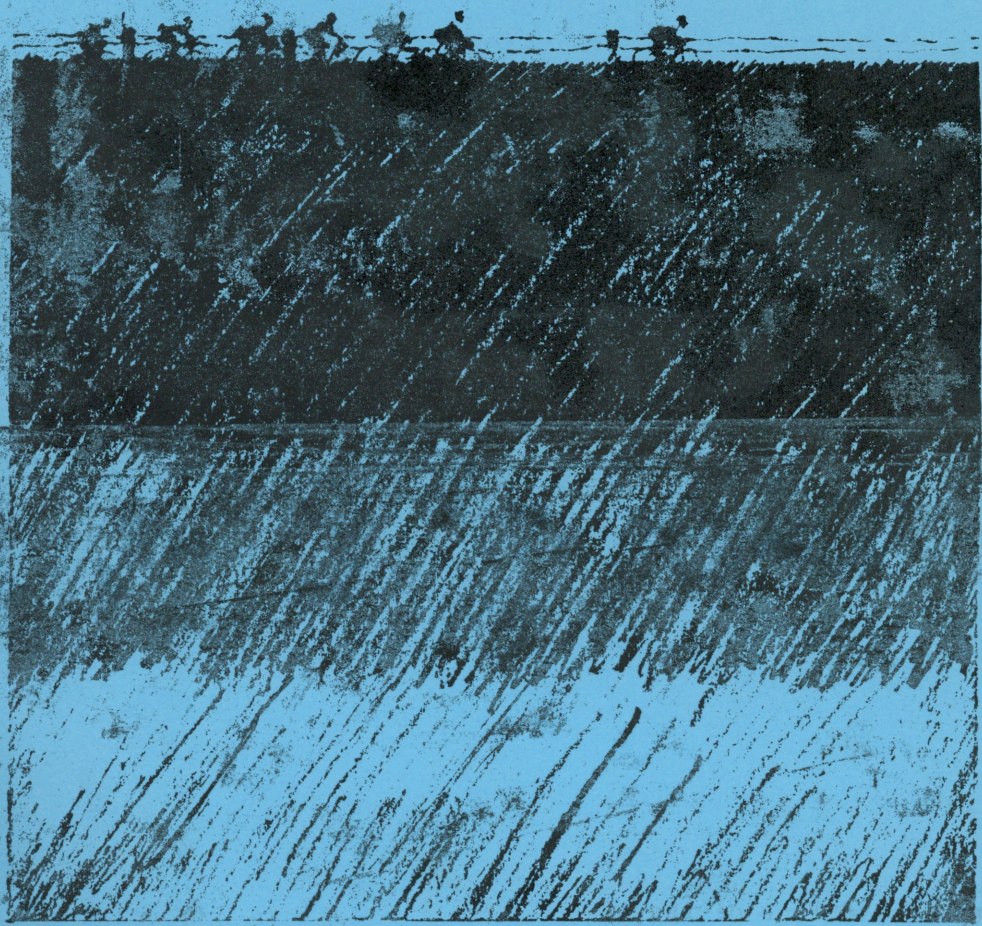




'a view from the drops'

Montana State University Library, Bozeman

The architecture of the Coors
International Bicycle Classic

The Architecture
of the Corps International Bicycle
Class

Submitted by

A professional paper submitted in partial
fulfillment of the requirements for the degree

Bachelor of Architecture

Approved

Advisor

Guest Coordinator

Director

College of Architecture

Louisiana State University
Baton Rouge, Louisiana

'and because it happens but briefly,
we celebrate'

The Architecture
of the Coors International Bicycle
Classic

by
Patrick L. Larum

A professional paper submitted in partial
fulfillment of the requirements for the degree

of
Bachelor of Architecture

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Thesis Coordinator

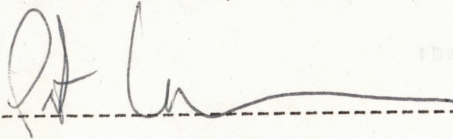
Director
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Montana State University
Bozeman, Montana

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Patrick L. Larum

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References cited in the preparation of this dissertation are not recognized except in specific instances. Please refer to the bibliography for a compendium of sources consulted.

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my parents...
they make me proud.

Full.



SPIRIT



"You wonder where the attraction lies? A heaving, colorful blur that passes so quickly. And yet they turn up each year: countless thousands, a human hedgerow lining the roads in northern France, Flanders and Wallonia. They witness the never-ending battles for cycling's classic prizes, pay homage to the men who punish themselves so and, by their roadside presence, form the background to cycling's classic landscapes.

Shuffled up in a jacket, windbreaker, or overcoat, their hands often concealed in pockets, they are to be seen everywhere. But it is the eyes which most distinguish cycling's roadside fraternity. A rider passes alone, in the lead, and the eyes of the spectators strain to recognize him, to find a name for the face. Heads move slightly forward to give the eyes a better chance. Ten seconds later, it is too late. He is gone, recognized or otherwise, never to be brought back.

Many clutch a morning newspaper, folded so that the quarter of the page carrying the riders' names and their numbers is right in front. The eyes jump from rider to page: "Ah, c'est Marc

Madiot." Conversation for future days:
"I was there when Madiot made his
attack. He was strong that day."

Cycling differs from most sports in
that its protagonists inspire reverence
in those on the roadsides. There are
good cyclists and better cyclists, even
a few great ones. Nobody is discouraged.
Indeed it is the way of the cycling
world that those most in need of support
are cheered most heartily. What other
sport has a 'lanterne rouge'?

If the severity of the game elevates
the racers in the eyes of those
watching, it also leaves its impact on
the sufferers themselves. It is not a
sport for the athlete whose ego seeks
more than an occasional embrace. When
setting out on a race as torturous as
Paris-Roubaix, the wheelman pays his
dues to Lady Luck, imploring her to
follow him on his journey. He hopes that
he will not flinch when his body begs
for compassion, and cherishes the notion
that he might make it to Roubaix first.

When, seven hours later, the
procession of exhausted bodies streams
into Roubaix it is again time for awe.
We are inspired by the gaunt and haunted
expressions on faces covered with pale
and sickly mud, dried and cracking. In a
fixed stare, men trying to shut out
everything from their minds except that
piece of road which offers the next
challenge.

At the finish, the confusion of the
race becomes the chaos of the post-race.
Only the riders can tell the story,
their contributions providing little
pieces to the giant tactical jigsaw. How
this one crashed at the wrong moment,



how another felt his reservoir of strength run dry twenty miles from the finish and how another had a puncture, or simply a bad day. It is a category of horrors, listed in a matter-of-fact sort of way.

The journalists converge. There are small huddles of conversation, with microphones gobbling up every word. It is cold. The journey has been long and the riders must scratch away the clay from their lips just to talk. But they do it willingly. They are professionals down to their toe clips, always prepared to answer questions. Journalists are part of the circus: peripheral but not unimportant. Sponsors must be placated.

Before Paris-Roubaix, the travelling circus had been through Flanders. In the early spring, the coloring in this region of Belgium is more gray than green. The Tour of Flanders is the country's one-day excursion into the sport's hell. Rain, mist, and chilling temperatures provide the most common backdrop. Short, steep, cobbled climbs are the swords which dissect the field.

So much in love with cycling, Flanderians would never want to miss their race. You see them mostly in the bars, an hour or so before the race momentarily fills their village. Old men recall old battles. It was tougher in their day. The rain, then, more persistent. The climbs, ah yes the climbs, they were steeper and the riders, they were tougher. Had to be. Is it not always so? The riders of today are good but not as hard as the men of the 1940's. Heroes of the 21st century will not be as good as those of today.



Their time will come.

And in that Belgian bar there will always be a television; beaming out the story of the race, telling of the great ones and their prospects. As the race gets closer, the cycling men leave their stools and take up their positions at the roadside. Trained eyes identify expertly the giants of the road. Prisoners in Flanders.

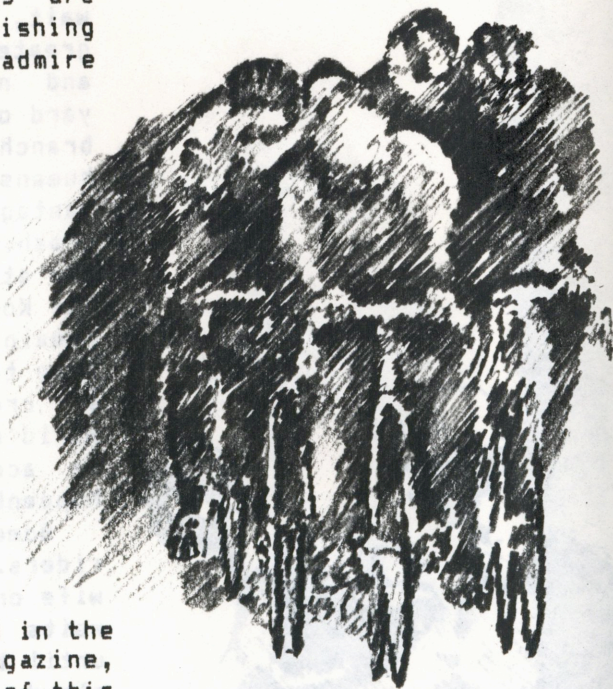
Further out in the country, the fans most sympathetic to the cyclist's life wait, most likely at the point of greatest severity. On the crazily steep and narrow Koppenberg they find every yard of standing space, clutching at branches, billboards, and even fellow humans, desperately trying to preserve a vantage point. They are waiting for a crash, wanting to stretch out and push the star. But knowing they shouldn't. On the Koppenberg the first ten racers may remain on their bikes; the rest will have to walk the steepest section. It is a cruel indignity for some of the world's greatest bike men but one that is accepted. Those who cluster on the Koppenberg are never disappointed.

Someone is willing to back all of the riders. For each domestique there is a wife or girlfriend, father or mother who waits at the roadside, who stands there until the clear day has disappeared in clouds and rain starts to fall. Later she will tell her loved one that she wanted to wait, had wanted to see him in the peloton, but the baby in her arms was getting wet and she had to go to the car. He will invariably say that there was nothing to see.

The racers will not unpack their



suitcases: hotel rooms are nothing more than overnight stopping points. The sun they encounter in Wallonia is a grim, if simultaneously pleasant reminder of what the summer will bring; long tours, big mountains, intense heat, and more suffering. But in those marathon tours there are some quiet days, moments when the body can rediscover its true self. The ones who command our attention, who bring the crowds out of houses, factories, cafes, bars, and schools are the survivors of a most punishing regime. We don't pity them. We admire them."



This article which appeared in the April 1986 edition of Winning magazine, perhaps best typifies the spirit of this elusive sport, professional cycling. The emotion, pain, and celebration are all very real. As real as the cyclists who compete. As real as the throngs of ardent spectators waiting for that fleeting glimpse. To capture this spirit provides a special challenge.

THE CLASSIC

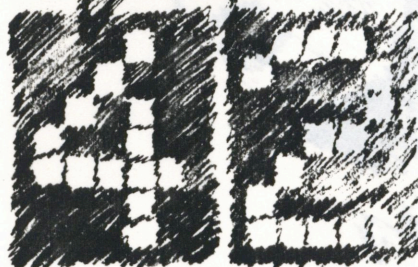
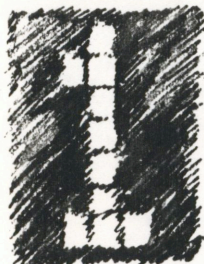


"Like a butterfly wearily emerging from its chrysalis, the Coors International Bicycle Classic is still in search of its true identity."

-John Wilcockson, editor
Winning Bicycle Racing
Illustrated



OFFICIEL



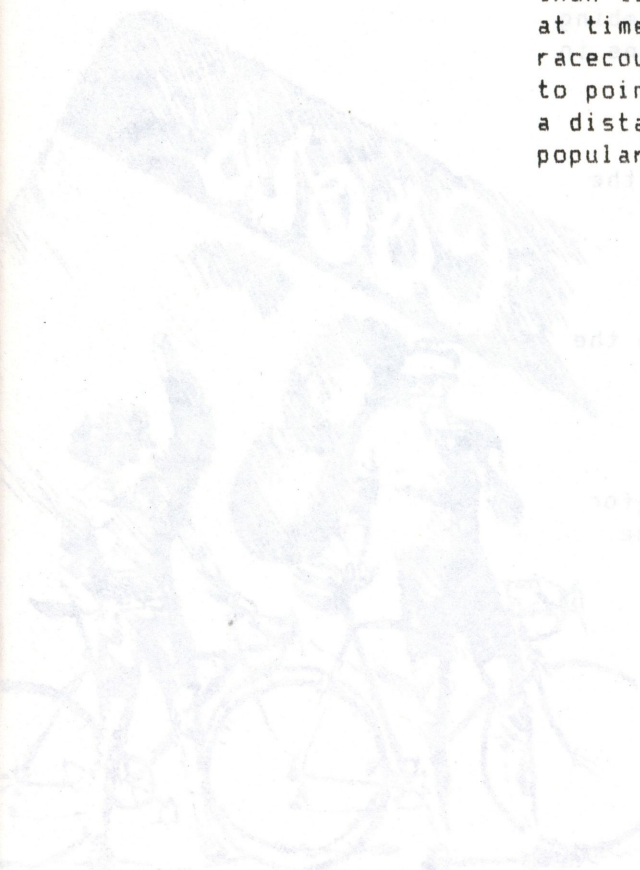
Most major cycling competitions utilize a format known as a 'stage race'. A stage race is simply a series of individual races consisting of time-trials, criteriums, and road races with each race giving individual riders an opportunity to demonstrate their particular strengths. To win a stage race, a cyclist needs only to accumulate the least total time from the individual events. The Tour de France is perhaps the world's most famous stage race covering some 3000 total miles in 27 days.

The primary element of a stage race is the road race. Usually covering 50 miles or more in length, the racecourse may consist of a circuit (lap), 'point to point', or an 'out and back' layout. Road races are sometimes difficult to hold in many places because government officials are reluctant to stop, reroute, or control traffic during a race. In

Europe however, towns make special bids to have a race pass through their villages because of the business it generates.

The criterium is usually the shortest, most dangerous of all cycling events. The race consists of a specified number of laps typically laid out on blocked-off streets in a town or village. This format offers spectators the best opportunity of watching most of the race and is particularly suited to American audiences.

The time-trial, or 'race of truth', is simply a race against the clock providing a sheer test of speed rather than tactics or techniques. Racers begin at timed one minute intervals on a racecourse which is typically a 'point to point' or 'out and back' layout with a distance of 25 miles being most popular.



The Coors International Bicycle Classic is perhaps one of the most significant non-stadium sporting events in North America. A stage race beginning as the 'Red Zinger' in 1975, the Classic has grown from a \$15,000, two day, local amateur race, to the most prestigious professional cycling event in the United States. Its statistics are impressive:

- \$1 million race budget (1985)
- 350,000 spectators
- \$100,000 prizelist
- \$100,000 airfare bill
- \$10 million insurance policy
- 1000 miles of racing in three states
- over 50,000 feet of climbing
- 75 cars, wagons, and vans in the race entourage
- 50 road and special use permits
- 200 police assigned to the race
- 1000 total police personnel-hours for planning
- 660 people traveling in the race entourage
- 75 race marshalls, 300 supplementary volunteers
- 7000 bed nights booked for the entourage during the Classic



scenario

the adopt cars company recognizes the economic benefits of sponsoring an event such as the cars classic. in order to firmly establish the classic into a world class competition & to permanently confirm its existence, the sponsors desire to reinforce the dynamic image of competitive cycling with an equally convincing architectural response. a response of both place & image.

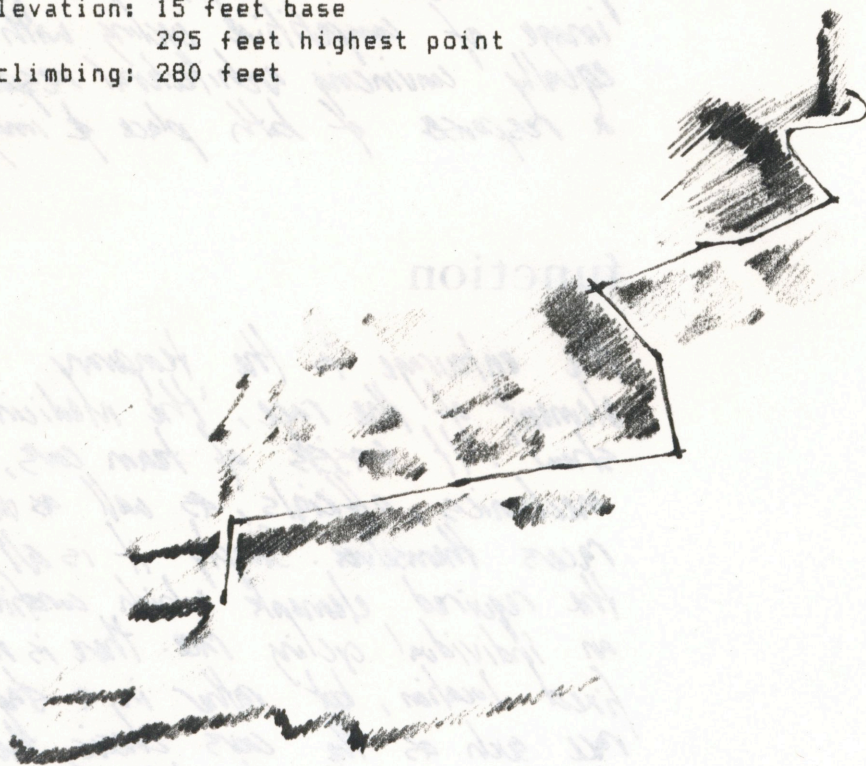
function

the entourage is the temporary element of the race, 'the medicine show'. It consists of team cars, mechanics, officials, as well as the racers themselves. Simply it is all the required elements which constitute an individual cycling race. There is no fixed location, but rather in a stage race such as the cars classic the races are held at different venues each day, so the entourage is constantly travelling from place to place.

s t a g e o n e

Fisherman's Wharf
Prologue Time-Trial

type: 1.05 mile time-trial
San Francisco, Ca.
environment: urban
start: Pier 45, Fisherman's Wharf
10:00 am
finish: Coit Tower, Telegraph Hill
approximately 11:45 am
elevation: 15 feet base
295 feet highest point
total climbing: 280 feet



day 1

stage two

San Francisco

Fisherman's Wharf Criterium

type: 45 lap criterium

.88 miles per lap

San Francisco, Ca.

environment: urban

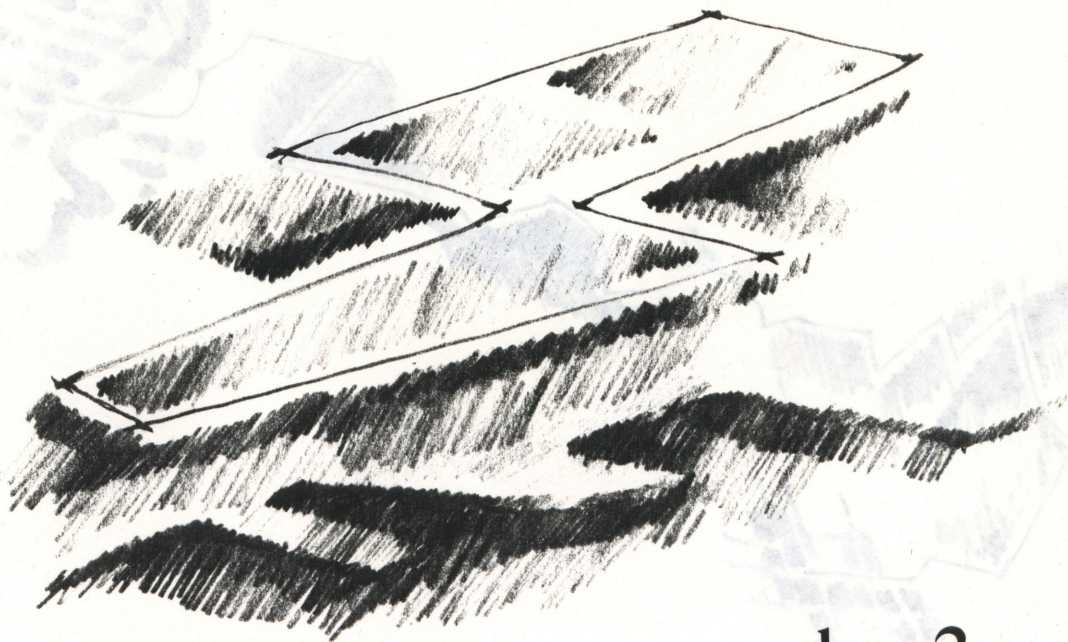
start: Embarcadero St.,
Fisherman's Wharf

10:00 am

finish: approximately 11:30 am

elevation: 15 feet

total climbing: flat course



day 2

s t a g e t h r e e

Sonoma to Sacramento
Road Race

type: 102 mile road race

Sonoma, Ca. to Sacramento, Ca.

environment: rural to urban

start: The Plaza, Sonoma

9:00 am

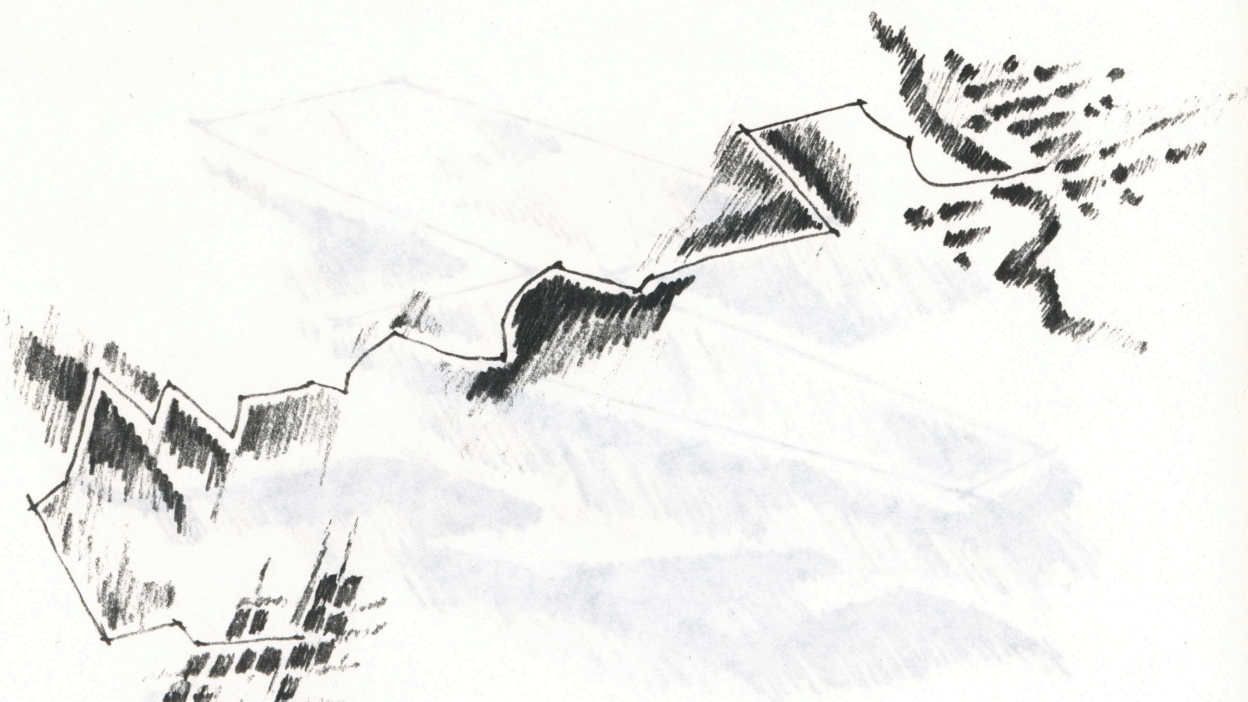
finish: 6th and Capitol Mall,
Sacramento

approximately 12:45 pm

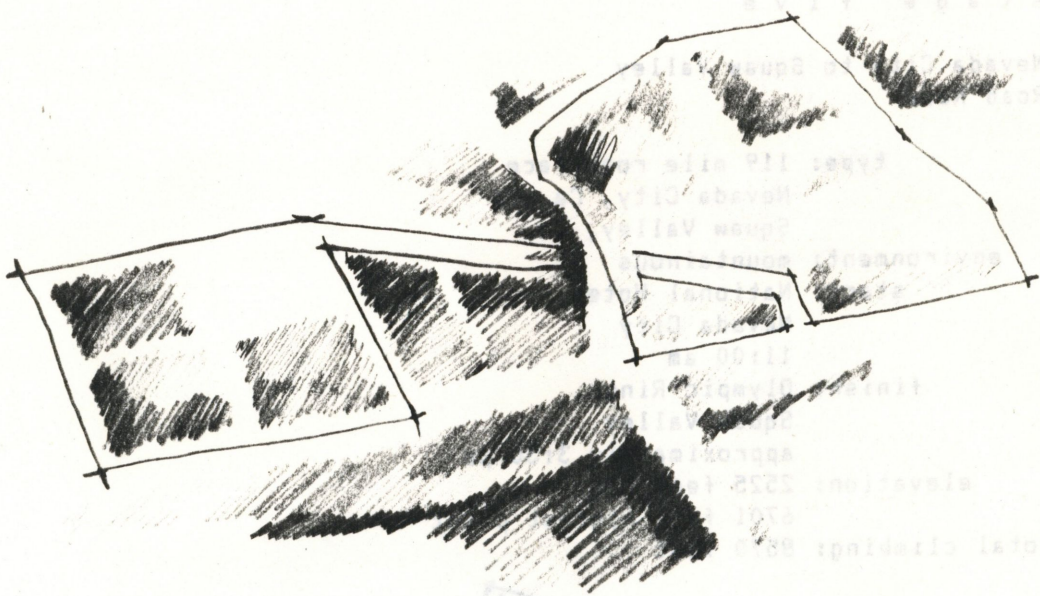
elevation: 60 feet base

1785 feet highest point

total climbing: 3700 feet



day 3



s t a g e f o u r

Old Sacramento
Criterium

type: 25 lap criterium
1.4 miles per lap
Sacramento, Ca.

environment: urban

start: 2nd St., Old Sacramento
6:30 pm

finish: approximately 7:45 pm

elevation: 60 feet

total climbing: flat course

day 3

s t a g e f i v e

Nevada City to Squaw Valley
Road Race

type: 119 mile road race
Nevada City, Ca. to
Squaw Valley, Ca.

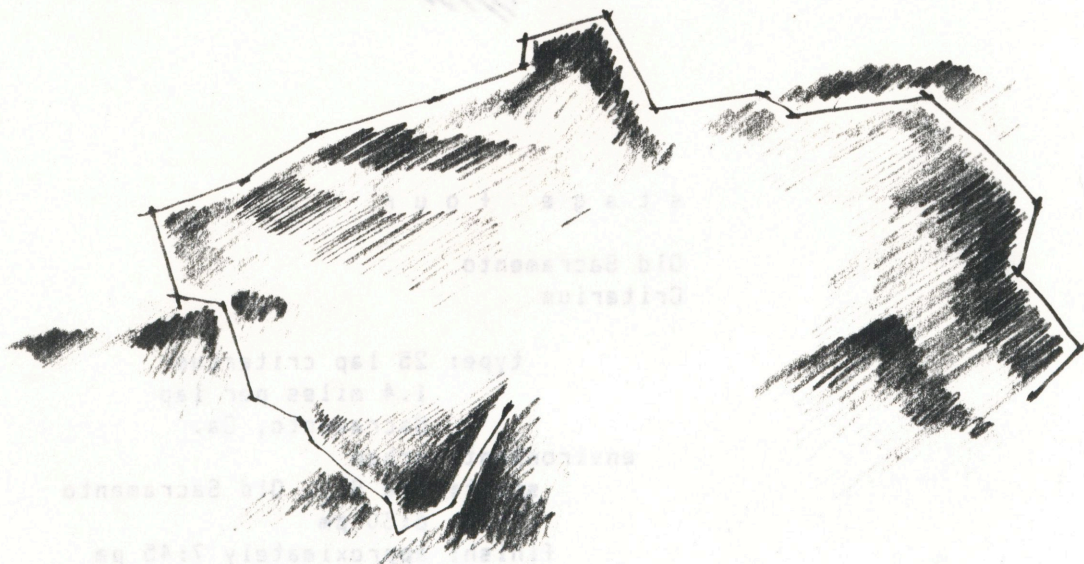
environment: mountainous

start: National Hotel,
Nevada City
11:00 am

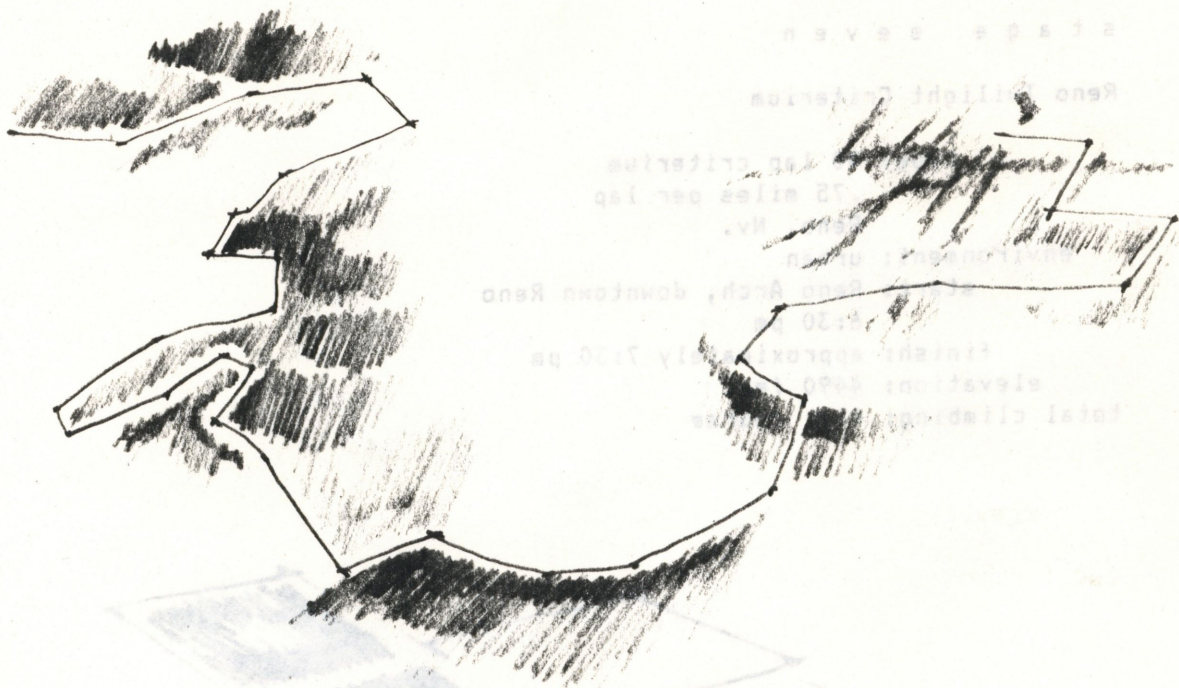
finish: Olympic Rings,
Squaw Valley
approximately 3:30 pm

elevation: 2525 feet base
6701 feet highest point

total climbing: 8570 feet



day 4



stage six

Squaw Valley to Reno
Road Race

type: 99.5 mile road race
Squaw Valley, Ca. to
Reno, Nv.

environment: mountainous

start: Olympic Rings,
Squaw Valley
9:30 am

finish: the Arch, Reno
approximately 1:00 pm

elevation: 6200 feet base
7179 feet highest point

total climbing: 4520 feet

day 5

s t a g e s e v e n

Reno Twilight Criterium

type: 40 lap criterium
.75 miles per lap
Reno, Nv.

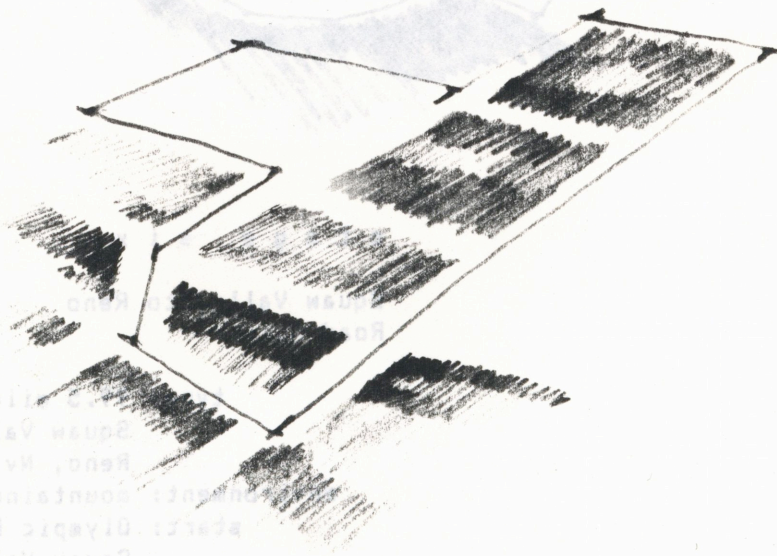
environment: urban

start: Reno Arch, downtown Reno
6:30 pm

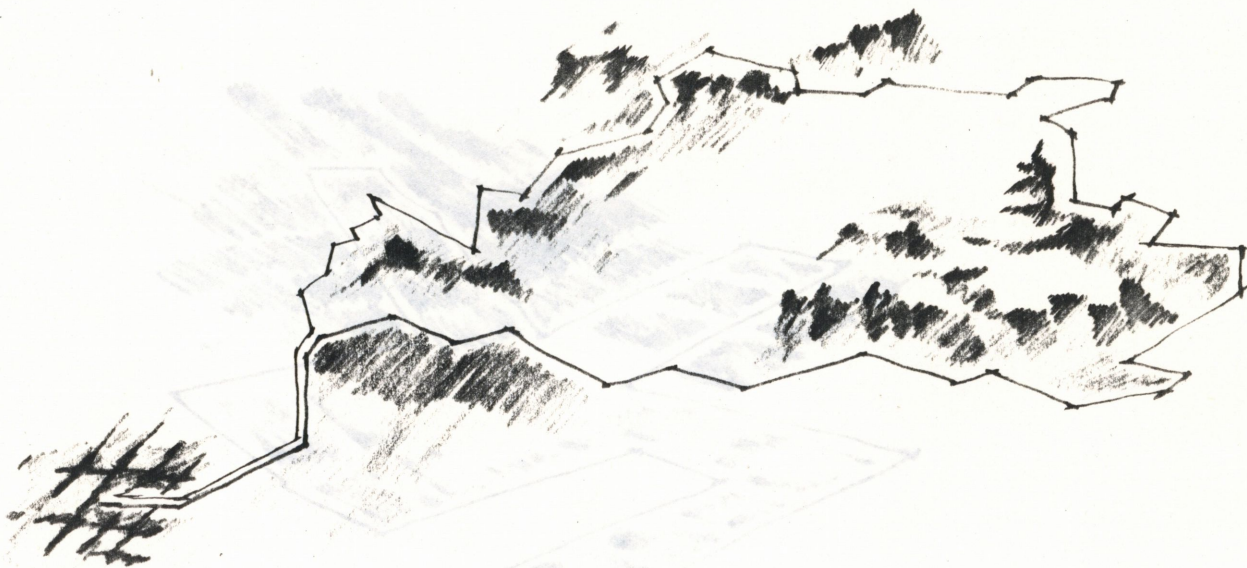
finish: approximately 7:30 pm

elevation: 4490 feet

total climbing: flat course



day 5

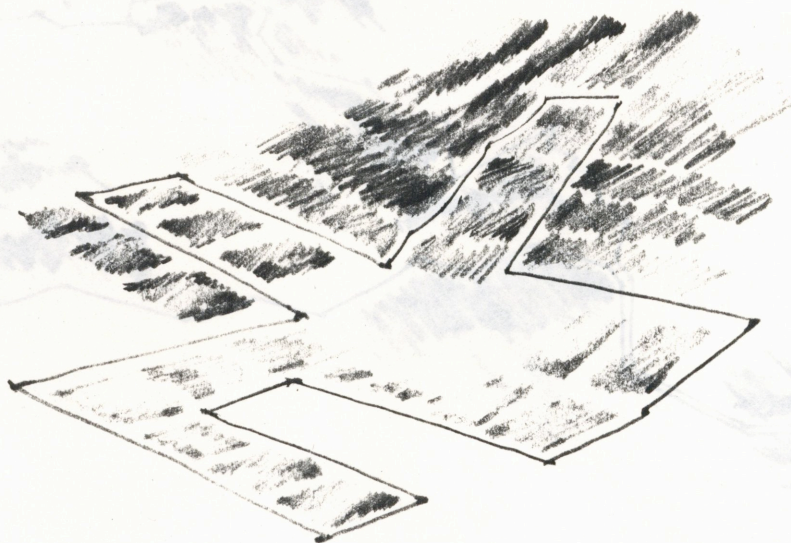


s t a g e e i g h t

Grand Junction
Tour of the Moon
Road Race

type: 76 mile road race
Colorado National Monument,
Grand Junction, Co.
environment: mountainous
start: Downtown Grand Junction
2:30 pm
finish: Downtown Grand Junction
approximately 5:30 pm
elevation: 4586 feet base
6640 feet highest point
total climbing: 4970 feet

day 6



s t a g e n i n e

Aspen Circuit Race

type: 30 lap circuit race

2.0 miles per lap

Aspen, Co.

environment: mountainous village

start: Hyman Street Mall,

Aspen

12:00 pm

finish: approximately 2:30 pm

elevation: 8025 feet base

8155 feet highest point

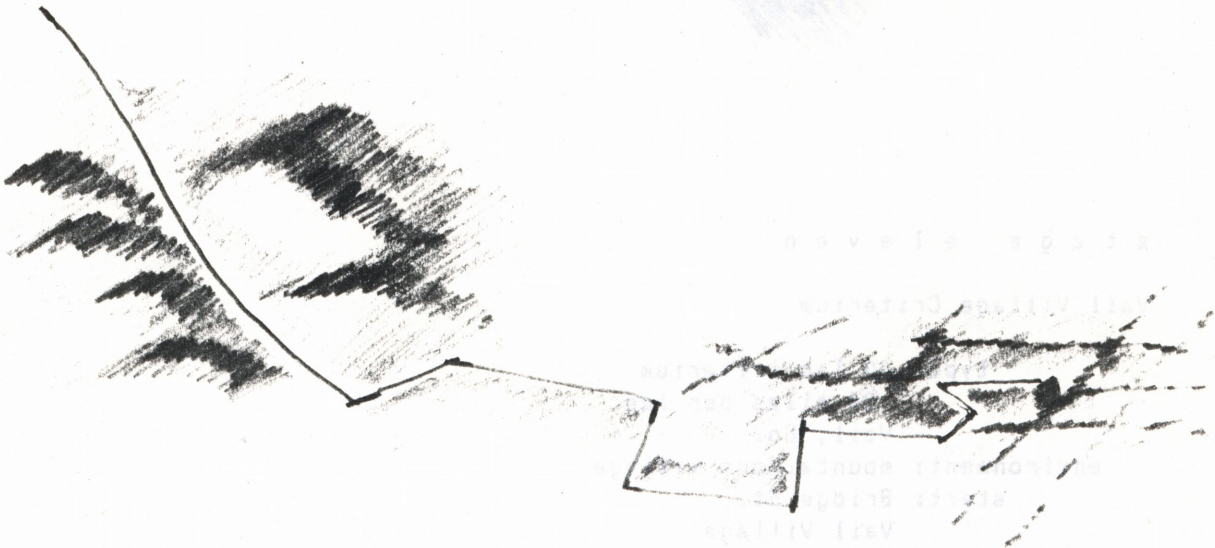
total climbing: 4550 feet

day 7

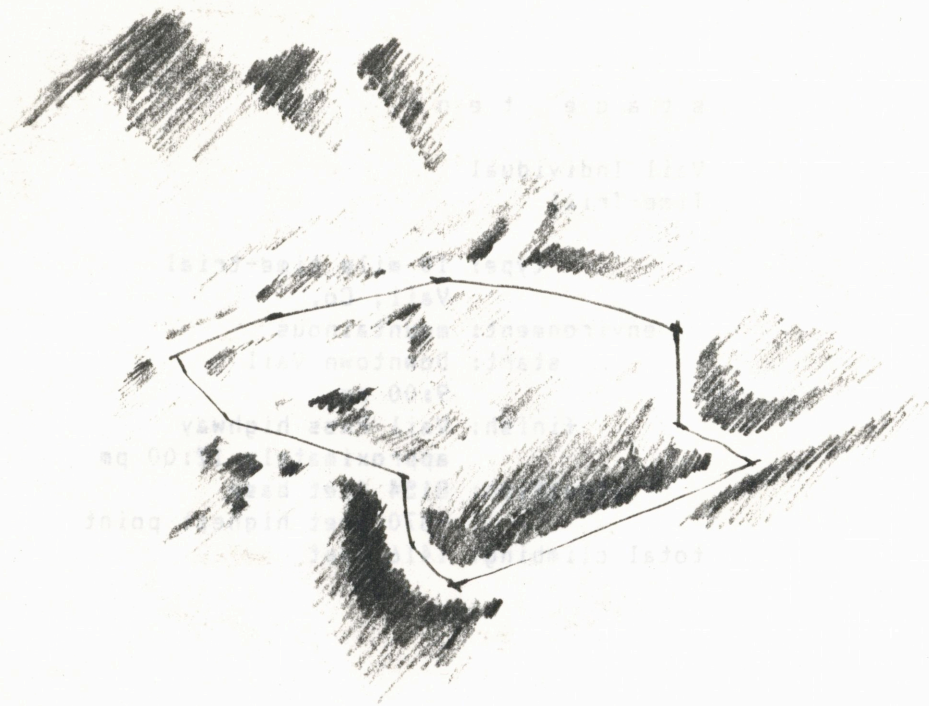
s t a g e t e n

Vail Individual
Time-Trial

type: 10 mile time-trial
Vail, Co.
environment: mountainous
start: Downtown Vail
9:00 am
finish: Vail Pass highway
approximately 12:00 pm
elevation: 8154 feet base
9570 feet highest point
total climbing: 1416 feet



day 8



s t a g e e l e v e n

Vail Village Criterium

type: 60 lap criterium
.84 miles per lap
Vail, Co.

environment: mountainous village

start: Bridge St.

Vail Village

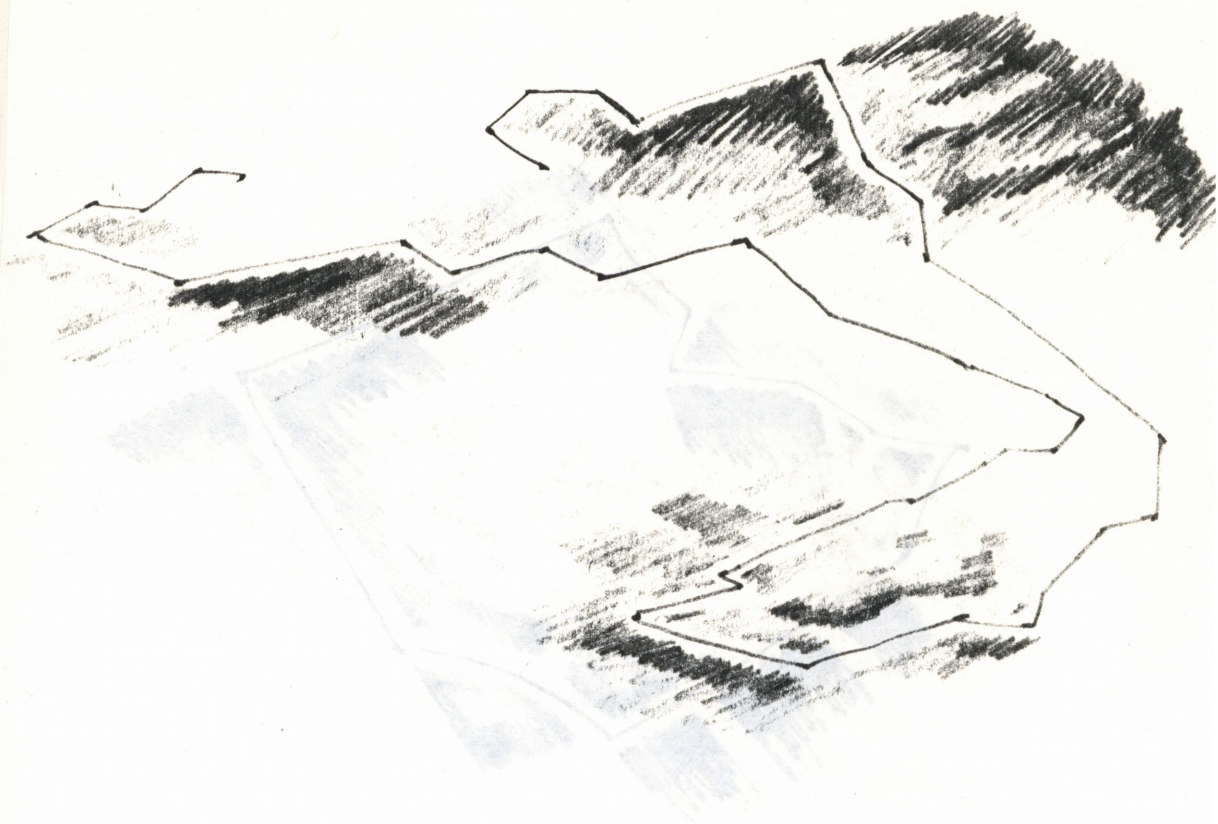
4:00 pm

finish: 6:00 pm

elevation: 8154 feet base

total climbing: 2880 feet

day 9



stage twelve

Vail to Copper Mountain
Road Race

type: 81 mile road race

Vail, Co. to Copper Mtn., Co.

environment: mountainous

start: Lionshead Center, Vail

11:00 am

finish: Village Center,

Copper Mountain

approximately 1:50 pm

elevation: 8154 feet base

11,316 feet highest point

total climbing: 5440 feet

day 10

s t a g e t h i r t e e n

Estes Park Circuit Race

type: 35 lap circuit race

1.35 miles per lap

Estes Park, Co.

environment: mountainous village

start: Elkhorn Avenue,

Estes Park

2:00 pm

finish: approximately 4:00 pm

elevation: 7530 feet

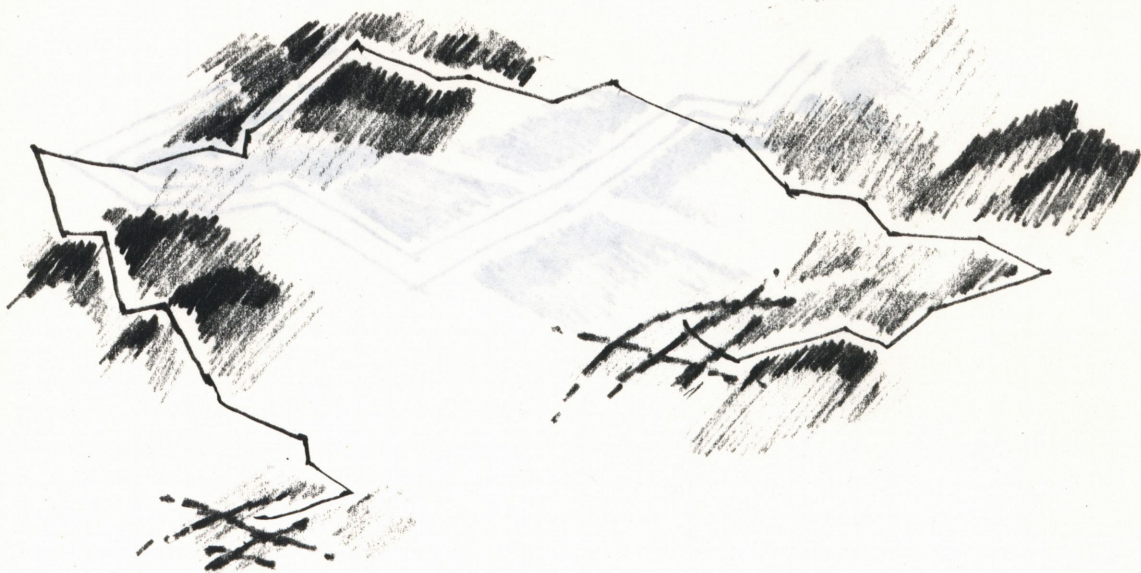
total climbing: 4920 feet

day 11

s t a g e f o u r t e e n

Golden to Boulder
Mountain Road Race

type: 88 mile road race
Golden, Co. to Boulder, Co.
environment: mountainous
start: Coors Brewery, Golden
10:15 am
finish: Boulder Theatre, Boulder
approximately 1:15
elevation: 5660 feet base
9350 feet highest point
total climbing: 6840 feet

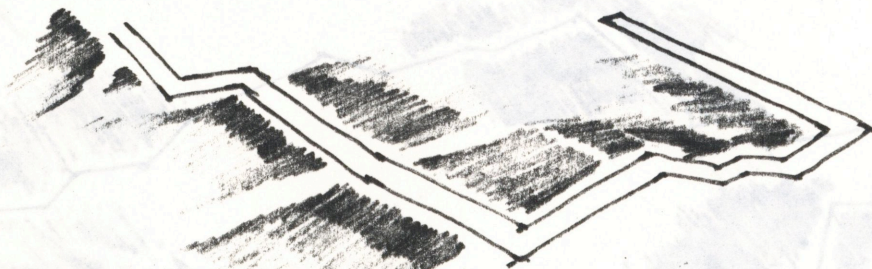


day 12

s t a g e f i f t e e n

Niwot Individual
Time-Trial

type: 12.4 mile time-trial
Niwot, Co.
environment: rural
start: village of Niwot
9:00 am
finish: village of Niwot
approximately 12:30 pm
elevation: 5081 feet base
5440 feet highest point
total climbing: 840 feet



day 13

s t a g e s i x t e e n

Denver Tivoli
Criterium

type: 90 minute timed criterium
.87 miles per lap
Denver, Co.

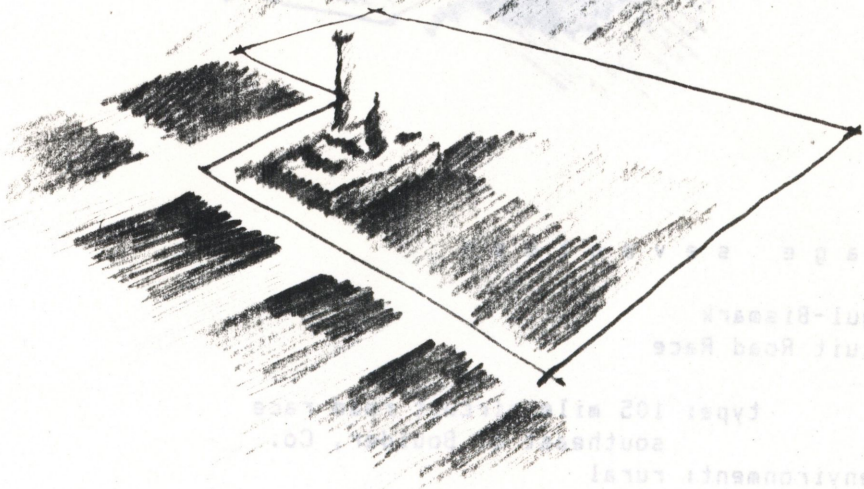
environment: urban

start: Tivoli Brewery,
downtown Denver
5:45 pm

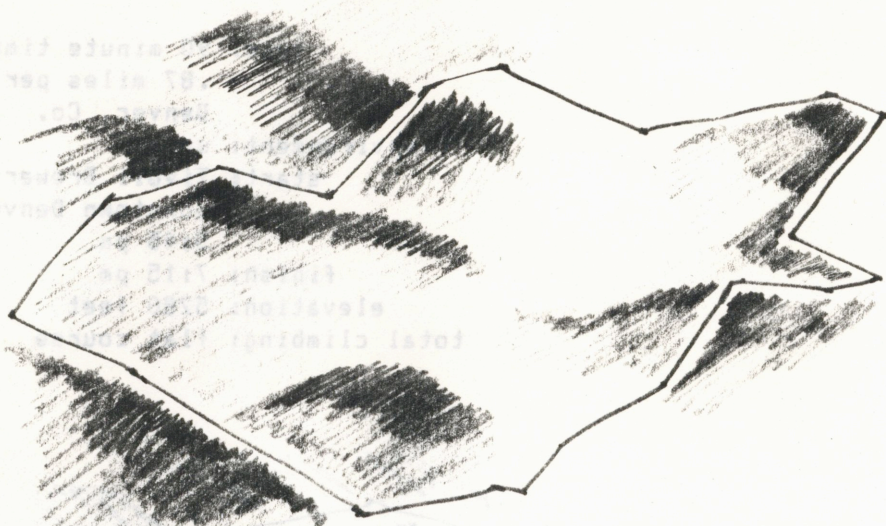
finish: 7:15 pm

elevation: 5280 feet

total climbing: flat course



day 13



s t a g e s e v e n t e e n

Morgul-Bismark
Circuit Road Race

type: 105 mile circuit road race
southeast of Boulder, Co.

environment: rural

start: McCaslin Blvd. and Colorado 128
11:00 am

finish: approximately 3:00 pm

elevation: 5853 feet

total climbing: 7051 feet

day 14

s t a g e e i g h t e e n

North Boulder Park
Circuit Race

type: 37 lap circuit race
1.65 miles per lap
Boulder, Co.

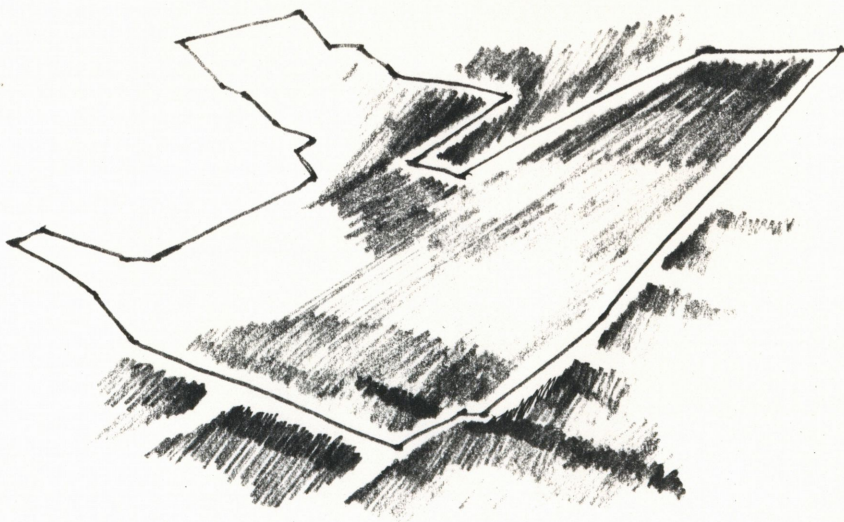
environment: residential

start: North Boulder Park
2:00 pm

finish: approximately 4:30 pm

elevation: 5392 feet

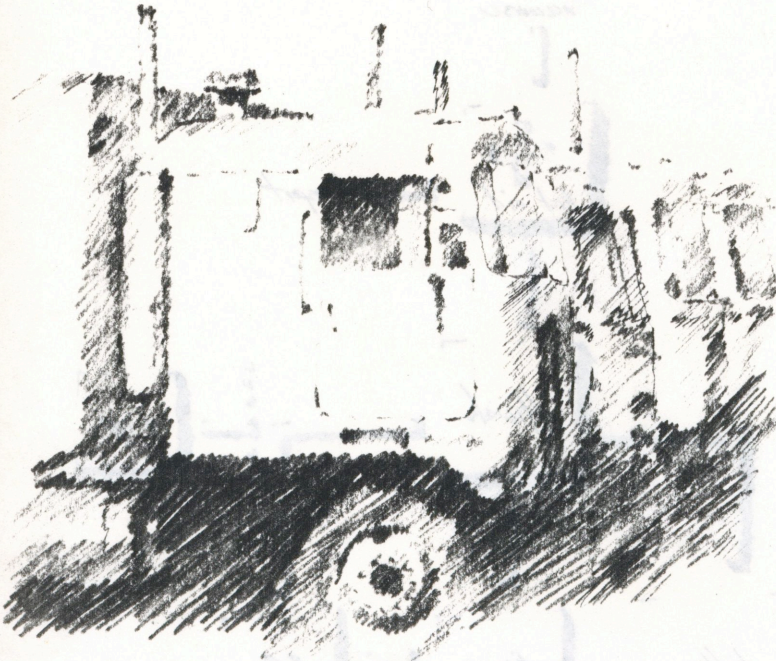
total climbing: 4662 feet



day 15

The Race Operation Facility

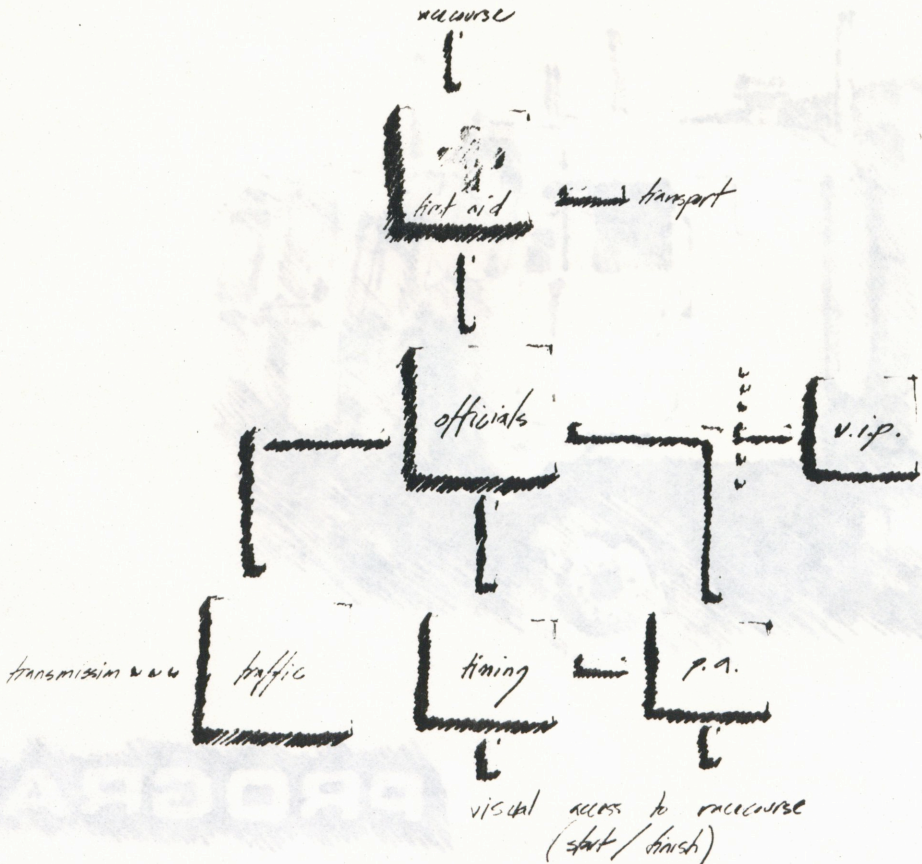
It is this element of the Coors Classic which provides the logistical operation of the event over the roughly sixteen days of active operation. Involving approximately 425 staff of fixed areas, this facility governs race action and results. Situated adjacent to the finish line on the west side, the control facility contains areas for public address (75 sq. ft.), timing (100 sq. ft.) and communications (100 sq. ft.) as well as areas 100 sq. ft. for race officials.



PROGRAM

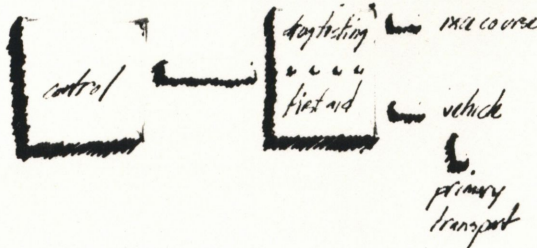
The Race Operation Facility

It is this element of the Coors Classic which provides the logistical operation of the event over its roughly sixteen days of active operation. Involving approximately 425 s.f. of fixed area, this facility governs race action and results. Situated adjacent to the finish line of all races, the control facility contains areas for public address (75 sf), timing (100 sf), and communications (100 sf), as well as areas (150 sf) for race officials.



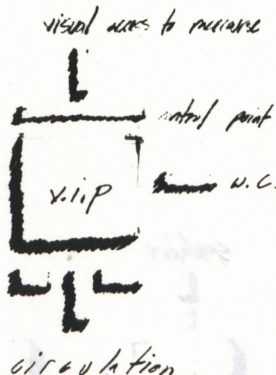
The First Aid Center

Primarily, the First Aid Center provides the Coors Classic with a 400 sf facility capable of distributing medical aid to injured and exhausted competitors. Equally important however, the Center also incorporates a drug testing lab within its program, thus allowing for the immediate testing of competitors at the conclusion of individual events.



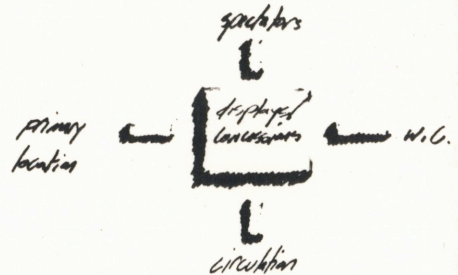
V.I.P. Viewing

V.I.P. viewing areas are provided by the organizers for the press, city officials, and other celebrities during the race. At 1200 sf total area, these elevated viewing platforms are strategically located at critical points along the racecourse.



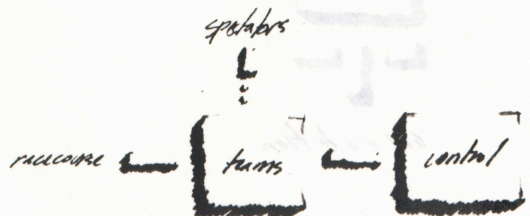
The Exposition

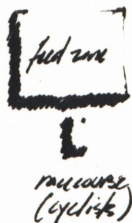
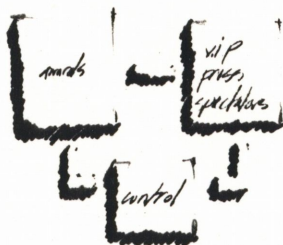
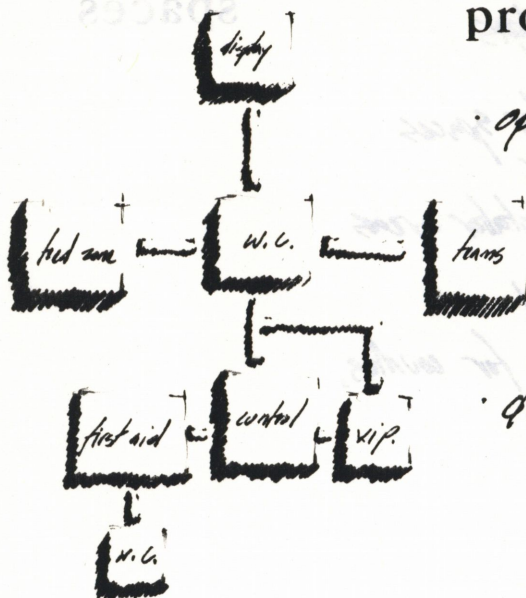
A major attraction of the Coors Classic entourage is the 3000 sf manufacturer's product show. In addition to allowing cycling and related sporting goods manufacturers a chance to exhibit their latest products, it provides spectators with a multitude of activities between lulls in racing action. It features not only exhibits but food, drink and licensed concessions as well.



Team Areas

These areas provide shelter for the approximately twenty cycling teams which annually compete in the Coors Classic. At 120 sf each, these areas, used in conjunction with team vehicles, give individual teams the opportunity to perform public relation duties as well as establish a 'home base' for the team during the course of a day's racing.





program

91200 sf.

operations ... 425 sf.
 timing 100 sf.
 pa. 75 sf.
 communications 100 sf.
 officials/referes 150 sf.

displays/concessions ... 3000 sf.
 manufacture 1500 sf.
 licensed concessions 300 sf.
 food & drink 900 sf.

first aid 600 sf.
 first aid 250 sf.
 drug testing 150 sf.
 safety shield 200 sf.

rooms 2400 sf.
 per room 120 sf.

v.l.p. viewing 1200 sf.

awards 150 sf.

restrooms 1200 sf.

first aid 150 sf.

spaces

use: displays/concessions
character: festive, flexible
adaptable to other spaces
view: circulation areas
adjacency: circulation, spectator areas
lighting: natural
area: 3000 sf total
specialties: flexibility, places for counters,
cannots, signage

use: timing
character: efficient
view: racecourse, start/finish area
adjacency: officials, pa.
lighting: natural with limited
electrical
area: 100 sf
specialties: computer, timing equipment,
2 chairs, desk

use: p. a.
character: efficient, control
view: racecourse, incoming racers
at start/finish
adjacency: officials, pa.
lighting: natural with limited
electrical
area: 75 sf
specialties: computer terminal, sound equip.,
desk, 2 chairs

use: communications
character: efficient
view: racecourse
adjacency: officials
lighting: natural, artificial
area: 100 sq.
specialties: communications equipment,
chair, table, storage

use: officials / referees
character: efficient
view: racecourse, start/finish
adjacency: timing, communications,
lighting: natural
area: 150 sq.
specialties: position, meeting places

use: first aid, drug testing
character: clean, ordered
view: none, inward focus
adjacency: operations, racecourse
lighting: artificial, natural
area: 600 sq. total
specialties: two exam beds, cabinets, storage
sink, sample room, testing
lab

use: games
character: festive, ordered
view: racecourse, circulation
adjacency: racecourse, operations
lighting: natural
area: 120 sf per team
specialties: flexible, adaptable
counters, chairs, tables

use: k.i.p. viewing
character: prominent, festive
view: racecourse
adjacency: operations
lighting: natural
area: 1200 sf. total
specialties: chairs

use: awards area
character: ceremonial
view: start/finish
adjacency: p.a., start/finish
lighting: natural
area: 150 sf.
specialties: hierarchy of competitors

use: 'feed zones'

character: Active

view: race course

adjacency: race course

lighting: natural

area: 150 sf each

specialties: storage of food & water

use: restrooms

character: San. o. let portable restrooms

view: none

adjacency: circulation, spectator areas,
restricted areas

lighting: natural

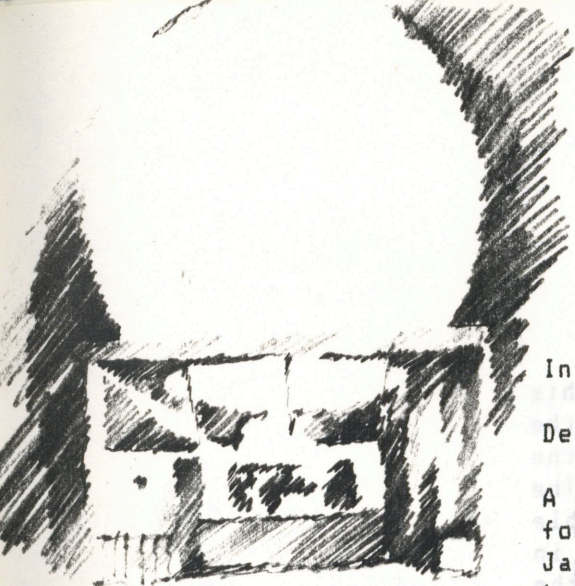
area: 1200 sf total (flexible)

specialties: portable, identifiable

goals

- if all moves
 - portable architecture
 - portable
 - identifiable
 - flexible
 - functional
- provide a temporary, moveable system, the 'entourage', for the Cars International Bicycle Classic
- provide the emotional climax & physical climax for the race
- to create an architectural language capable of permanently establishing the Cars Classic
- provide a festive atmosphere
- maintain & reinforce the existing graphic language of the race
- provide an architectural solution which responds to the requirements of a roadway environment: width, connection to ground, etc.

PROTOTYPES



Information Pavilion at Expo '70

Design: Taiyo Kogyo Co., Ltd. 1970

A single membrane pneumatic structure for the 1970 World Exposition in Osaka, Japan. Although not intended for transportation, its basic concept provides a useful prototype for similar structures.



Michelin Man

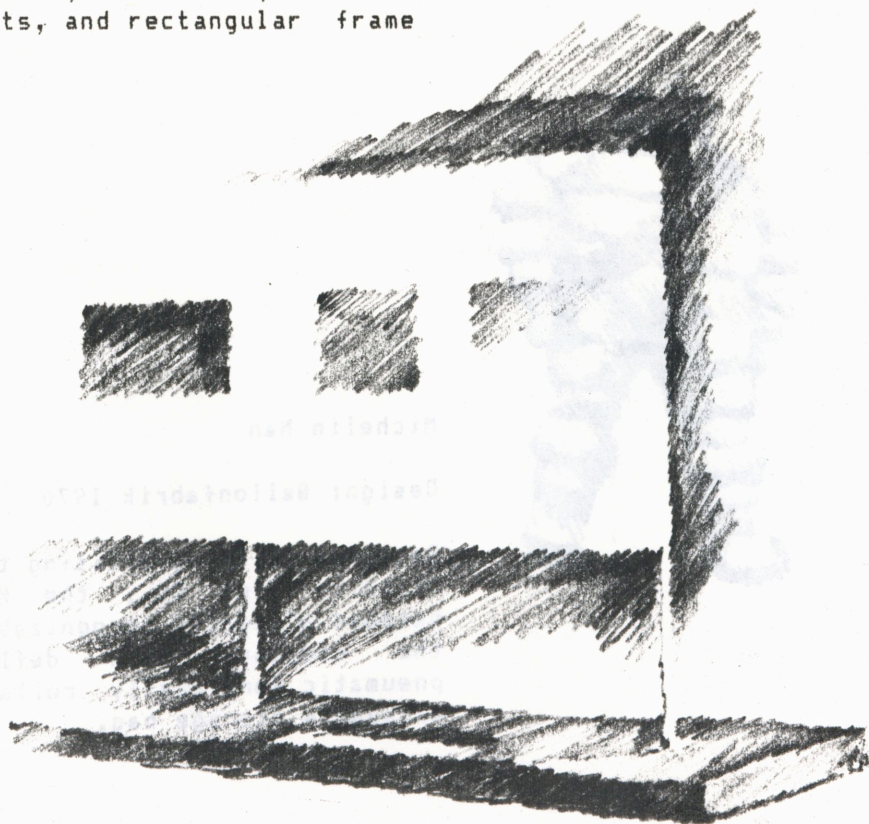
Design: Ballonfabrik 1970

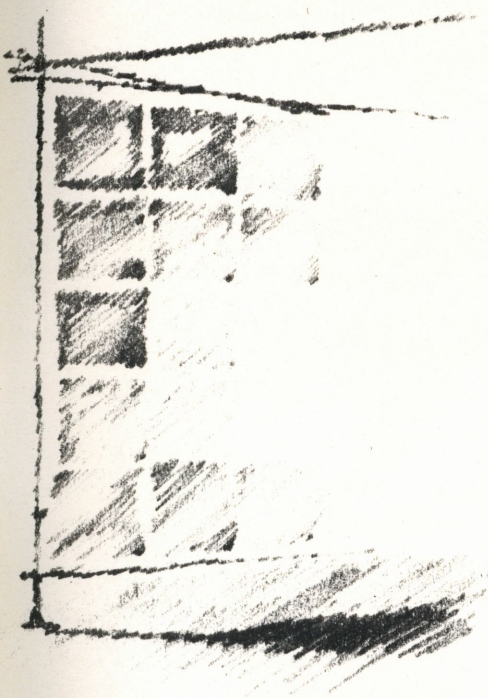
Designed as an advertising tool for the Michelin Tire Co., the Michelin man becomes a readily recognizable symbol of the company. Upon deflation, this pneumatic form easily collapses into a manageable storage bag.

Knife / Fork / Spoon Exhibition

Design: W. Friedman 1951

Organized by the Walker Art Center, this touring exhibition illustrated the cultural, historical development in the designs of knife, fork, and spoon. The exhibition involved various dismantlable parts which could be assembled in accordance with the peculiarities of the space available. Standardized parts consisted of a pedestal with built-in lighting channels, show-cases, aluminum panels, supports, and rectangular frame members.





SWB Exhibition

Design: Richard Lohse 1950

This special exhibition of the Schweizerischer Werkbund demonstrated developments in SWB products. The solution was an open-air exhibition designed for installation at the Basle Industries Fair. The form was the outcome of the structural basis and the treatment of the subjects. It consisted of a tubular framework and panels containing thematic information.

International Red Cross Exhibition

Design: H. Fischli and H. Eidenbenz 1945

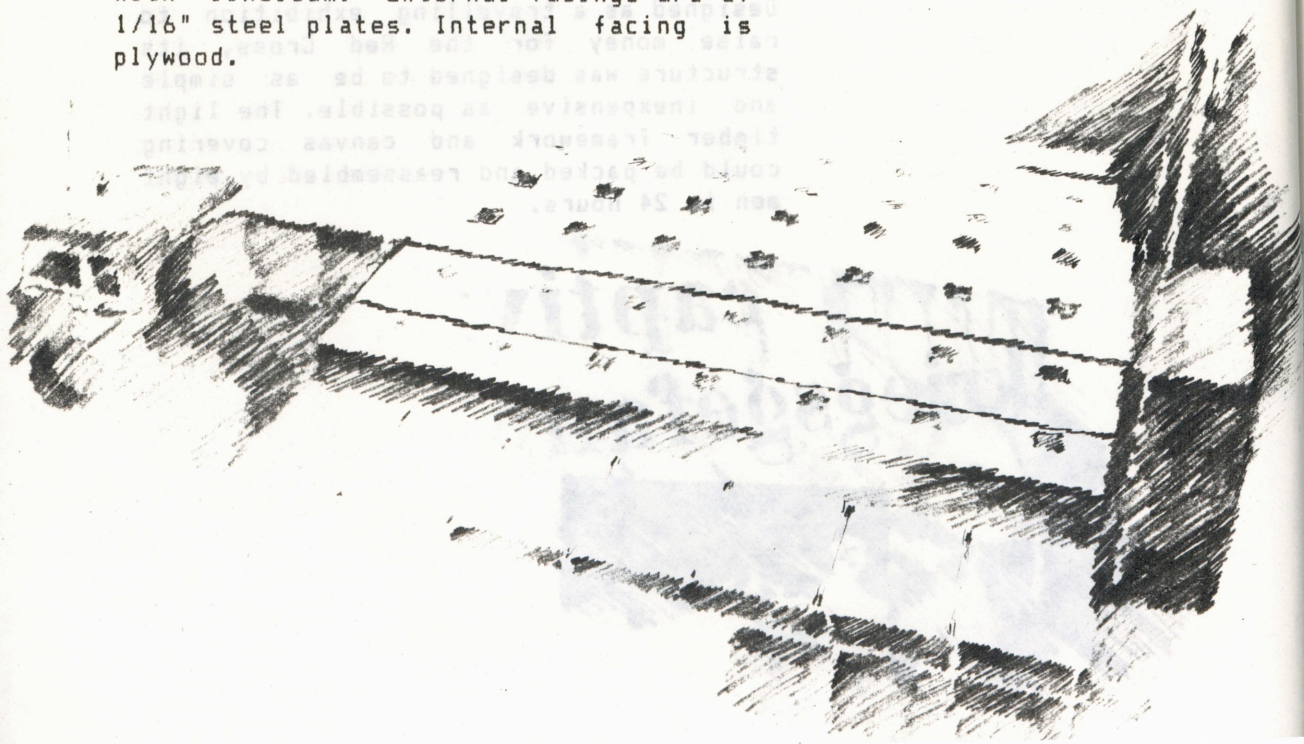
Designed as a travelling exhibition to raise money for the Red Cross, its structure was designed to be as simple and inexpensive as possible. The light timber framework and canvas covering could be packed and reassembled by eight men in 24 hours.

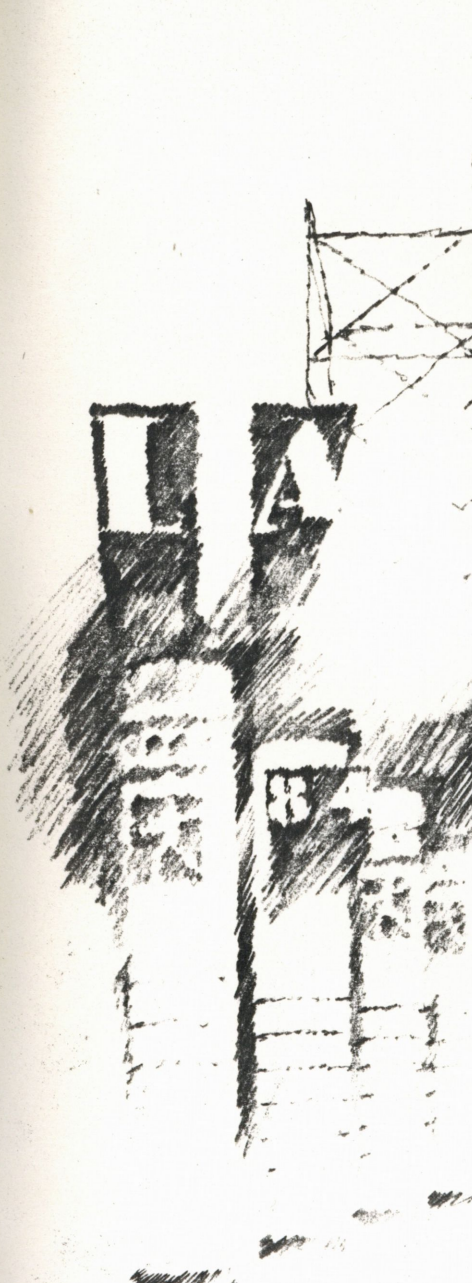


Expanding Mobile Exhibition Unit

Design: Peter G. Harnden 1951

This vehicle for travelling exhibitions can be expanded to nearly 20 feet in width in less than 90 seconds. The unit is comprised of a tractor and an expanding exhibition trailer, the body of which is mounted on a chassis 30 feet long. The double extension system consists of four sets of steel joists extending simultaneously. These joists carry the side walls and, through a synchronized sideward movement, extend together with the roof, floor, and walls. All display panels, show-cases, tables, etc. are of standard sizes, based on the module of the entire structure of the vehicle. The unit is an all steel structure. Floors are covered with linoleum. External facings are of 1/16" steel plates. Internal facing is plywood.





1984 Los Angeles Summer Olympics

Design: Jerde and Sussman/Prejza 1984

A pattern language was devised to guide the development of the infill architecture needed at the Olympic villages and competition sites. The limited duration of the Games and Los Angeles's climate allowed the use of rather fragile, ephemeral materials. Sonotube columns and special tops transformed rental tents into imaginative pavilions. At a larger scale, magenta and aqua scaffolding formed gateways and monumental towers. These were punctuated with ornaments: nylon louvers, plywood cutouts, and fiberglass spheres. A flexible system of signs used inexpensive materials: styrene panels, hollow core doors, and Sonotubes. The yellow, vermillion, aqua, and violet signs were designed to be decorative as well as functional.

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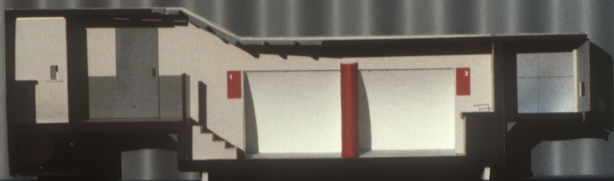
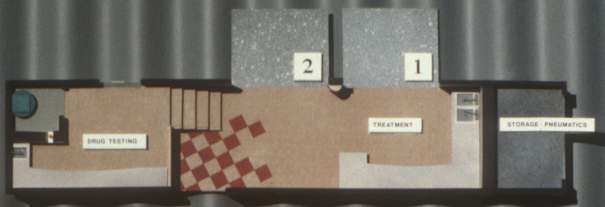
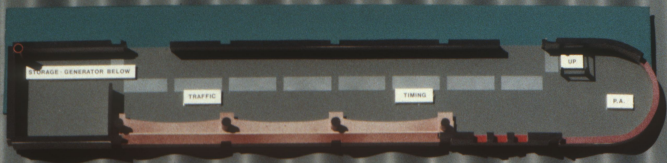
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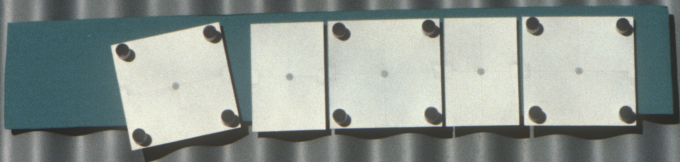
SYSTEM

TAT-0



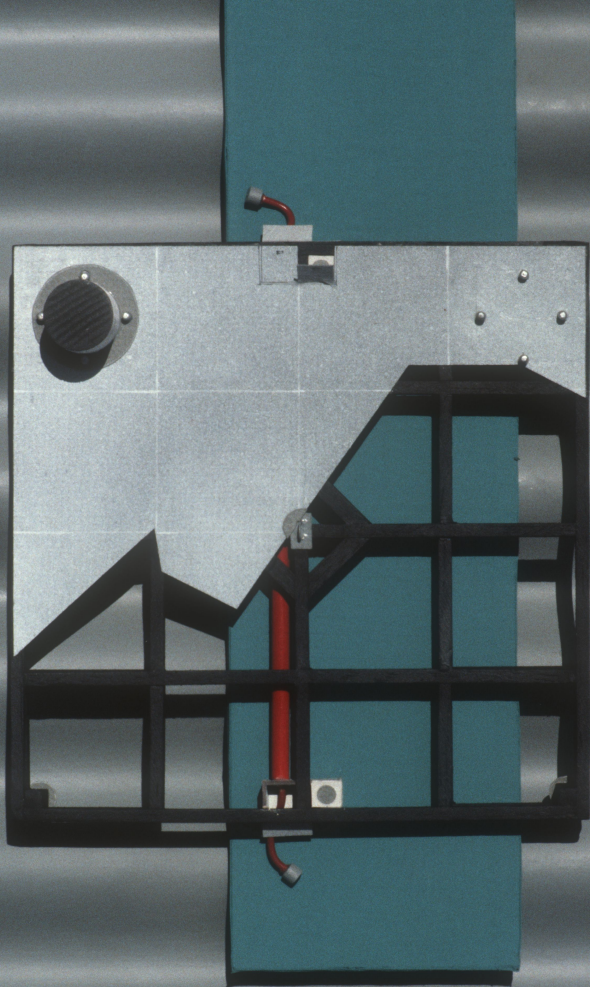
1/2" = 1'-0"

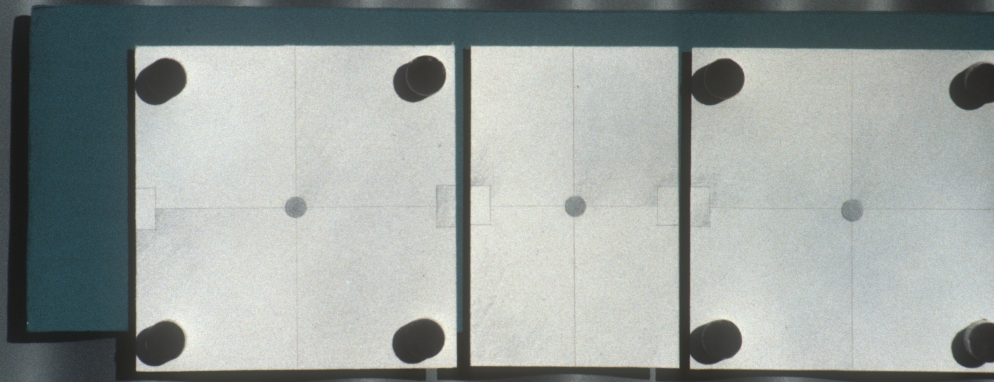
OPERATIONS

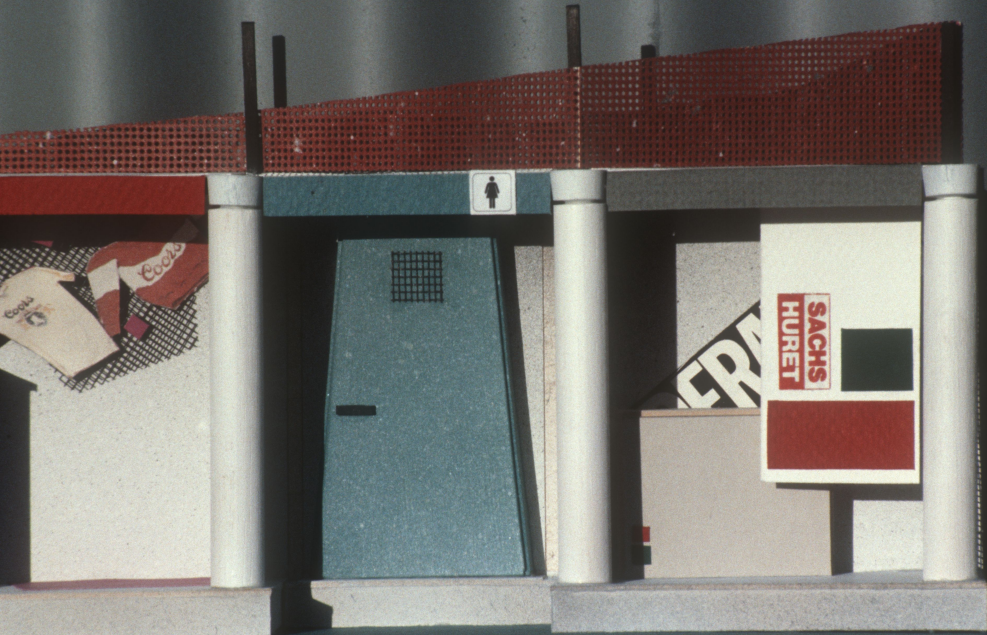


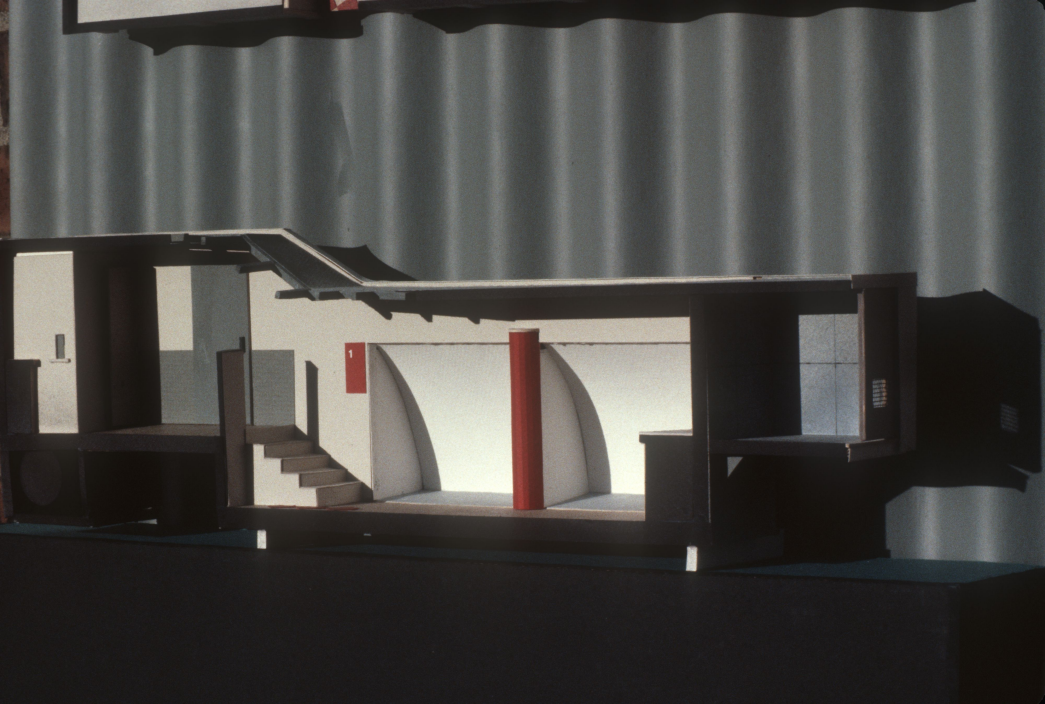
USE

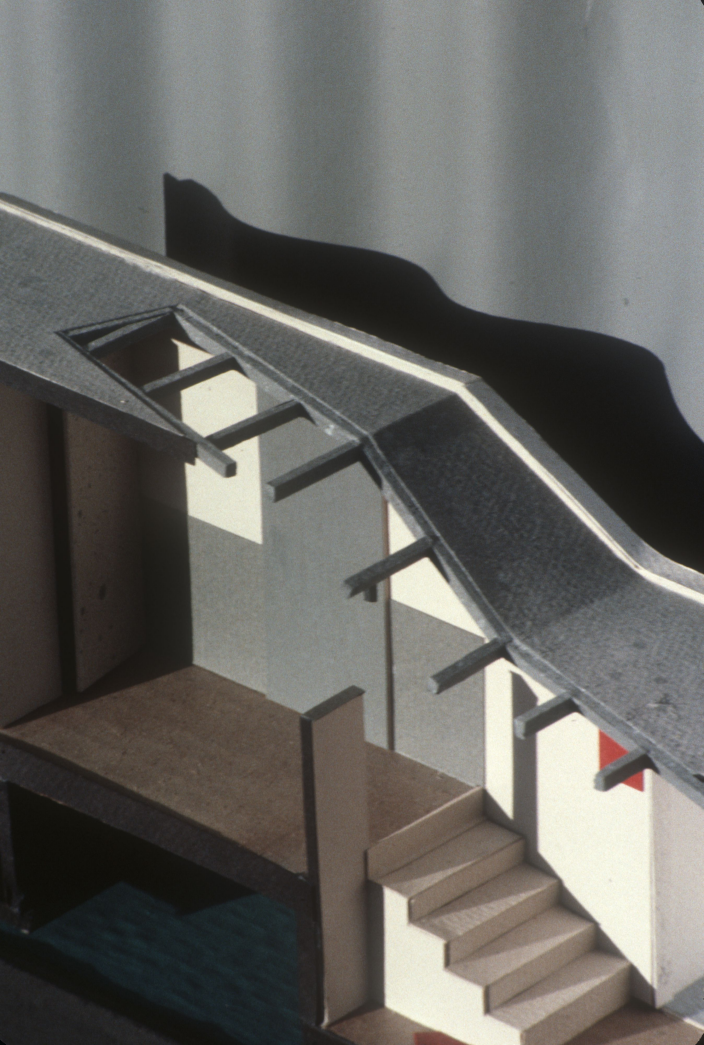
USE























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Butch U.,
Jim, Kent, Lorne,
Mike, Ray, Ron,
and Tom.

thanks guys.