoke & draft control assembly, with fire rating not less than 20 minutes

Stairs	
Width	>No less than 44 inches
Rise and Run	>Rise not less than 4 inches or greater than 7 inches
	>Run no less than 11 inches
Handrails	>Each side
Roof Stair Required	>No
Special Exit Requirements	>No
Sprinklers Required	>No
Flame Spread Requirement	
Stairs	>Class II
Corridors	>Class II
Rooms	>Class III



"Can I help? . . . I'm a chiropractor."
GOLF DIGEST 82

GLOSSARY

GLOSSARY

>**Ace:** A hole completed in one stroke.
>**Address:** The process that the player goes through in positioning himself and the golf club for the stroke.
>**Approach shot:** A full stroke played to the putting green, usually made with a medium or short iron.
>**Apron:** The fringe grass around the green, not as short as the green but usually shorter than the fairway. Sometimes called "froghair."
>**Away:** The ball deemed farthest from the hole and to be played first.
>**Back nine:** Holes 10 through 18 on the golf course.
>**Best ball:** A type of play in which the lower score of either of two partners is counted in the match.

>**Birdie:** One stroke less than the par for the hole.
>**Bite:** Backspin imparted to the ball which makes it stop abruptly.
>**Bogey:** One stroke more than the par of the hole.
>**Break of green:** The slant or the slope of the green, sometimes called "barrow," when considering the amount of break to allow.
>**Bunker:** A hazard in the fairway, rough, or near the green which may take the form of a mound or depression and can be filled with grass or sand. The term is often used synonymously with sand trap.
>**Caddy:** A person who carries a player's clubs and otherwise assists him in play in accordance with the rules.
>**Callaway system:** A method of handicapping players who have no established handicaps by applying the score the player has just made to a pre-determined formula. Used particularly in one-day outings for infrequent golfers.

>Carry: The distance that a ball travels in the air before striking the ground.

>Casual water: A temporary accumulation of water which is not meant to be played as a hazard.

>Chip shot: A short and usually low trajectory shot played to the green.

>Closed clubface: One in which the face of the golf club points to the left of the intended line of flight.

>Closed stance: A position of the feet in which the right foot is withdrawn from an imaginary line across the toes that runs parallel to the line of flight.

>Cocked: A position of the wrists in which the left wrist is laterally flexed (toward thumb side) and the right wrist is dorsally hinged (back of hand toward forearm).

>Divot: A piece of sod taken from the ground by the player's stroke that should be replaced or stamped down.

>Dog leg: A bend in the fairway which crooks similarly to the hind leg of a dog.

>Dormie: A player or side which is ahead in the match by as many holes as there left to play. Used only in match play competition.

>Double bogie: Two over the par for the hole.

>Double eagle: Three under the par for the hole, or most commonly, a score of two on a par five hole.

>Down: The number of holes or strokes that a player is behind his opponent.

>Draw: A shot which curves slightly from the right to the left; slight hook.

>Driver: The 1 wood club that is most often used from the teeing area.

>Driving Range: Designated area for practice. Irons and woods are used but putters are never used.

>Dub: A poor golfer or a poorly hit shot.

>Duffer: A player with poor skills.

>Eagle: Two strokes under the par for the hole.

>**Explosion shot:** A forceful shot made in a sand trap which displaces a large amount of sand and forces the ball upward out of the trap.

>**Fade:** A shot which curves slightly in flight from the left to the right.

>**Fairway:** That portion of grass between the tee and green which is kept well-mowed so as to provide the ball a good lie.

>**Fat shot:** A swing in which the clubhead strikes the ground before the ball and thereby decreases the distance of the shot.

>**Flag or flagstick:** A marker placed on the green indicating the location of the cup.

>**Flat swing:** A technique of swinging which employs a less vertical and more horizontal swing than normal. The backswing may stay below shoulder level.

>**Flight:** The path that the ball takes in the air; or a division of players in a tournament according to playing ability.

>**Follow through:** The remainder of the swing after the ball has been hit.

>**Fore!:** A warning cry to anyone who stands in danger of being hit by a ball.

>**Foursome:** Four players playing together in a group. It technically means two players playing against two others, but with each side playing only one ball between them, hitting alternate shots.

>**Front nine:** Holes 1 through 9 on the golf course.

>**Grain:** The direction which the grass grows and lies on the putting green. It can have a marked effect on both the break and distance allowed for in a putt.

>**Gross score:** The actual number of strokes a player has taken before his handicap is deducted.

>**Halved:** A hole which each player or side has played in the same number of strokes. It means a tie, or 1/2 a hole for one side and 1/2 a hole for the other.

>**Handicap:** A rating of the player's ability relative to shooting par. Used to equalize competition between players of unequal ability.

>**Hazard:** In general use, any natural obstacles on the course, such as trees, ponds, ditches, bunkers, etc.; but more specifically, by rule, bunkers and water hazards.

>**Heeled shot:** A shot hit near or off the portion of the club which attaches to the shaft.

>**Hole high:** Ball which has come to rest even with the hole but off to one side.

>**Hole out:** To complete the play of the hole by hitting the ball into the cup.

>**Honor:** The right to drive or play first from the teeing ground. Determined by the lowest score on the previous hole, or on the first tee by a flip of a coin.

>**Hook:** A golf shot which curves from right to left. A "duck hook" or "smothered hook" would be one that is particularly low to the ground and curves sharply to the left.

>**Lie:** The position in which the ball has come to rest on the ground; or the angle that the shaft makes with the ground when the club is properly soled.

>**Links:** Originally a seaside golf course but now and course.

>**Loft of the club:** The amount or degree of pitch which is built into the clubface.

>**Loose impediments:** Natural objects which are not fixed or growing, such as twigs, loose rocks, pine cones, leaves.

>**Match play:** A form of golf competition in which each hole is a separate contest. The winner is determined by holes won rather than total score.

>**Medal play or stroke play:** A form of golf competition in which the winner is determined by the lowest score for the round. The rules of golf differ slightly between match and medal play.

>**Medalist:** The player who has shot the lowest qualifying round for a tournament. Also the player with the lowest score in a team match.

>Mixed foursome: A group of four players made up of two men and two women.

>Mulligan: The common but illegal practice of driving an extra ball on the first hole in the event that the original ball was not to the player's liking.

>Nassau: A method of scoring a match based upon the allowance of three points: one for the winner of each nine and one for the winner of the total eighteen holes.

>Net score: A player's score after having subtracted his handicap from his gross, or actual, score.

>Obstruction: Anything artificial or man-made, whether erected, placed, or left on the course except objects defining the course boundaries such as stakes, fences, or walls; also artificially constructed roadways or pathways.

>Open tournament: One in which both professionals and amateurs can compete together.

>Open stance: A position of the feet in which the left foot is withdrawn from an imaginary line across the toes which runs parallel to the line of flight.

>Out-of-bounds: Any area outside the boundaries of the course as defined by the white stakes or some other designated marker.

>Par: A theoretical score representing a standard of excellence based upon the length of the hole and allowing for two putts.

>Penalty stroke: A stroke added to a player's score for an infraction of the rules.

>Pitch shot: A short lofted shot made with the intention of getting the ball onto the green.

>Press: To attempt to hit the ball harder than usual; or to double a previously made bet in a game for stakes by initiating a new and second game from the time of the press to the end of the nine holes being played.

>Provisional ball: An extra ball that is hit after the player feels that his original ball may be lost or out-of-bounds.

>Pulled shot: Shot which travels to the left of the intended line.

>**Pushed shot:** Shot which travels to the right of the intended line.
>**Rough:** The long grass and other vegetation that borders the fairway and surrounds the green.
>**Rub-of-the-green:** The occurrence of a ball that is in motion being stopped or deflected by an outside agency.
>**Sand trap:** See Bunker
>**Sand wedge:** A club with a heavy wide sole that is designated principally to be used in sand traps.
>**Sclaffing:** Hitting the ground with the club before making contact with the ball. (Same as hitting the ball "fat.")
>**Scotch foursome:** Four players divided into two teams, each team playing one ball, each partner hitting alternate shots.
>**Scrambler:** A player who shows exceptional skill around the greens after demonstrating loose play in getting there.
>**Scratch player:** A player who plays consistently around par and has a handicap of zero.
>**Shanking:** Hitting the ball with the neck (hosel) of the club and making it travel in an oblique direction to the right.
>**Short game:** Shots to the green within a certain yardage. This yardage depends on the golfers view. Usually with irons 7 through the pitching wedge.
>**Skying:** Hitting the ball high in the air but only a short distance when it was intended to travel much farther.
>**Slice:** A golf shot which curves from left to right.
>**Sole:** The bottom of the clubhead in the act of resting the bottom of the clubhead on the ground at address.
>**Square stance:** A stance in which a line drawn from the toe of the right foot to the toe of the left foot runs parallel to the line of flight.
>**Stance:** The position of the feet and body when a player addresses the ball.
>**Starter's shack:** Building used to control play of golfers from #1 and/or #10 tees.

>**Summer rules:** The regular playing rules of golf which do not allow a player to improve the lie of the ball except under special conditions.

>**Tee:** The wooden or plastic peg on which the ball is placed at the start of a hole, or the area from which the player starts the play of a hole, more correctly called the "teeing ground."

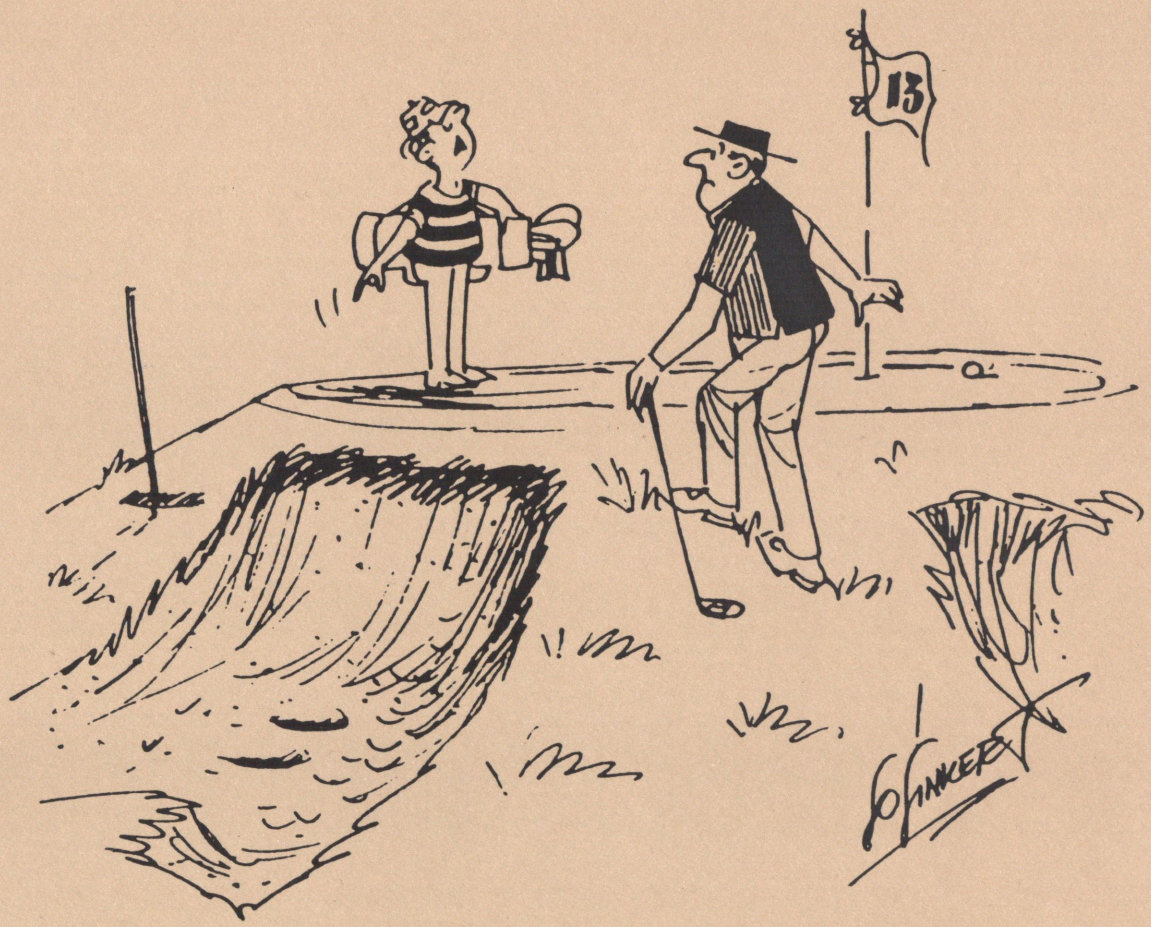
>**Tee markers:** The markers placed on the teeing ground which designate the point from which play of the hole begins.

>**Through the green:** All of the area on the course with the exception of the teeing ground, the green, and any hazard.

>**Toed shot:** A shot which is struck on or near the toe of the club.

>**Topped shot:** A rolling or low bounding shot which is caused by striking the ball above its center of gravity.

>**Winter rules:** A condition under which the course is not in top playable condition and the players are allowed to improve the lie of their ball.



"Just a point of etiquette, Reverend—you're supposed to rake out those kneeprints."

GOLF DIGEST 82

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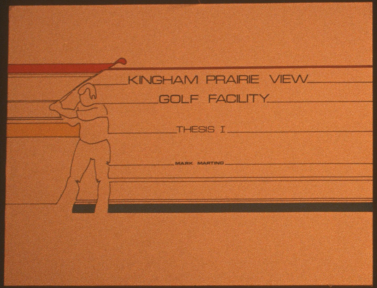


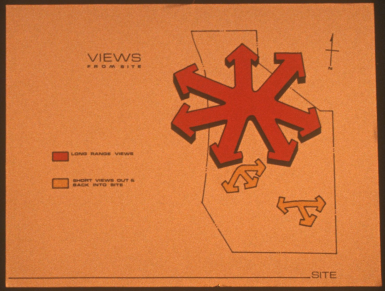


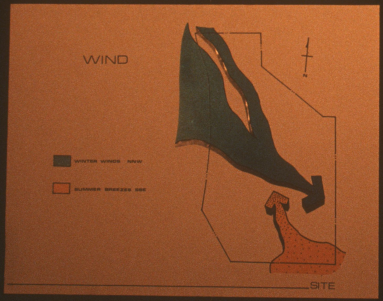


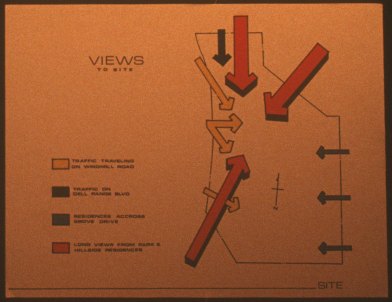

BELL RANGE BLVD
N
WRIGHT RD
COURSE LAYOUT #1
PLAYING RANGE
INCONVENIENTS
TREES

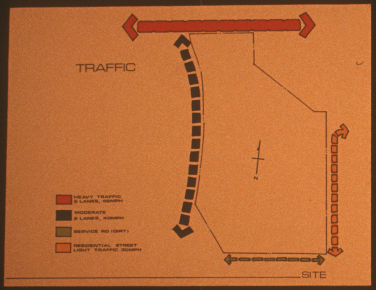

BELL RANGE BLVD
N
WRIGHT RD
COURSE LAYOUT #2
SAND
PRO SHOP LOCATION

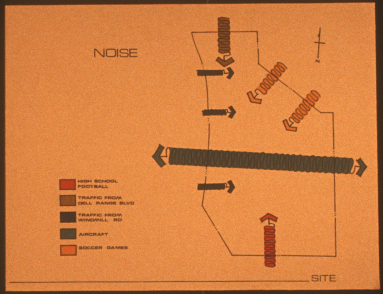

KINGHAM PRAIRIE VIEW
GOLF FACILITY
THESIS I
MARK MARTINO

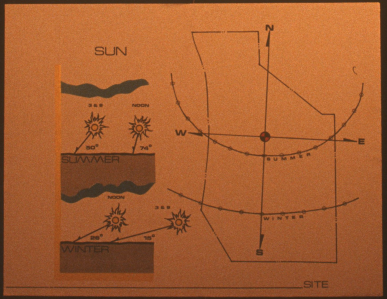

VIEWS
FROM SITE
LONG RANGE VIEWS
SHORT VIEWS OUT & BACK INTO SITE
SITE


WIND
WINTER WINDS NNW
SUMMER BREEZES SSE
SITE


VIEWS
TO SITE
TRAFFIC TRAVELING ON WINDMILL ROAD
TRAFFIC ON DELL RANGE BLVD
RESIDENCES ACCROSS GROVE DRIVE
LONG VIEWS FROM RARK & HILLSIDE RESIDENCES
SITE

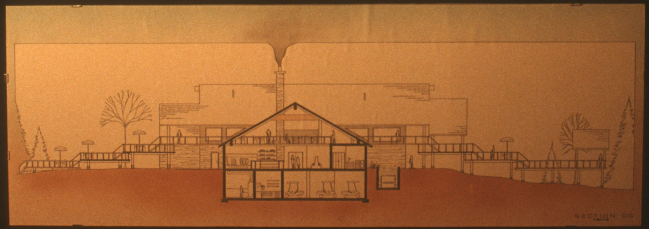

TRAFFIC
HEAVY TRAFFIC
6 LANES, 55MPH
MODERATE
4 LANES, 40MPH
SERVICE RD (ONE-WAY)
RESIDENTIAL STREET
LIGHT TRAFFIC 30MPH
SITE

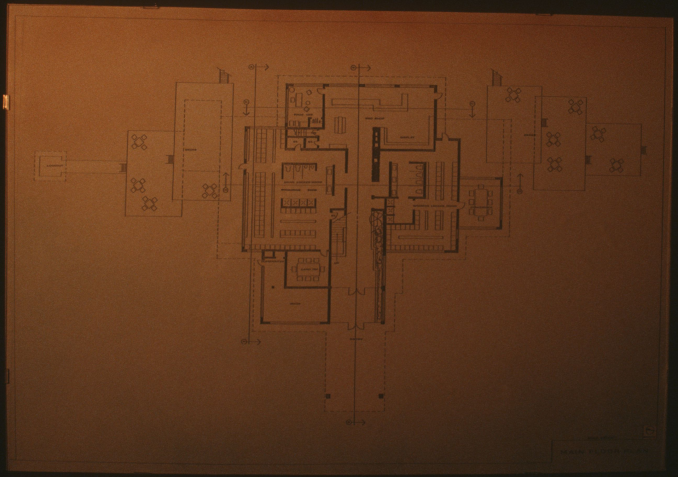

NOISE
HIGH SCHOOL
FOOTBALL
TRAFFIC FROM
DELL RANGE BLVD
TRAFFIC FROM
WINDMILL RD
AIRCRAFT
SOCCER GAMES
SITE

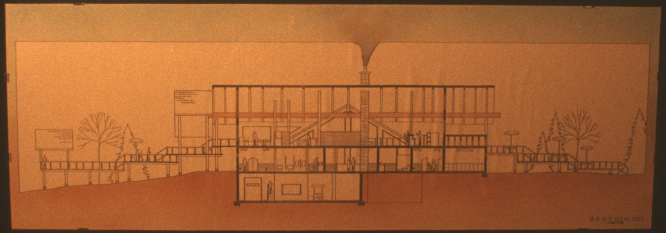

SUN
3:45
NOON
SUMMER
NOON
3:45
WINTER
N
W
E
S
SUMMER
WINTER
SITE

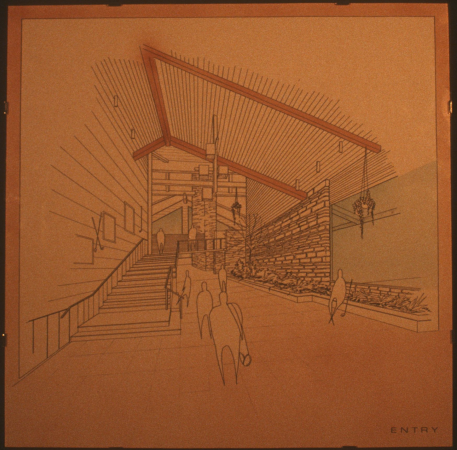

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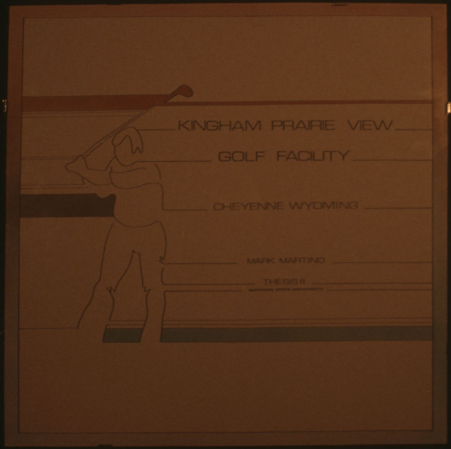

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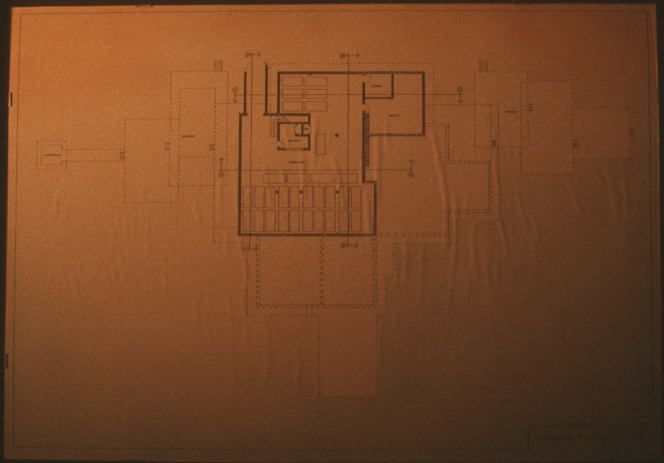


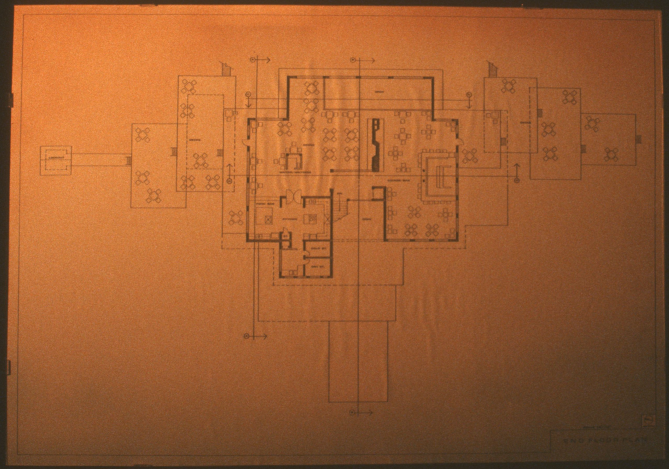



ENTRY


KINGHAM PRAIRIE VIEW
GOLF FACILITY
CHEYENNE WYOMING
MARK MARTINO
THESIS II


LOUNGE/BAR





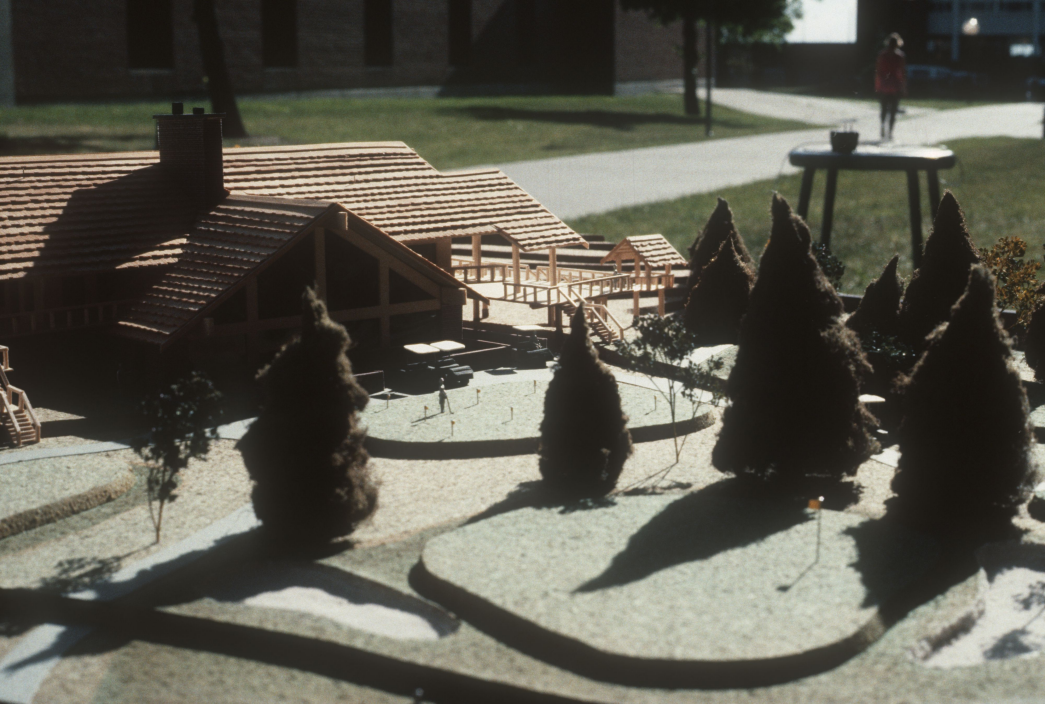


















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