

H.T.I. SPORTS HALL

Project Report Submitted by

VASILIOU ELEFThERIO
TOMBAZO IOANNI

in partial fulfillment of the requirements
for the award of the Diploma of
Technician Engineer in
Civil Engineering of the
Higher Technical Institute, Cyprus

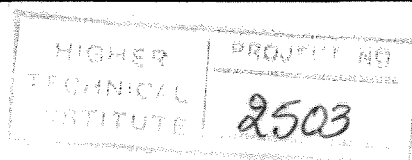
Project Supervisor: Dr. Despina Serghides
Senior Lecturer
Civil Engineering Department
H.T.I.

External Assessor: Chris Philippou
Civil eng. Bsc C. Eng. MICE

Type of Project: Group

C/759

June 1996



3. ABSTRACT

This is a study of a SPORTS HALL, at a specific area at H.T.I.

It gives general information about the project's aim and objectives.

It outlines the facilities of the sports hall, defining its use and location as well the minimum requirements and equipment use for each room.

It furthermore deals with the safety of the spectators in the sports hall ground.

The study concludes with problems arise, possibilities of increasing the capacity and a brief summary.

1. CONTENTS

<u>PART A</u>		<u>PAGE</u>
1.	CONTENTS	I
2.	ACKNOWLEDGEMENT	VII
3.	ABSTRACT	VIII
4.	AIM AND OBJECTIVES	IX
5.	TERMS AND CONDITIONS	XI
6.	INTRODUCTION	XIII
 <u>PART B</u>		
 <u>CHAPTER 1</u>		
A.	SPORTS CENTERS	1
B.	GENERAL	1
1.	Orientation of the sports hall	1
2.	Parking place	3
3.	Access	3
4.	The building	4
5.	Main entrance	4
C.	SPORTS HALL	4
1.	Play area	7
1.1	Surface of the play area	7
1.2	Danger for the training persons	7
1.3	Seats for the substitutions	8
1.3.1	Location	8

1.3.2	Capacity	8
1.3.3	Level	8
1.3.4	Comfort	8
1.3.5	Protection	8
1.4	Scorer's table	8
2.	Exclusion of the spectators from the play area	9
3.	Locker-rooms and sanitary rooms for the teams	9
3.1	Location	9
3.2	Quantity	9
3.3	Requirements	9
3.4	Equipment	9
3.5	Sanitary installations for each room	10
3.5.1	Location	10
3.5.2	Requirements	10
4.	Locker-rooms for the referees and rooms providing sanitary installations	10
4.1	Location	10
4.2	Requirements	10
4.3	Equipment	11
4.4	Sanitary installations for each room	11
4.4.1	Location	11
4.4.2	Requirements	11
5.	First aid room for athletes and referees	11
5.1	Location	11
5.2	Equipment	11
6.	Drug use control room	12
6.1	Location	12
6.2	Requirements	12
6.3	Equipment	12
7.	Access from the locker-rooms to the play area	12
8.	Very important persons' (V.I.P. box)	13

8.1	Location	13
8.2	Seats	13
8.3	Capacity	14
9.	Public entrances and exits	14
10.	Mass media	15
11.	Public places	15
11.1	Accommodation	16
11.2	Security	16
12.	Disabled spectators	16
13.	Signs (guiding information)	16
14.	Parking places	17
14.1	Police, fire brigade and emergency services	17
14.2	Teams, referees and administration	17
14.3	V.I.P.s'	17
14.4	Mass media	18
14.5	Stadium personnel	18
14.6	Public	18
14.7	Disabled persons	18
15.	Lighting	18
16.	Communication	19
16.1	Communication center	19
16.2	Service telephones	19
16.3	Telephones for the public	19
17.	Speakers	20
17.1	Scoreboard	20
18.	Ticket sales	20
19.	Prevention of fire	20
20.	Structural safety	21
21.	Staff flags	21
22.	Helicopter landing	22

23.	First aid for the public	22
23.1	Requirements	22
24.	Store rooms	22
24.1	Location	22
25.	E.A.C. substation	23
26.	Office-session (conference) rooms	23
26.1	Location	23
27.	Water tank	23
28.	Fuel tank	23
29.	Mechanical (machine) room	24
30.	Door trap	24
30.1	Location	24
30.2	Access	24
31.	Multiple use room	25
31.1	Access-location	25
32.	Roof	25
32.1	Slopes	25
32.2	Construction	25
33.	Walls	26

CHAPTER 2

SAFETY

GUIDE TO SAFETY AT SPORTS GROUNDS

1.	Introduction	27
1.1	Circulation problems and movement of the crowd	28
1.1.1	Spectators exits	28
1.1.2	Shuttles of spectators	28
1.1.3	Circulation	29

1.2	Panic creation	29
1.3	Fall from height	30
1.4	Obstacles on the floors, slippery	31
1.4.1	Slippery floors	31
1.4.2	Obstacles on the floors	32
1.5	Injuries	32
1.6	Obstacles in the sports halls-violation	33
1.6.1	Precautions and measures (general)	33
1.6.2	Precautions and measures (open rooms)	34
1.7	Fire	35
1.	Conclusions	36
1.	References	37

PART C

DRAWINGS

- A1 Site plan
- A2 East & West elevation
- A3 South & North elevation
- A4. Basement plan
- A5. Ground floor plan
- A6. Floor plan
- A7. Roof plan
- A8. Section Z₁ - Z₁ & Z₂ - Z₂
- A9. Setting out spectators seating