

The Commonwealth of Massachusetts

SPECIAL REPORT

OF THE

DEPARTMENT OF NATURAL RESOURCES

RELATIVE TO

THE CONSTRUCTION OF AN OUTDOOR
SKATING RINK AT LAKE QUINSIGAMOND
STATE PARK

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CHAPTER 91

of the

RESOLVES OF 1963

RESOLVE PROVIDING FOR AN INVESTIGATION AND STUDY BY THE DEPARTMENT OF NATURAL RESOURCES RELATIVE TO THE CONSTRUCTION OF AN OUTDOOR SKATING RINK AT LAKE QUINSIGAMOND STATE PARK.

Resolved, That the department of natural resources is hereby authorized and directed to make an investigation and study relative to the construction of an outdoor skating rink at Lake Quinsigamond state park.

Said department shall report to the general court the results of its investigation and study and its recommendations, if any, together with drafts of legislation necessary to carry such recommendations into effect, by filing the same with the clerk of the senate on or before the first Wednesday of December, nineteen hundred and sixty-three.

In accordance with the above resolve, the Department of Natural Resources hereby respectfully submits the attached report.

CHARLES H. W. FOSTER

COMMISSIONER

Department of Natural Resources

The Commonwealth of Massachusetts

REPORT ON PROPOSED RINK FOR LAKE PARK LAKE QUINSIGAMOND, WORCESTER

Healthy physical development through participation in active sports has long been an acknowledged fact, but recent federal interest expressed through the President's Council of Youth Fitness and his creation of the Bureau of Outdoor Recreation is stimulating vigorous sports interest at State and municipal levels and in all American citizens both young and old. There is a pronounced trend away from the spectators' bench and a new eagerness to "get into the act."

This trend is probably observed in the field of ice skating more than in any other recreational activity. The sport which bridges the gap between the last touchdown in football and the first spring sandlot baseball is fast becoming the No. 1 sports drawing card for the entire family, particularly where interiors of enclosed summer ice arenas offer relief from devastating summer heat as well as a chance for continued enjoyment and practice on skates.

Massachusetts District Commission Recreational Director, Jim Whalen tells us the interest in hockey alone has increased five hundred percent in Greater Boston during the past four years. One hundred thousand High School and other hockey players used Massachusetts District Commission rinks during 1961-1962.

Detroit has eight city owned rinks. Paid admissions last year totaled \$4,911,312. The rinks were also used by one hundred and ninety hockey teams. The Detroit Park Director comments, "I have need of twenty more rinks to meet the demand."

In Wilmette, Illinois, the village owned rink last season had 55,000 paid admissions and was used by a dozen local hockey teams. Income was \$27,000.00, operating costs were \$17,000.00. Wilmette made money.

PRESENT WORCESTER FACILITIES

Inquiry into the existing skating rinks within the city of Worcester reveal there are *no indoor municipal facilities* and only six

small outdoor ponds cleared for skating, two of which will be removed when new highway construction is completed. The City Park Commissioner states that eight small outdoor ponds will be constructed or improved within the next year and he hopes for an indoor facility but there is little hope of an indoor rink in the immediate future.

One private club, The Worcester Skating Club, provides the only indoor facility for all the school boy hockey, public skating and figure skating within the city and, since it is a private club, the fees for skating privileges are costly and beyond the reach of many families. The Worcester High School and Junior teams pay for the privilege of playing their competitive games on this private rink at present. There are, indeed, justifiable reasons why the people of Worcester want a rink.

THE PROPOSED SITE

Two possible rink sites at Lake Park on the shores of Lake Quinsigamond were mentioned in our previous report, chosen at the time because of the very limited use made of the existing football field and parts of the picnic area. However, present commitments call for ten school boy football games to be played on the field in 1963, which seems to indicate the encroachment on the previously unused football field would be unwise. Use of the picnic area, however, is still very limited, bringing in only an \$1,800.00 revenue for use in 1963. Some part of the picnic area could be used for a rink site without destroying the limited use of the area by picnickers. However, there is a small knoll lying between the highway and the parking area adjacent to the football field which provides sufficient area for a rink site without encroaching on any of the other facilities at Lake Park. Use of this site would be convenient from a snow removal point of view and permit maximum twelve-month use of the large parking area, a feature which was costly to build and is now receiving very light use.

THE RINK DESIGN

The design of the proposed rink should be determined by the estimated number of interested citizens, their tastes and desires in regard to the types of skating in which they are most interested, and by visits and comparisons with similar communities now oper-

ating municipal skating facilities. Worcester is already known as an important figure skating and ice skate dancing center and such trends should be considered before plans for construction and administration are made.

Should the rink be enclosed or open? This is a question that the Metropolitan District Commission has been pondering for some time. Builders and operators of a dozen busy rinks, the Commission has constructed facilities open to the sky, with a roof and no sides, and completely enclosed. Recent conversation with Mr. Mason Condon, M.D.C. Engineer in charge of this rink program, confirms my belief that a completely enclosed rink providing temperature control and protection from the elements is most economical. Mr. Condon's most recent design for a new rink in Dedham calls for artificial ice and all sanitary and service facilities under one roof, completely enclosed. The estimated cost of this rink is \$700,000.00. Perhaps the greatest advantage to this enclosed construction is the possibility of swinging into twelve month operation with no added expense. The demand for full year service is increasing daily, particularly by those who want off season hockey school and by figure skaters who hope to try out for Olympic teams or develop competitive skill.

Most municipal rinks throughout the country consist of enclosed artificial ice two hundred or more feet by eighty-five feet with hockey dashers and removable nets, steel riser stands, an office, toilet facilities, dressing rooms, a first aid room, food concession, machinery room, detached ammonia tank area, high fidelity record player and loud speaker system. Lighting must be good with a minimum of shadow. Refrigeration systems operate by ammonia and brine ammonia in a direct expansion system, or freon gas. Details of the various systems may be obtained by investigating package systems manufactured by several different firms, one of which, the Creamery Package Manufacturing Company, has headquarters in Belmont, Massachusetts. An ice conditioning machine is also a necessity and should be used to resurface at least every three hours of skating time. All rink authorities agree that *good ice all the time* is *safe ice* and frequent use of the conditioner to eliminate cracks, soft spots and chips reduces accidents to a minimum. The cost of most conditioners is about nine thousand dollars.

Some recreation areas and cities have multiple use arenas providing floor space for dancing, basketball and roller skating, alternating with artificial ice surface for skating in the colder months. Such a facility is shown in the illustrations of Bear Mountain State Park, though the lack of a roof limits the recreational use to good weather days only. A roof over such a facility is recommended.

PERSONNEL MANAGEMENT AND MAINTENANCE

Personnel in most arenas consists of a Superintendent, 2 Equipment Maintenance Men, Clerk in charge of tickets and lockers, Janitor, 2 or more instructors in charge of programming and music as well as teaching, 2 more attending personnel on skates to enforce safety rules on the ice.

Private rinks seem able to operate efficiently and safely with less personnel than public rinks, mainly because they have a chief instructor who takes a personal interest in good programming and creating a competitive atmosphere in all the various skating groups. He or she becomes a combination host (or hostess), teacher, and organizer who encourages the shy and younger children to take group lessons and start their skating correctly, helps find partners for all the dance skating sessions, and arranges the instruction, tests, and music for the figure skaters. Such attention inspires good behavior to the point where the North Shore Skating Club in Lynn, the only rink in Massachusetts now offering twelve month continuous skating, operates without police personnel on the ice. Hockey competitions and practice periods are in charge of their own school leaders and present no problem.

Municipal rinks have one or more uniformed guards on the ice throughout the skating hours. The business of keeping order and preventing accidents probably requires more man hours of personnel time than any other part of the management program.

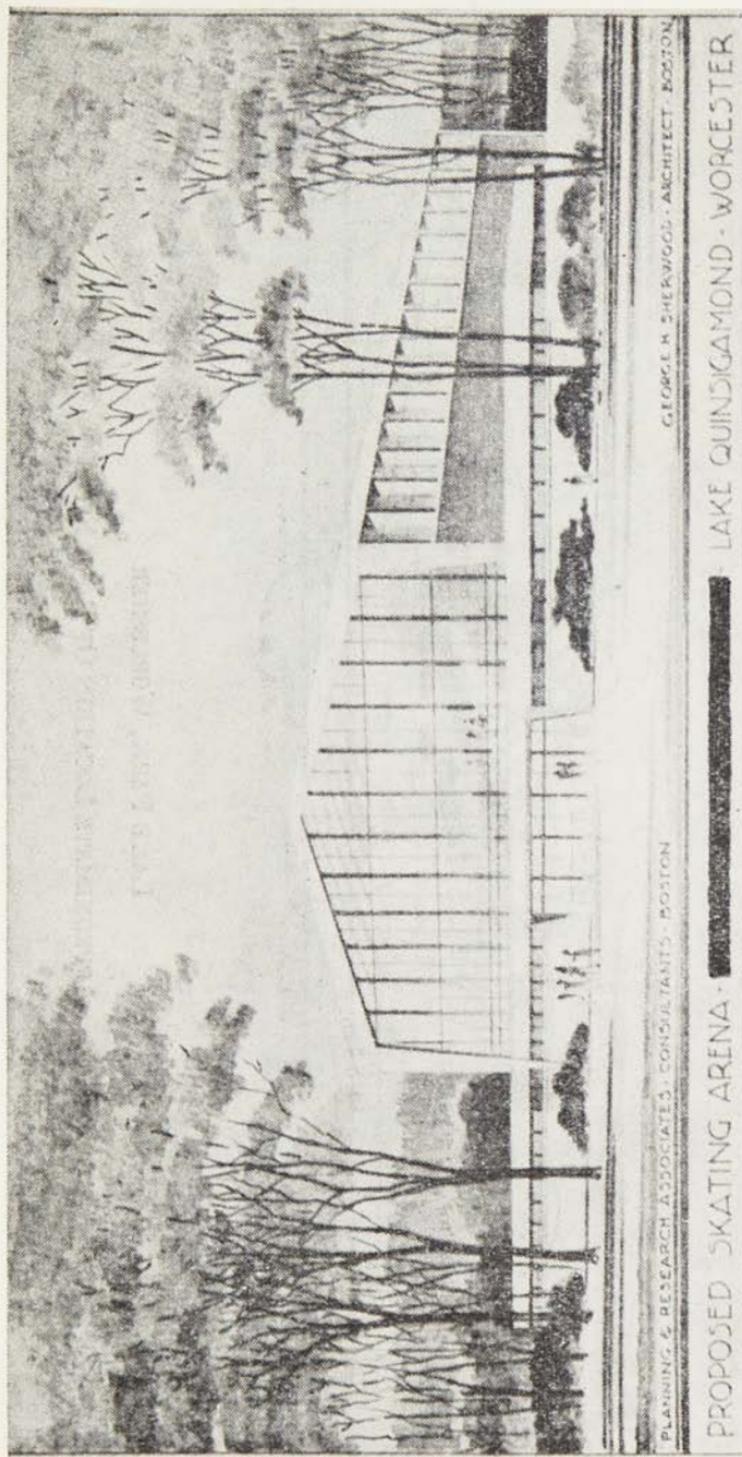
FIGURE SKATING TODAY

Figure skating today is almost the equivalent of ballet in its combining of graceful intricate figures, colorful costumes and classical music. It offers an ever increasing challenge to youth of both sexes and its demanding disciplines of muscle training and good living habits serve as a character builder. One who has successfully

passed all the national figure skating tests must, necessarily, have developed a strong and healthy body, a perceptive mind and a determined will to succeed. All rinks should offer good figure skating instruction.

RINK COSTS

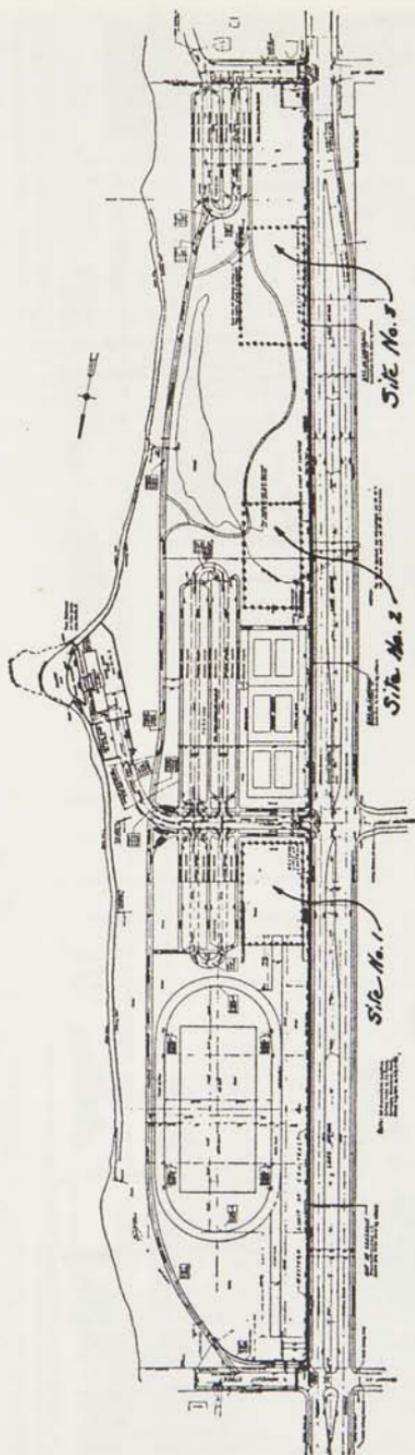
Recent costs of fully enclosed rinks and facilities built by Metropolitan District Commission range between \$517,000 and \$700,000. A safe estimate for artificial ice surface and refrigeration unit without building enclosure may be figured at seven dollars per square foot. Any Legislative proposal for a rink facility must include an appropriation of sufficient funds for the purchase of adequate equipment and the employment of qualified personnel for technical operation.



GEORGE H. SHERWOOD - ARCHITECT - BOSTON

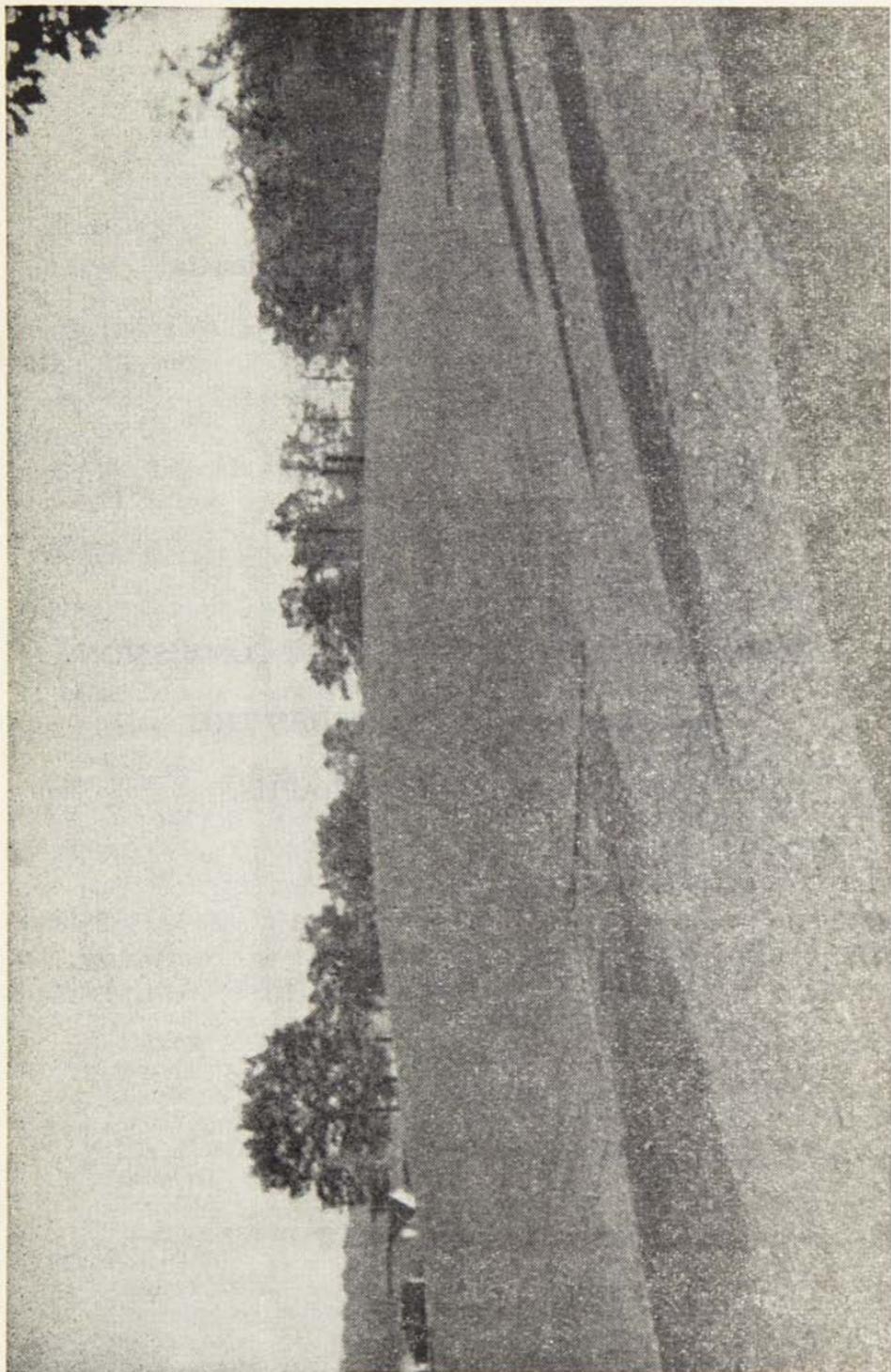
PLANNING & RESEARCH ASSOCIATES - CONSULTANTS - BOSTON

PROPOSED SKATING ARENA - LAKE QUINDIGAMOND - WORCESTER



LAKE PARK, WORCESTER

APPROXIMATE LOCATION OF RINK SITES



PROPOSED RINK SITE AT LAKE PARK, WORCESTER
(*First Choice*)

The Commonwealth of Massachusetts

VARIOUS METROPOLITAN DISTRICT COMMISSION
RINKS ARE ILLUSTRATED IN THE
FOLLOWING PHOTOGRAPHS.

The Commonwealth of Massachusetts

METROPOLITAN DISTRICT COMMISSION

20 SOMERSET STREET, BOSTON 8

November 26, 1963

Miss Frances W. Loring
Design Department
Department of Natural Resources
15 Ashburton Place
Boston 8, Massachusetts

Dear Miss Loring:

Reference is made to your November 13, 1963 letter relative to recreational facilities of the Metropolitan District Commission.

I offer herein a rough cost breakdown of the rink now under construction in the West Roxbury Area of Boston.

The general contract price for this facility is \$517,797.00, of which the work of the general contractor amounts to \$369,400.00, \$83,300.00 being for piling necessary to support both the rink, the roof over the rink and the building. It is estimated that an additional \$75,000.00 represents the cost of the reinforced concrete slab upon which the rink bed is placed. The balance of the work is performed by filed sub-contractors and is as follows:

Roofing and Flashing	\$ 3,250.00
Aluminum Doors and Windows	10,500.00
Caulking, Dampproofing and Waterproofing	1,065.00
Glass and Glazing	1,229.00
Finish Hardware	895.00
Painting	4,740.00
Plumbing	15,847.00
Heating and Ventilating	10,420.00
Electrical	33,490.00
Refrigeration	64,390.00
Dressing and Toilet Compartments	2,571.00

Total sub-contractors	\$148,397.00
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It is reasonable to assume, on the basis of the cost for piling and reinforced concrete, that if this facility were being constructed upon an ideal site, the overall cost would be reduced by approximately \$160,000.00.

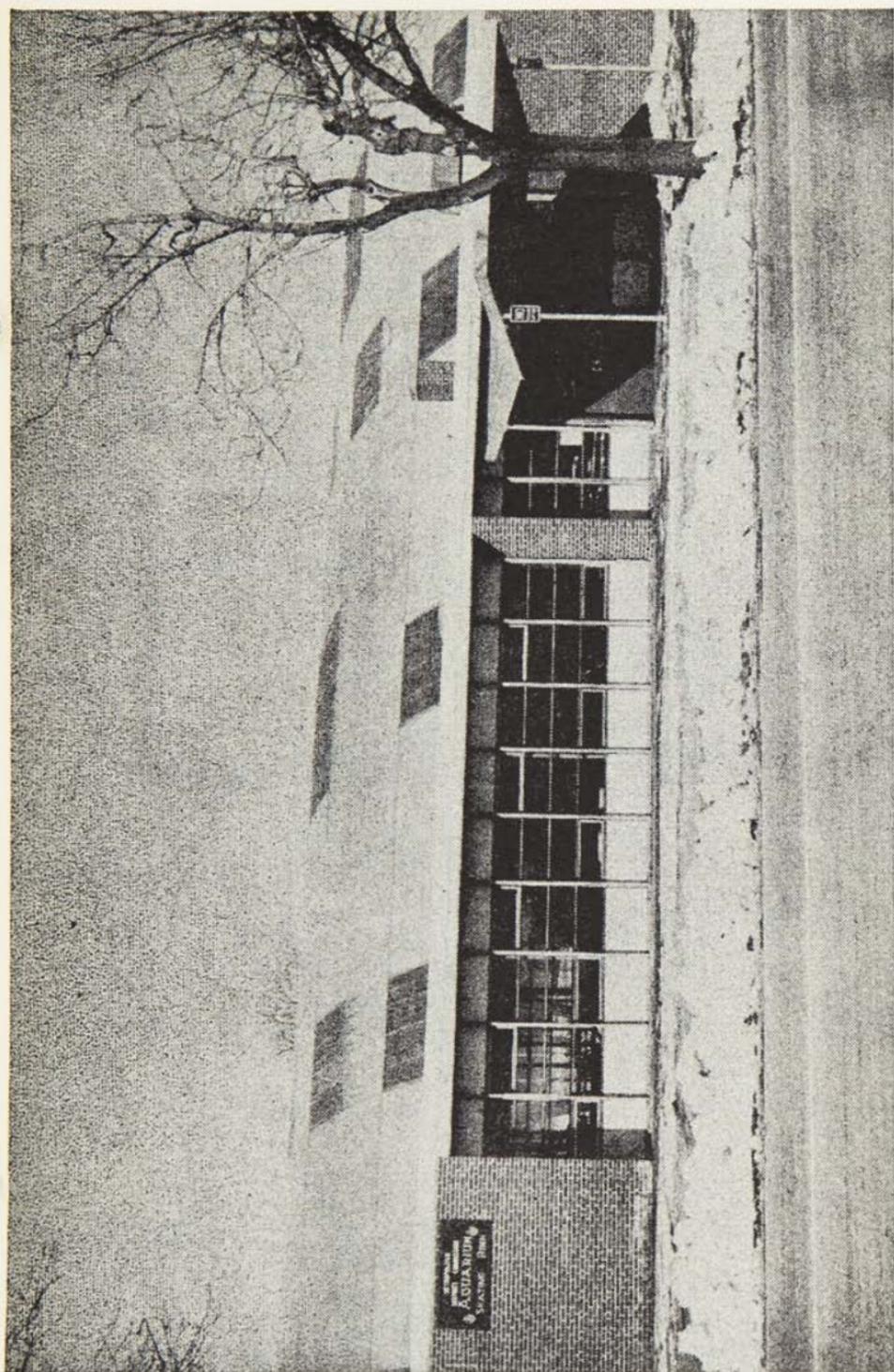
No detailed cost breakdown is kept as such insofar as it concerns operating costs and personnel salaries as you have requested. However, generally speaking, the Commission expends approximately \$20,000.00 in round figures for these items each skating season. The income from the rinks approximates the expenditures.

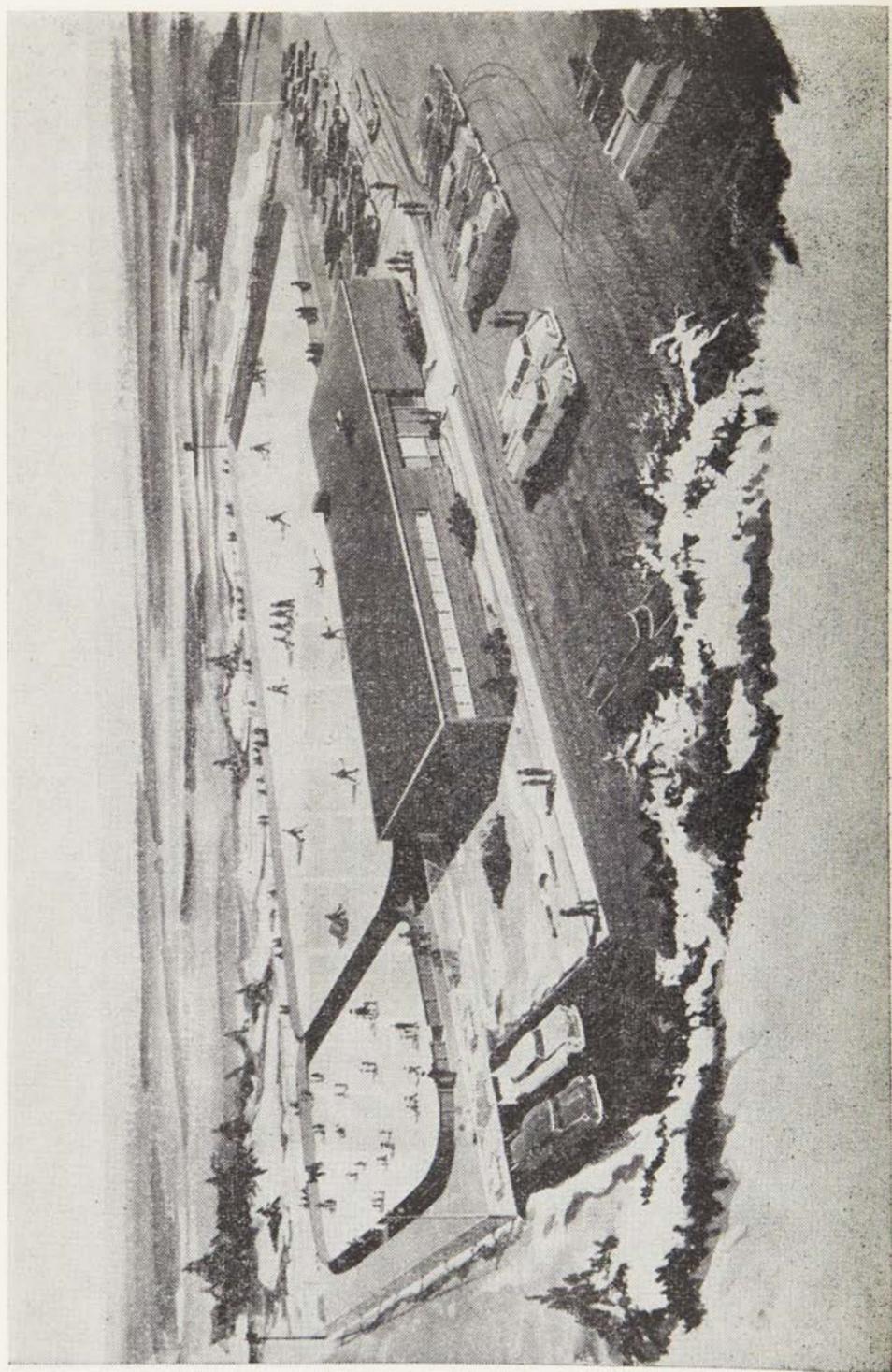
You will find that the cost of electrical energy is the greatest single item to contend with and this cost will vary from community to community depending upon the local electric rate as approved by the Department of Public Utilities. We have instances where identical rinks operate for the same period of time and the electrical energy cost will differ by as much as fifty percent.

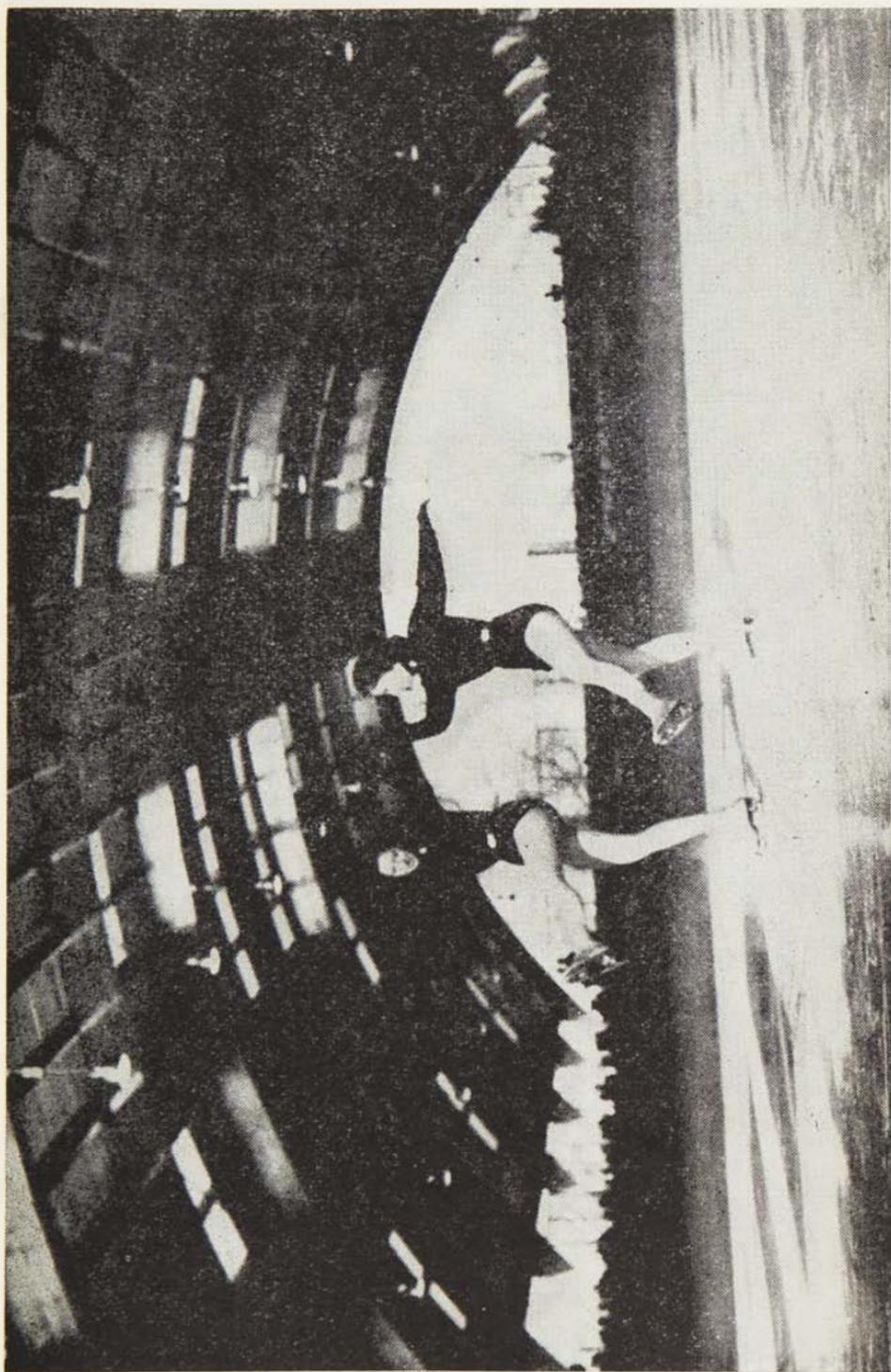
If I may be of any further assistance to you in this matter, please do not hesitate to call.

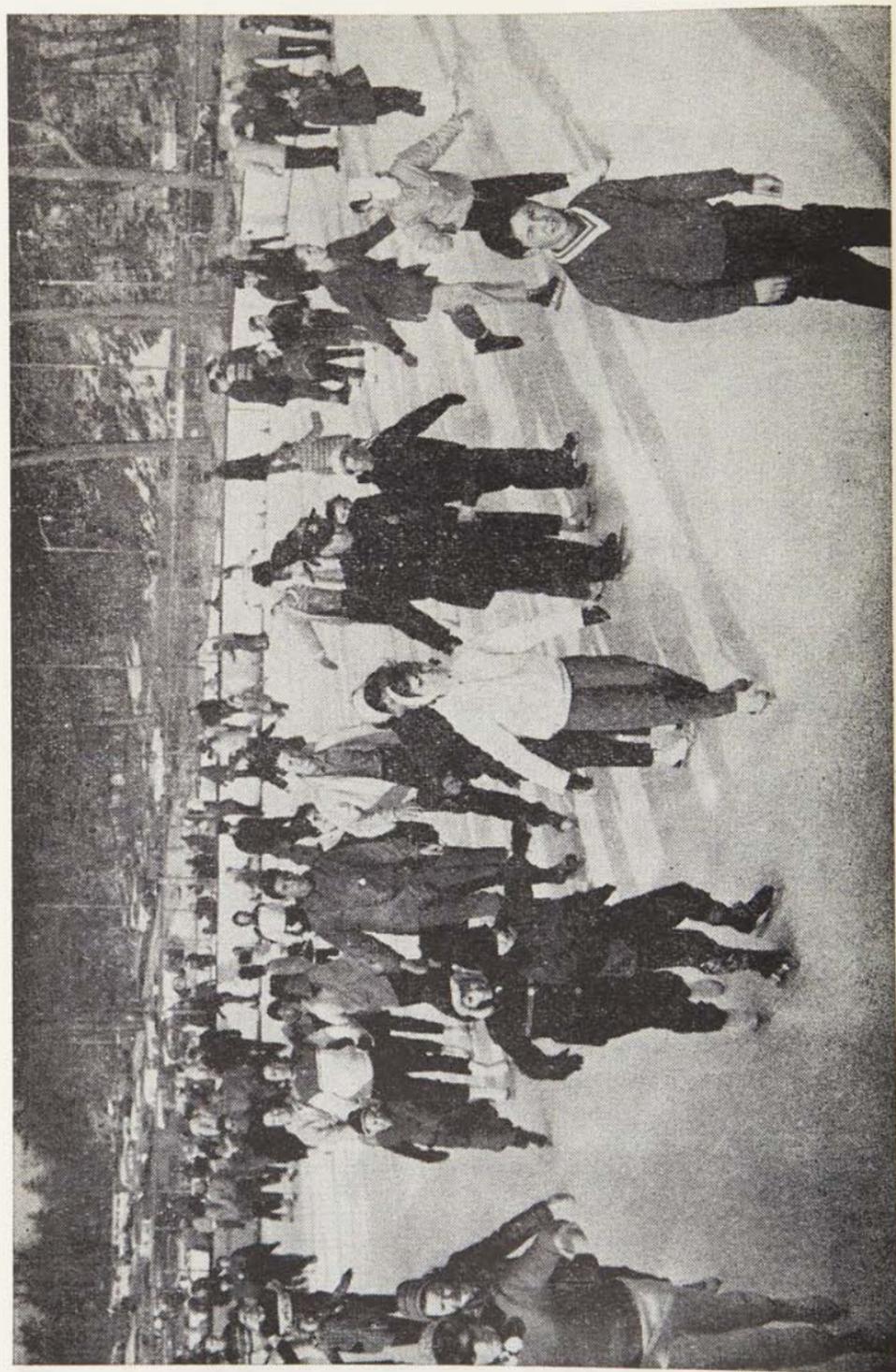
Very truly yours,

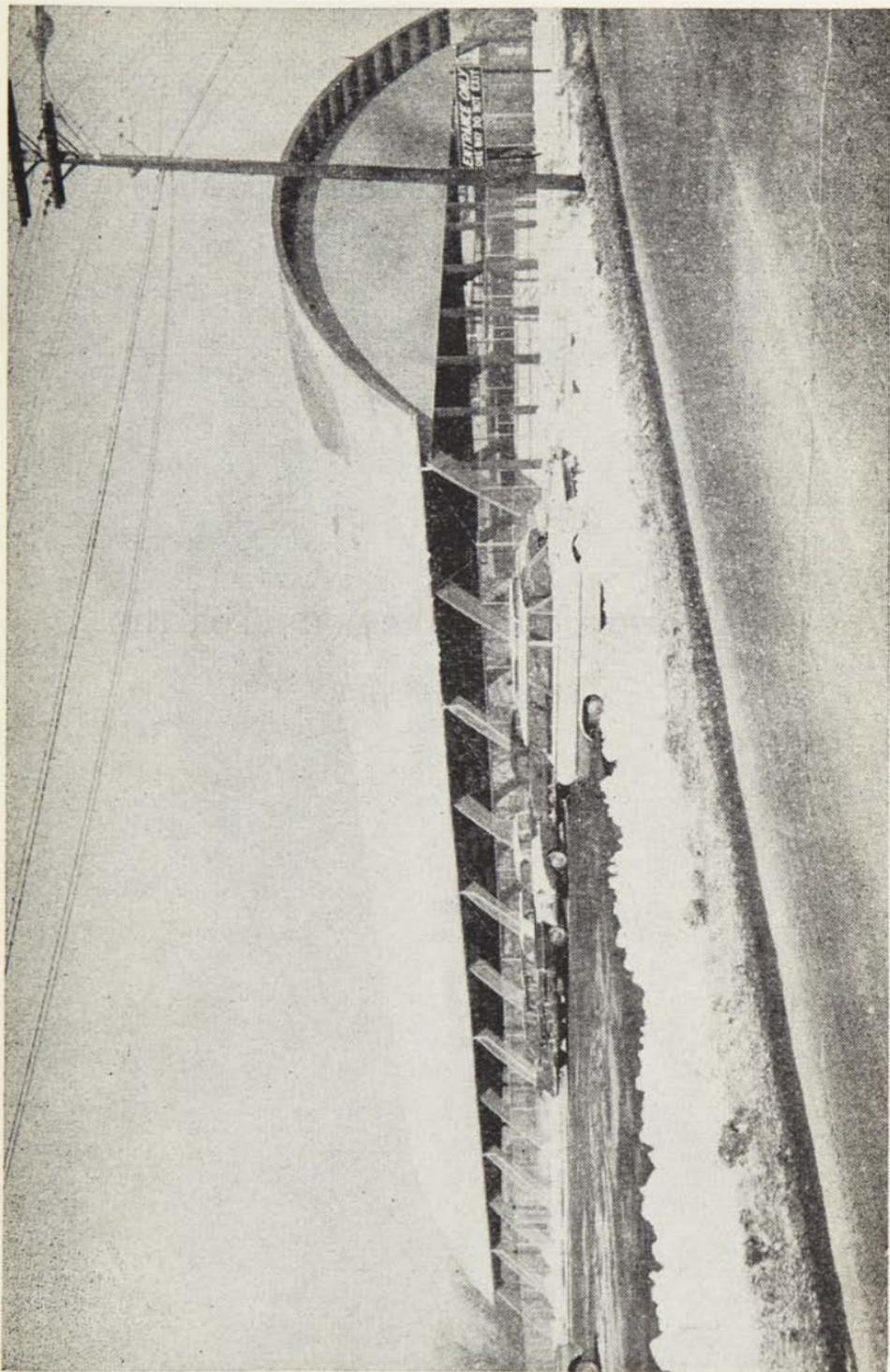
MASON J. CONDON





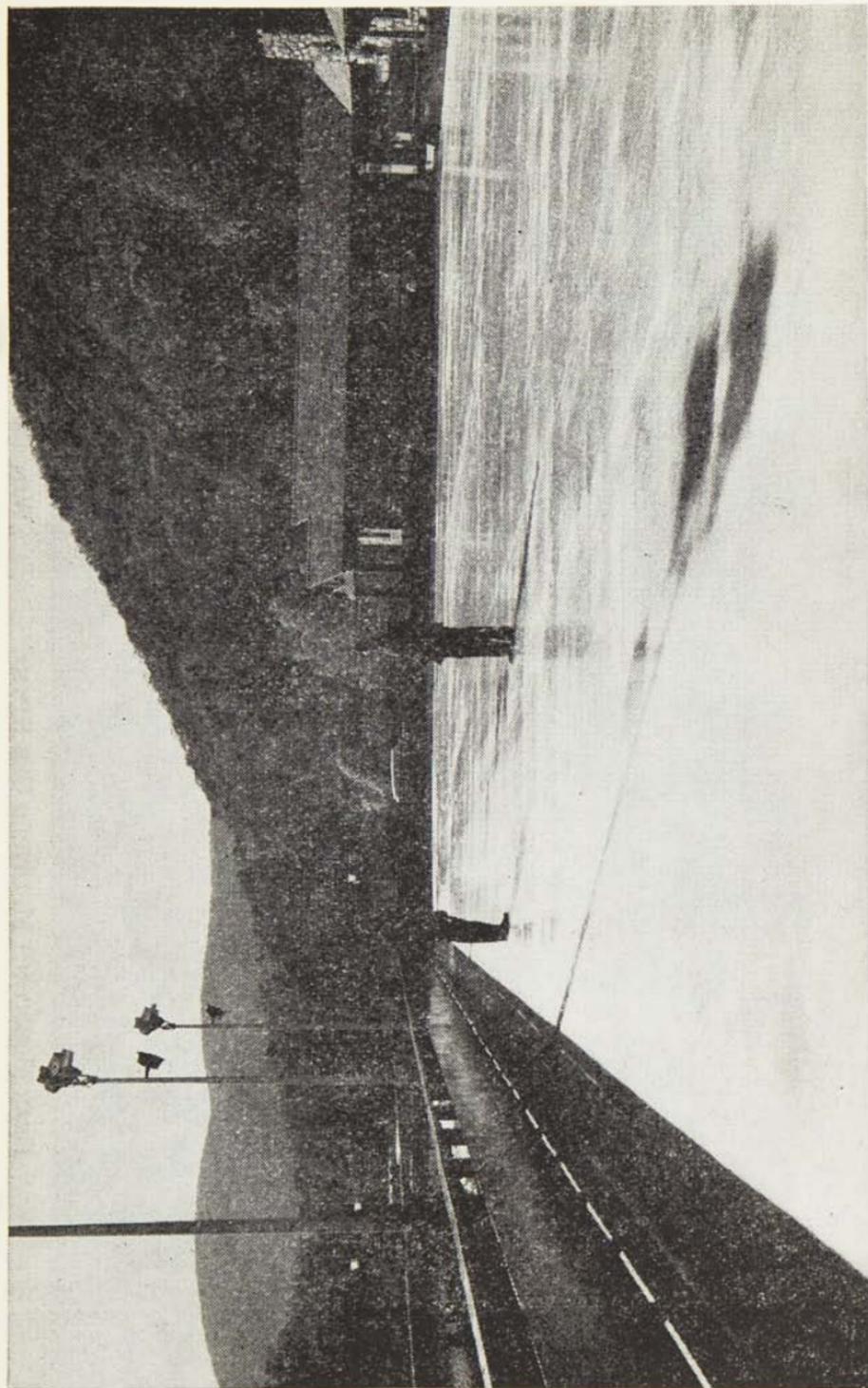




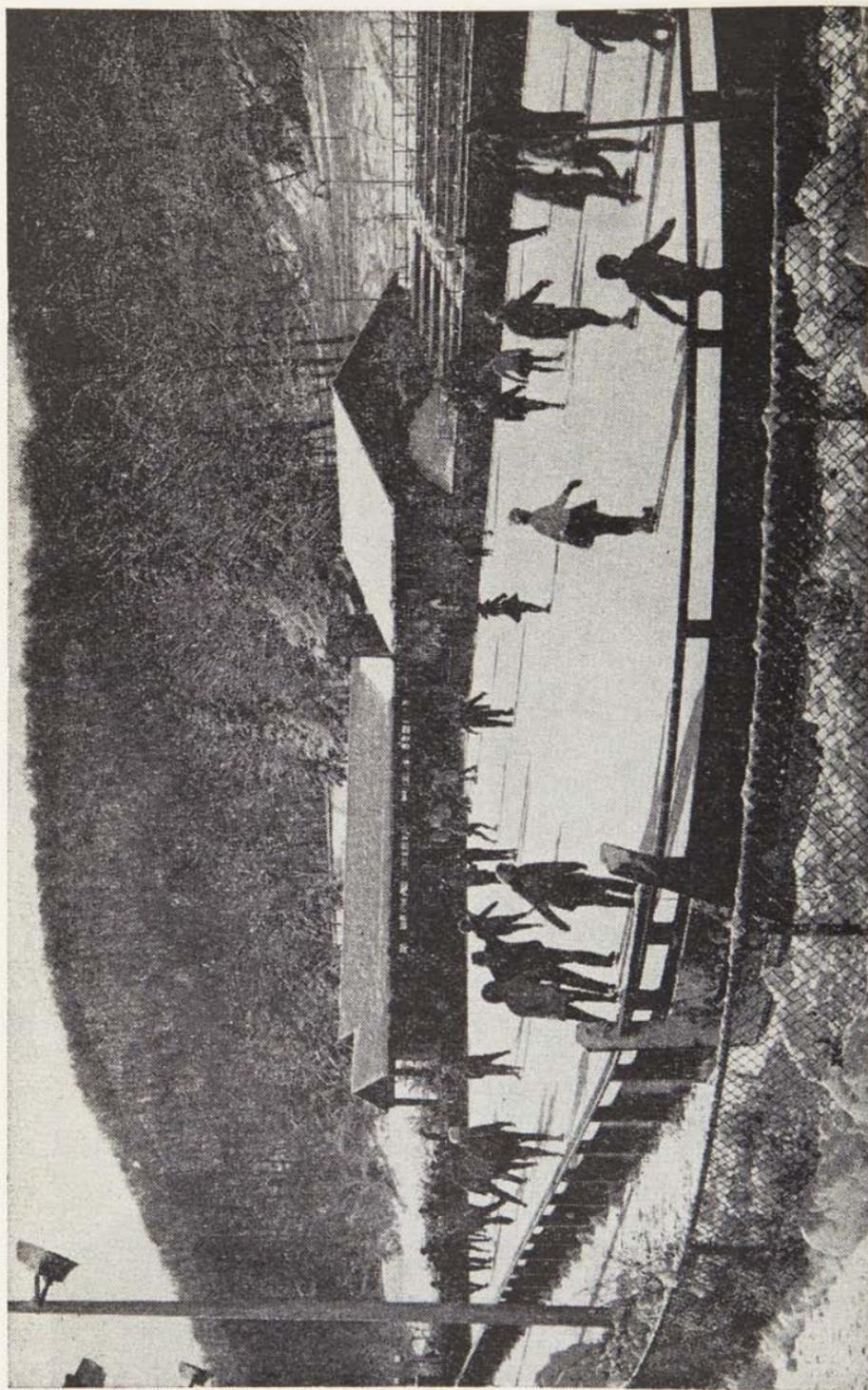


The Commonwealth of Massachusetts

WHAT OTHER CITIES ARE DOING FOR THE
SKATING PUBLIC

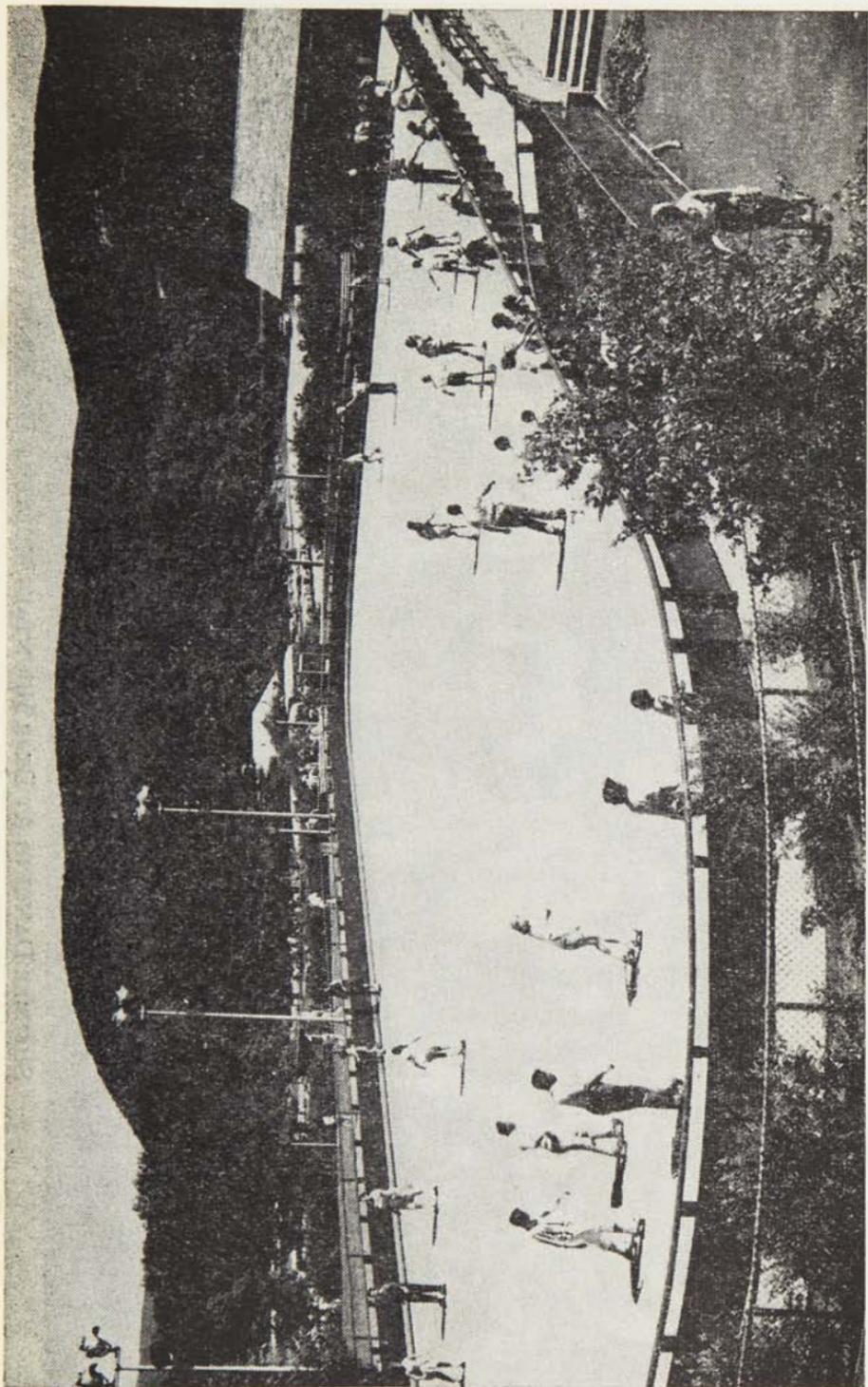


BEAR MOUNTAIN ICE RINK, PALISADES INTERSTATE PARK



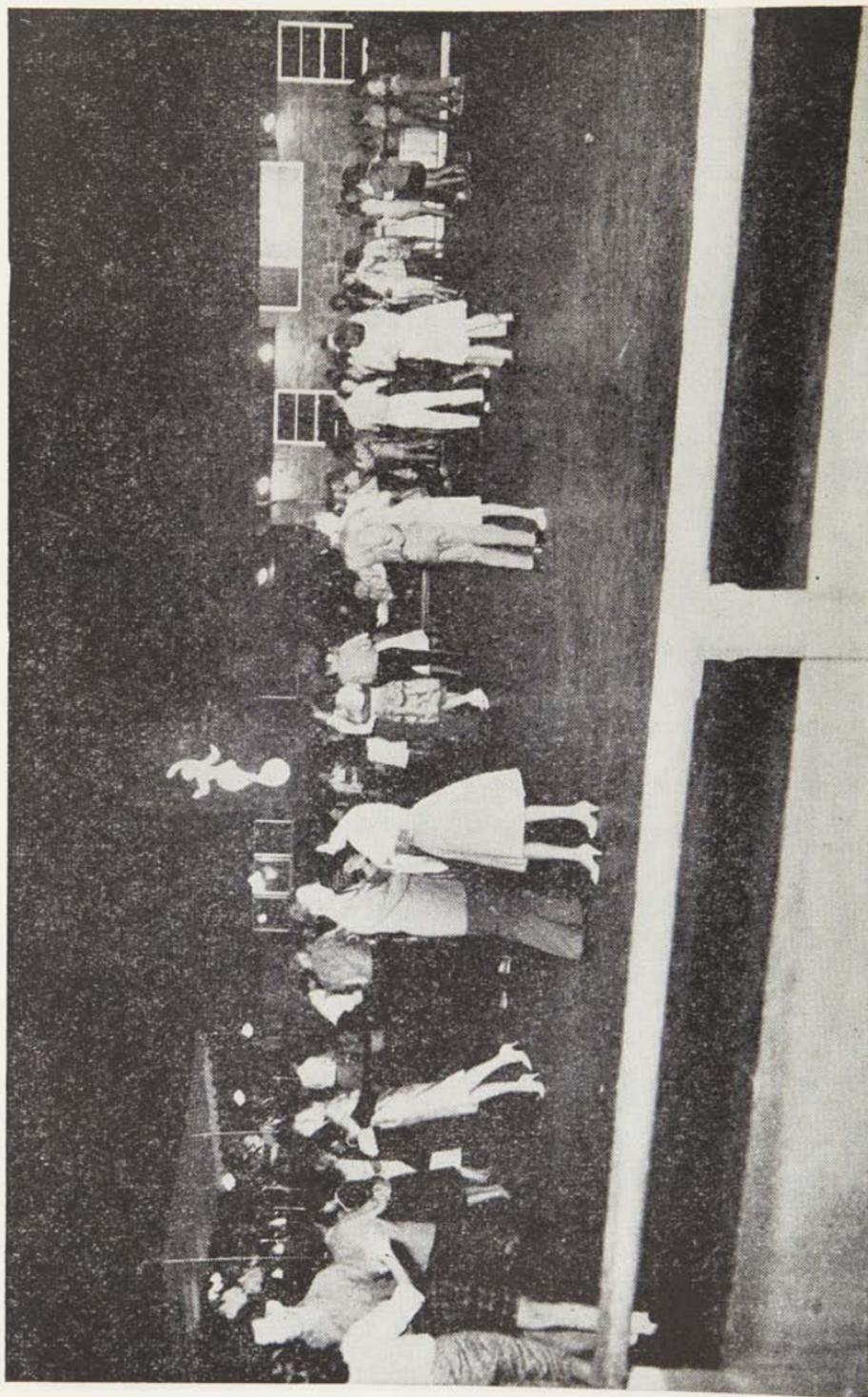
BEAR MOUNTAIN MULTIPLE USE RINK

WINTER ICE SURFACE



BEAR MOUNTAIN MULTIPLE USE RINK

ROLLER SKATING IN SUMMER



SUMMER DANCING AT BEAR MOUNTAIN MULTIPLE USE RINK

RULES & REGULATIONS
SKATING AT YOUR OWN RISK.
NO FAST SKATING.
NO BACKWARD SKATING.
NO WHIPS.
NO TRIO SKATING.
FIGURE SKATING IN CENTER
OF RINK.
NO SMOKING ON SKATING
SURFACE.
NO EATING OR DRINKING
ON SKATING SURFACE.
UNAUTHORIZED
INSTRUCTION PROHIBITED.
PERSONS EXPELLED
FROM RINK WILL NOT
RECEIVE A REFUND.
NO REFUND IN THE
EVENT WEATHER
CONDITIONS CAUSE
CANCELLATION OF
SESSION.
ONLY SKATES ALLOWED

REGULATIONS AT BEAR MOUNTAIN ICE RINK

BEAR MOUNTAIN RINK

Dimensions	— Building area	— 4,044 sq. ft.
	Skate hall	— 28 x 70
	Rink	— 85 x 185, oval
Capacity	— 900 Skaters. 200 Spectators in 70' bleachers.	
Equipment	— 500 shoe skates.	
Construction	— Concrete; 6" thick with 1" topping Kalman finish slab. Post-stressed.	
Cost	— \$300,000.	

ICE

Refrigeration	— 11 miles 1" wrought iron pipe. 2 compressors —
	175 tons ice daily. Cleaning with ZAMBONI unit. Features; Cost \$8,500. Refrigeration total cost \$100,000.
Season	— 11/15 - 3/15.

ROLLER

Equipment	— 500 skates.
Season	— 4/1 - 11/1.

SQUARE DANCING

Square Dancing — Twice weekly in Summer on rink surface.

PALISADES INTERSTATE PARK COMMISSION
 NEW YORK SECTION
 AUTHORIZED SCHEDULE OF FEES — 1963 - 64
 WINTER SEASON
 BEAR MOUNTAIN

PARKING

CARS — Weekdays No Charge
 Sundays & Holidays 50c
 October 27th to April 4th, 1964 Charge; Sundays &
 Holidays (Except Election Day, Thanksgiving Day and
 Christmas Day) weather permitting.
 Charge Saturdays when ski jumps are held and when
 skiing is available.

BUSES — Parking Permit \$4.00 per bus
 (Note — Buses are not permitted at Bear Mountain
 on SUNDAYS during January to and including the sec-
 ond Sunday in February because of acute traffic con-
 gestion. Bus Permits must be obtained in advance
 through New York Office).

BEAR MOUNTAIN ICE SKATING RINK

SKATING SESSIONS:

Friday

7:30 P.M. - 9:30 P.M.

Saturdays, Sundays and Holidays

10:00 A.M. - 11:30 A.M.

2:00 P.M. - 3:30 P.M.

12:00 Noon - 1:30 P.M.

4:00 P.M. - 5:30 P.M.

7:30 P.M. - 9:30 P.M.

Closed Monday thru Thursday

SPECIAL SESSIONS:

Special One Hour Sessions may be arranged by advance
 reservation when regular sessions are not scheduled at
 \$25.00 per hour for groups of 50 or less.

The Rink may also be reserved for Hockey at special
 rates.

Phone Bear Mountain Ice Skating Rink—STony Point
 6-2701.

ADMISSIONS CHARGES:

Admission	50c per session
Children under 14	25c per session
Shoe Skate Rental — \$2.00 deposit	75c per session
Checking	10c per package
Skate Sharpening — Figure Skates	75c
— Hockey Skates	50c

HOCKEY RATES:

Afternoon Games	\$15.00 per game
Evening Games and Saturdays, Sundays and Holidays	\$20.00 per game
Reservation of 7 or more sessions — \$3.00 deduction per session on above rates.	

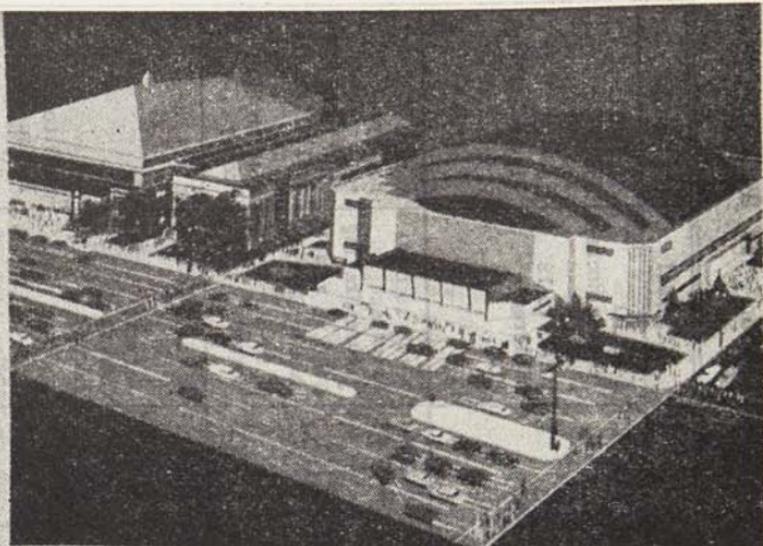
NOTE: On November 29th and from December 23rd thru
January 3rd, holiday sessions will be in effect.

SEPT. 8th — 1963 FALL SCHEDULE — NOV 14th

NORTH SHORE SPORTS CENTER — 30 BOSTON STREET — LYNN, MASS. — LY 8-2550

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
M O R N I N G		10 to 12 Public Skating	10 to 12 Public Skating	10 to 12 Public Skating	10 to 12 Public Skating	8 to 10 Pee Wee Hockey • 10:30 to 12 Children's Club	10 to 11 Patch • 11 to 1 Figure Skating
A P P E R	1:30 to 3:30 Patch and Figure Skating •	12:30 to 2:30 Figure Skating •	12:30 to 2:30 Figure Skating •	12:30 to 2:30 Figure Skating •	12:30 to 2:30 Figure Skating •	12:30 to 2:30 Patch and Figure Skating •	1 to 2 Hockey •
T R E E	4 to 5:30 Intermediate Figure Skating Club	2:45 to 4:45 Public Skating •	2:45 to 4:45 Public Skating •	2:45 to 4:45 Public Skating •	2:45 to 4:45 Public Skating •	2:30 to 4:30 Public Skating •	2:30 to 4:30 Public Skating •
N O O N	5 to 6 Hockey	5 to 6 Hockey	5 to 6 Hockey	5 to 6 Hockey	5 to 6 Hockey	5 to 6 Hockey	4:45 to 8:15 Hockey
E V E N I N G	6 to 8 Intermediate Hockey School •	6 to 8 Intermediate Hockey School •	6:15 to 8:15 Patch and Figure Skating •	6 to 11 Harvest League Hockey	6:15 to 8:15 Patch and Figure Skating •	6 to 11 Harvest League Hockey	• 8:30 to 11 Public Skating

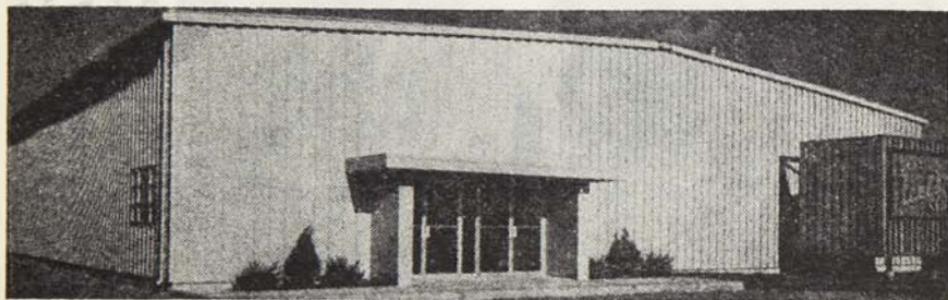
TYPICAL PROGRAM



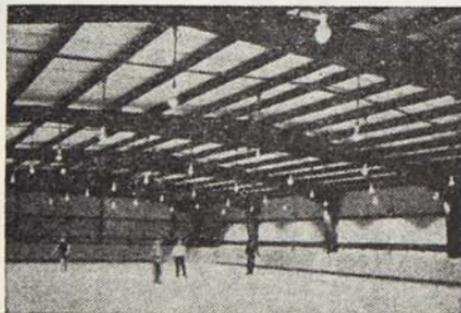
MILWAUKEE'S SUCCESSFUL COMBINATION AUDITORIUM-ARENA



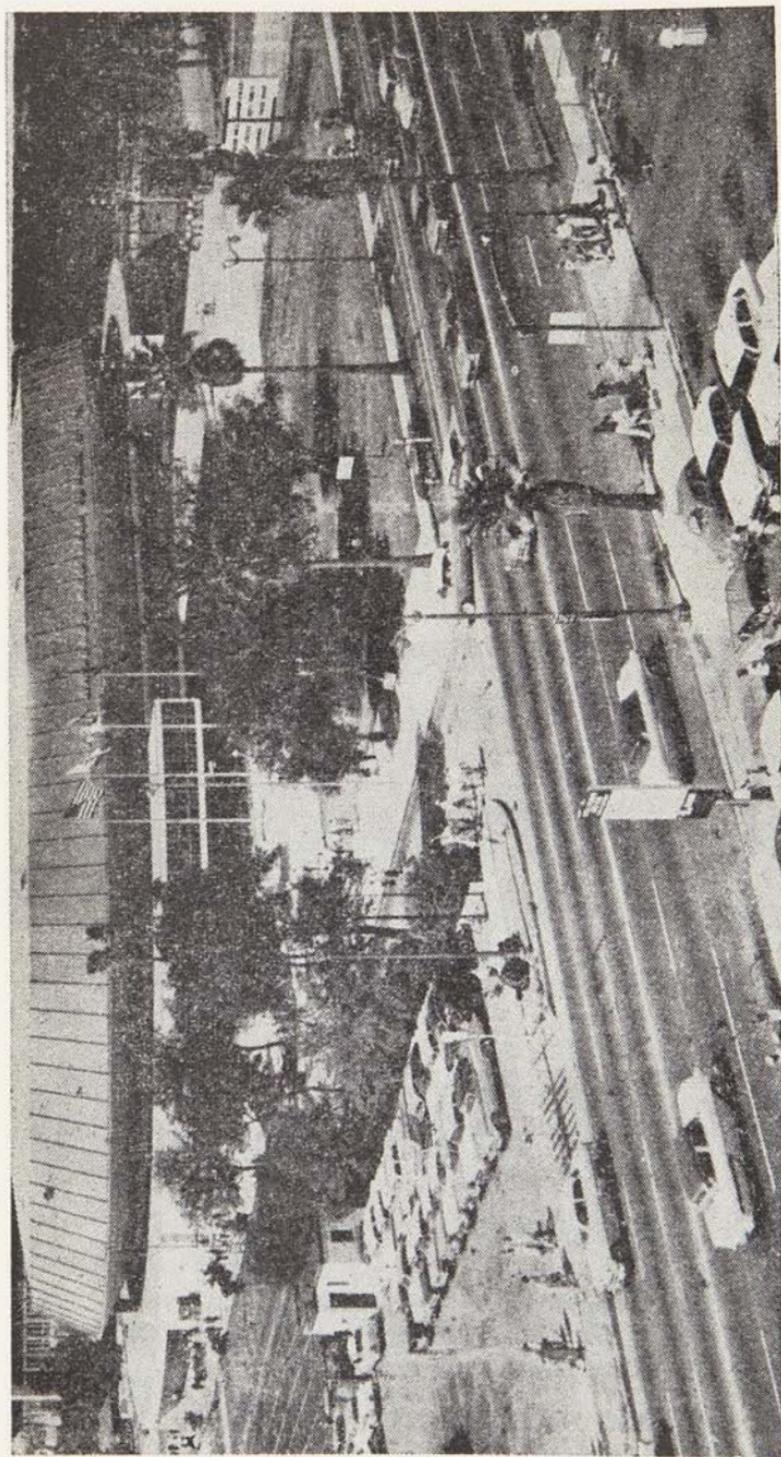
is built a space with
 easily accessible ice
 THE YVES ZEMER
 1964



Dedicated to
 "Ice Center"
 DEDICATED 1964



ICELAND SKATING CENTER, TROY, MICHIGAN



LOS ANGELES ARENA
DEDICATED TO THOSE WHO DIED IN THE ARMED SERVICES
*"Ice Capades" playing at the above facility, outcrossed the
Dodgers' Ladies Night baseball game played a block away
at the Coliseum.*