

PROPOSED DEVELOPMENT PLAN OF CAVITE SPORTS
COMPLEX AT TRECE MARTIRES CITY

DESIGN PROJECT

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PROPOSED DEVELOPMENT PLAN OF CAVITE SPORTS COMPLEX AT TRECE MARTIRES CITY

**Undergraduate Design Project
Submitted to the Faculty of
Cavite State University
Indang, Cavite**

**In partial fulfillment
of the requirements for the degree of
Bachelor of Science in Civil Engineering**



*Proposed development plan of Cavite sports
complex at Trece Martires Cavite City
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ABSTRACT

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The design project was conducted from June 2006 to March 2007 at Department of Civil Engineering, College of Engineering and Information Technology, Cavite State University, Indang, Cavite. The design project aimed to provide a development plan of Cavite Sports Complex at Trece Martires City that includes architectural plan, structural plan, plumbing layout, detailed cost estimate and development of miniature scaled model. The site development plan is composed of 400m running track, 0.40m x 0.55m x 400m drainage canal, 21m x 50.03m swimming pool, 8 light towers, grandstand and bleachers. This design project would serve as future reference for the rehabilitation and upgrading of the existing sports complex.

Structural Aided Analysis and Design (STAAD) was used in the analysis of steel light towers. The reference such as Ultimate Strength Design (USD), Simplified Methods on Building Construction and Simplified Construction Estimate were used in the design computations. Safety, economy and aesthetic aspects were also considered in conceptualizing the design.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGEMENT	v
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF APPENDIX TABLES	xv
LIST OF APPENDIX FIGURES	xvi
ABSTRACT	xvii
INTRODUCTION	1
Significance of the Study	2
Statement of the Problem	3
Objectives of the Study	3
Scope and Limitation of the Study	4
Time and Place of the Study	4
REVIEW OF RELATED LITERATURE	5
MATERIALS AND METHODS	13
Site Investigation	13
Data Gathering	13
Detailed Surveying	14
Design and Computation	14
Preparation of Architectural and Structural Plan	18

Detailed Estimated Cost and specification	18
Development of Miniature Scaled Model	19
RESULTS AND DISCUSSION	20
Site Investigation and Inspection	20
Survey and Inspection of the Proposed Site	21
Detailed Estimated Cost and Specification	23
SUMMARY, CONCLUSION AND RECOMMENDATION	24
Summary	24
Conclusion	25
Recommendation	26
BIBLIOGRAPHY	27
APPENDICES	28
Appendix A- ATHLETIC FIELD	28
A ₁ - Architectural design	29
A ₂ - Earthfill and Excavation	42
A ₃ - Materials and Specification of Rekortan	55
A ₄ - Figures	65
A ₅ -Site Development Plan	70
Appendix B- ATHLETIC FIELD DRAINAGE SYSTEM	75
B ₁ - Architectural and Structural Design	76
B ₂ - Design of Drainage System	80
B ₃ - Detailed estimate for Drainage and Manhole	84

Appendix C- PERIMETER FENCE and ENTRANCE GATE	93
C ₁ - Architectural Design	94
C ₂ - Detailed Estimate for Fence and Entrance Gate	97
Appendix D- FLAME TORCH	104
D ₁ - Architectural Design	105
D ₂ - detailed Estimate for Flame Torch	108
Appendix E- STEEL LIGHT TOWER	115
E ₁ - Architectural and Structural Design	116
E ₂ -Design of Steel Column	118
E ₃ - Design of Concrete Pedestal	123
E ₄ - design of Concrete Footing	130
E ₅ - design of Base Plate	137
E ₆ - Design of Anchor Bolt	140
E ₇ - Detailed Estimate for Light Towers	143
Appendix F- SWIMMING POOL	148
F ₁ - Architectural and Structural design	149
F ₂ - detailed estimate for Swimm ⁱ 9ng Pool	159
Appendix G- TABLES	167
Appendix H- DETAILED COST ESTIMATES	175
Appendix I- STAAD ANALYSIS OUTPUT	183

LIST OF TABLES

Table	Page
1.1 Computation of Profile Elevation	43
1.2 Data for Elevation	45
1.3 Area for Elevation	46
1.4 Earthfill and Excavation	50
1.5 Sierra Universal Corporation Track Record	63

LIST OF FIGURES

Figure	Page
1. Athletic Field Cross Sectioning	66
2. Contour Map	67
3. Map of Trece Martires City	68
4. Vicinity Map	69

LIST OF APPENDIX TABLES

Appendix

Table	Page
1. Concrete Proportions	168
2. Quantity of Cement and Sand for CHB Mortar per square Meter Wall	168
3. Quantity of Cement and Sand for Plastering per Square Meter	168
4. Length of Steel Bar Reinforcement	168
5. Quantity of Cement, Sand and Gravel for CHB footing per Meter Length	169
6. Number 16 G.I. Tie Wire for CHB Reinforcement per Square Meter	169
7. Values of c, Run-off Coefficient	170
8. Number of Lateral Ties in One Steel Bar and Quantity per Meter Length of Column	171
9. Quantity of Plywood Form and its Frame for Columns per Square Meter Lateral Area	172
10. Quantity of Lumber for Scaffolding or Staging	172
11. Quantity of Tiles per Square Root and Meter	173
12. Quantity of Reinforcing Steel Bars in a One-Way Reinforced Concrete Stab	174
13. Quantity of Tire Wire on a One-Way Reinforced Concrete Stab in Kilograms per Square Meter	174

LIST OF APPENDIX FIGURES

Appendix

Figure	Page
1. Proposed Site for Sport Complex	72
2. Track Oval of Rizal Memorial Sports Complex	73
3. Flame Torch of Rizal Memorial Sports Complex	74

PROPOSED DEVELOPMENT PLAN OF CAVITE SPORTS COMPLEX AT TRECE MARTIRES CITY ^{1/}

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^{1/}An undergraduate design project submitted to the faculty of the Department of Civil Engineering, College of Engineering and Information Technology, Cavite State University, Indang Cavite in partial fulfillment of the requirements for the degree of Bachelor of Science in Civil Engineering with contribution no. BSCE-2006-07-004. Prepared under the supervision of Engr. Rico C. Asuncion.

INTRODUCTION

The proposed Cavite sports complex will be located at Barangay San Agustin at the southwest portion of Trece Martires City, Cavite with an area of 48,429 square meters. The site was allocated in 1998 during the term of Governor Bong Revilla.

Presently, there is an old grandstand, unfinished track and field and abandoned swimming pool. Then, the area is turned into a jeepney terminal bound to Naic, Cavite. The swimming pool is filled with unclean water and now breeding place for frogs. The entrance gate of the sports complex is destroyed, the grandstand has no railings and the area for track and field is not well developed. During summer the soil ground cracks while turns muddy during rainy days. The field turns rocky and rough because during rainy days, outgoing vehicles from the sports complex carry away soil with their wheels.