
SPORTS EDUCATION AND TRAINING COLLEGE

GLORIFYING PHYSICAL ACTIVITY AMONG PEOPLE



Inspiring Excellence

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ABSTRACT

Government Physical College in Dhaka, is designed to take an interdisciplinary approach to study in physical education. As well as gaining applied fitness in a range of physical activity, and will enrich critical skills and gain comprehensions on movement education from a socio-cultural and biophysical perspective. One will gain an enlightening, big-picture view of the impending of physical education, taught well, to be a foremost constructive potency in society. While creating such types of institutions, the fact is not to build a "building", but rather to put on platform as architecture. This building unlocks and converts itself following the different events happening within the institution, and also produces a mutable and dynamic profile in the landscape. Besides the accommodation facilities it functions all types of conveniences that a student might need. And, as it highpoints as a physical education college, so it is apparent that the people live in here is being provided by the facilities include training, warming-up, classrooms, as well as the press and technical servicing. Sometimes this campus also includes plazas or public spaces and the direct relationships between these and the surrounding city, along the streets, along the main axis composes the "great landscape" of the territory. The buildings around here make its own terminology of public space and complement the urban landscape elements, embossing a new compulsion to the site. It becomes a striking landmark for residents throughout the neighborhood. While any institution could hypothetically host more than one types of study field or event, this concept usually denotes to a specific design philosophy that stresses multi-functionality over specificity. While designing in this way, both the students, teachers and government can share costs. If a campus has multi-functionality, a designer should consider how this institution can offer to the society as well as to the students of its own, together being a driving force for a better and profitable future in all aspects. Keeping in mind about the uninhibited progression of the population with the relative diminution in open space, to build an institution so that the need within limited land area can be accommodated by the proficient use of the land are the main area of consideration of this paper. The aim of the paper is to set an example of the possible solutions and promote the importance of physical education of the government proposed Physical Education College within the context of Dhaka, Bangladesh – which is one of the most densely populated city as well as country which is also facing the lacking of physical education.

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CHAPTER 1: PROJECT INTRODUCTION

1.1 PROJECT BRIEF

1.2 INTRODUCTION

1.3 PROJECT BACKGROUND AND HISTORY

1.4 PROJECT RATIONALE

1.5 OBJECTIVES AND AIMS

1.6 PROPOSED PROGRAMS

1.7 LIST OF PHYSICAL ACTIVITIES (SPORTS)

1.1 PROJECT BRIEF:

PROJECT TITLE: SPORTS EDUCATION AND TRAINING COLLEGE

SITE LOCATION AND AREA: SHATMASJID ROAD, MOHAMMADPUR, DHAKA

CLIENT: MINISTRY OF YOUTH AND SPORTS.

SITE AREA: 7.9 ACRES.

1.2 INTRODUCTION:

We stand at the very verge of 21st century where everything changes within the blink of an eye and as a result to meet the demand everything has to be spoon apart. People are being captivated by their own sphere of life trying to push them self towards a new heights every **day to become more successful which is termed as "urbanization"**. The urbanized life is producing a mechanical life where being successful is everything, creating mechanical beings. In the modern world, a man is enjoying lot of luxuries provided by the advance technological development on one hand and facing lot of physical, mental emotional and social disturbances on the other hand. The advance technological development has provided all kind of comforts in all walks of life, may it be home or any other work place, agriculture or industries consequently, it has reduced lot of dependence on each other, caused social problems, reduced physical work, caused physical problems, working on machines causes mental problems, and working in shifts allows meeting family members like strangers, cause emotional problems. Collectively all these factors effect family life, society and nation adversely in the long run. Further, the technological advancements in all spheres of life has created lot of free/leisure time after the working hours, at the same time the advancement in recreational gadgets like T.V., Video-CD games, computer games have made the child least interested in physical activity resulting in so many physical, mental and emotional problems. To counter act both the aspect i.e. the utility of free time/leisure time in a constructive way and to make a child more physically active in order to allow his growth and development take place proportionately, active recreation activities, other than passive ones, are must.

Architectural composition, space by space, detail by detail, has a profound impact on the comfort, emotions, security, and understanding in humans. The success of architectural space and, in turn, a series of successful architectural spaces is dependent on the creation of an environment in which the human being can understand spaces easily and can grasp their image. This easy readability entails a feeling of openness that detonates the possibility of participation in the space on the part of the individual.

Therefore this paper focuses to bring a balance by promoting well-being of the whole nation with a healthy habit, by re-designing the government physical education college. A physical education college is inevitable, because they cover many factors that cannot be reproduced. Therefore, an integration of plans from economic and architectural views before the construction is very necessary, keeping mind about the nature of the environment it should blend with.

1.3 PROJECT BACKGROUND AND HISTORY

In 1954 in Gouripur Rajbari near Mymensingh district, the first physical college was established. The first physical education college was established in 1954 in Gouripur Rajbari of not far off Mymensingh district in Bangladesh. After that in 1955 the college was settled in Armanitola in Dhaka and then it shifted at Darfin hostel of Narinda and Aliya Madrassa. At last finally in 1962 the college was moved permanently at Mohammadpur in Dhaka as the first Government Physical Education College in Bangladesh.

The Government Physical Education College is a full residential academic institute. It is situated in 7.90 acre land area. There are two student hostels (one for male and another for females), a staff residential building, an administrative building, a college building, a 400-meter running track, a swimming pool, a basketball ground, and a gymnasium at the college. All indoor, outdoor games facilities are available at the college campus. Now The Government Physical Education College is only providing the Bachelor of Physical Education (BPh.Ed) Degree.

Government Physical Education College, Dhaka is under National University of Bangladesh. All educational and teaching activities are conducted in English at the college.

1.4 PROJECT RATIONALE

The physical education sector in Bangladesh is not very developed as expected. Bangladesh is the ninth largest country with 160 million people as of 2013 data. A very few private and public colleges are not enough to provide physical education. These institutions are offering only the Bachelor Degree in physical education. The existed buildings are more than 60 years old and most of them are in vulnerable state of self-destruction. For instance, swimming pool it has been 12 years, the water line and the drainage system, motor, basically the whole

system has corroded. Then the gymnasium's not at all in the state of use due to the risk of its structure being weak as it has aged. All the other buildings has aged and there are no proper maintenance taken at all. Thus, the quality of education and the quantity of students has descended. Along with the environmental scenario, the living condition of the students is very poor, which includes their food diet and supplements. Being in a physical education college, these students needs to get proper nutrition and protein for their well-being to perform their practical training. Overall, the institution is on the verge of extinction. So the government has taken the initiative to rebuild the whole institution with a new masterplan to make it work properly and enhance the importance of physical education in Bangladesh. Furthermore, introducing masters of physical education and four years long bachelors of physical education programs. Ensuring new heights of the building in that area to be 20 stories. Which means increased number of students, planning to have more expanded programs to accommodate all the students. Ensuring a better environment with proper supplement, equipment, materials, resources, etc. to create better trainers, teachers, coaches and individuals.

1.5 OBJECTIVES AND AIMS

- To promote and enhance the prospects of physical education in Bangladesh.
- To give the academic members and outsiders a way of recreation.
- To provide all students a variety of enjoyable leisure opportunities those which are accessible being safe and physically attractive.
- To provide the student a proper academic facility.
- To add up such auxiliary facilities; as to earn more revenue therefore making physical activity center more financially feasible.
- To enhance a sense of national cohesion and common interest, as this would act as a major building force in society as a whole.
- To access the requirement of multi-sports center in the light of regional potentials and aspirations of and for the students of physical education.
- To provide the students with better living and better food diet, making sure they are getting there supplements.
- To create a festive space responding to the enthusiasm of sports.
- To fulfill the idea that the physical college is a symbol for the city and the school.
- To provide a space easily understood by all.

- To create a space which entails a sense of openness and provides the possibility of participation in the space on the part of the individual.
- To reduce walking distances.
- To create a stimulating working environment.
- To maintain a secure environment.
- To create an environment adaptable to a multitude of activities year round.
- To create a simple circulation system that is easily accessible and informative.

1.6 PROPOSED PROGRAMS

1. Auditorium
2. Gymnasium
3. Academic building
4. Administrative building
5. **Girl's dormitory**
6. **Boy's dormitory**
7. **Teacher's quarter**
8. **Principal's quarter**
9. Parking
10. 3rd grade quarter
11. Service building
12. Café + dining
13. Tennis court
14. Football court + race court
15. Swimming pool
16. Guard room
17. Medical center
18. Library
19. Seminar rooms
20. Conference rooms
21. Reception, lift lobby and lounge
22. Toilet
23. Resting shades for athletes

1.7 LIST OF PHYSICAL ACTIVITIES (SPORTS)

1. Hockey
2. Cricket
3. Volleyball
4. Football
5. Handball
6. Soft ball
7. Kabadi
8. Khokho
9. Javelin
10. Athletics
11. Gymnastic
12. Swimming
13. Basketball
14. Tennis
15. Table tennis
16. Badminton
17. Taekwondo
18. Meditation
19. Rock climbing
20. Research center

CHAPTER 2: LITERATURE REVIEW

2.1 IMPORTANCE OF PHYSICAL EDUCATION

2.2 HOW TO BECOME PHYSICAL EDUCATION TEACHER OR TRAINER

2.3 ROLE OF A PHYSICAL EDUCATION TEACHER IN THE SOCIETY

2.4 COLLEGE CURRICULUM

2.5 DIFFERENT SPORTS AND REQUIREMENTS

2.1 IMPORTANCE OF PHYSICAL EDUCATION

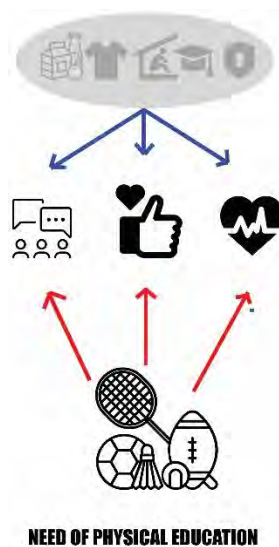


Fig: 2.1 Importance of Physical Education. Source: Author (2018)

The educational course related to the physics of the human body is known as physical education and is generally taught during primary and secondary education. It has been a compulsory part of curriculum in a majority of countries throughout history because it encourages comprehensive psychomotor learning in a moment exploration setting. It is utilized to promote health.

Both educational institutions and families have a long history of encouraging physical education exactly because of the benefits it provides children in terms of health and physical fitness. The many health benefits for young children include but are not limited to strengthening of their bones and muscles, improvement of gross and fine motor skills, help in maintaining healthy body weight and even higher energy levels.

There has been an increased awareness in Bangladesh of the benefits of physical education. The numerous physical activities encouraged are not just typical popular sports. Students are introduced to a plethora of different activities such as bowling, walking, yoga, meditation etc. Similarly, it ensures that children develop positive habits to carry over into their adult lives.

There are proven psychological benefits such as improvement in general mental health, concentration, awareness and positivity. Students of any age can be taught, with little or no need for equipment, which makes it ideal for mixed ability and age classes.

The components of physical education are physical, mental, social, and emotional. It builds self-esteem and develops skills in cooperation, teamwork and sportsmanship. It promotes

physically active lifestyles and academic learning. It serves as a preventive measure against disease and has been linked to overall good health.

Physical education is said to inspire a stronger sense of self-worth in children, due its promotion of mastery of skills and conceptualization of physical activity. Consequently, children become more assertive, confident and independent and develop better self-control.

The UN Inter-Agency Task Force on Sport for Development and Peace, in 2003, defined sport, for the purposes of development, as "All forms of physical activity that contribute to physical fitness, mental well-being and social interaction, such as play, recreation, organized or competitive sport, and sport and games" (IWG-SDP, 2008).

Sport, in the broadest sense indigenous, has been linked to the following human rights as set out in various international treaties and conventions:

- * Right to the highest attainable standard of physical and mental health;
- * Right to education directed at the fullest development of human personality;
- * Right to take part in cultural life;
- * Right to rest and leisure;
- * Right for children to engage in play and recreational activities;
- * Women's right to participate in recreational activities and sports;
- * Right of persons with disabilities to participate in sport on an equal basis with others.

2.1.1 Development perspective of children and youths:

There were reportedly 1.8 billion young people between the ages of 10 and 24 - the largest youth population ever recorded, in 2015. In fact, in the world's 48 least developed countries, children or adolescents make up a majority of the population (UN, 2015). Hence, youth represent an unprecedented opportunity, demographically speaking, for reduction of global poverty and advancement of development. Young people make up the largest segment of the population in most developing nations - more than 50 per cent in many cases. The number of young people has already peaked in many instances, and in some cases, the number of young people will peak within the next decade. A historic opportunity is presented by the unprecedented number of young people in these countries. Maximization of this rare

opportunity requires investment in and support of the children and youths. Proper investment in and support of these youths and children needs to include means for them to lead healthy lives.

Physical education and sport activities needs to be integrated into curriculums and made accessible to all school-going children. This can contribute towards (IWG-SDP, 2008):

- * Developing physical and motor capacities of children in order to enable them to lead active, healthy lives - a major protective factor in preventing non-communicable diseases;
- * Motivating children to have fun and be active, in order to reinforce their desire to make physical activity a lifelong habit;
- * Helping children understand and overcome barriers to physical activities;
- * Informing, equipping and motivating children to make healthy lifestyle choices;
- * Improving children's psychological state, especially relaxation, concentration and mood levels in schools - by helping them focus and learn;
- * Helping nurture vital life-skills and positive values like team-building and communication skills, decision making and problem solving skills, sense of community, self-esteem, personal responsibility, empathy, moral growth and resilience.
- * Attracting more children to enroll and stay in schools to take advantage of opportunities for sport and play that may not be otherwise available.

Community sport programs may provide children, who have been marginalized by poverty, gender, disability, family dissolution, ethno-cultural frictions and other conflicts, with:

- * Exposure to positive adult role models
- * Opportunities for learning and skill-building that foster self-esteem and self-confidence
- * Help for flourishing effective social and communication skills, building positive relationships, making friends, and finding social support;
- * Opportunities to learn how to express their needs and interests and play leadership roles in sport-fields and communities;
- * Critical help by addressing social and psychological health and aid in recovering from trauma caused by various adversities in their lives.

2.1.2 Recommendations for governments:

These recommendations are for governments around the globe, including the Government of Bangladesh, to aid in harnessing the power of sports for children and youths to achieve development and peace based on recommendations by the UN-sponsored International Working Group on Sport for Development and Peace (2008):

- * Make access to physical education and sport for children and youth universal and, in the context of national education, maintain explicit policy objectives, health and sport policy frameworks.
- * Deploy strategies, including mandatory, comprehensive, daily physical education and sport for students.
- * Enhance educational institutions and teachers capacity to effectively deliver physical education programs.
- * Invest in research and design national strategies and programs.
- * Ensure that physical education, sport policies and curricula are age-appropriate.
- * Integrate child and youth development initiatives into all training programs for physical education teachers and sport coaches.
- * Formulate policies to prevent the exploitation and abuse of children and youths in the domain of sport and games.
- * Address challenges of implementation with regard to disadvantaged communities and groups when formulating physical activity and sport policies for children and youths.
- * Provide decision making opportunities for children and youths in the formulation of physical education and sport policies and action plans that concern them.
- * Deliver health education courses to schools.
- * Work with institutions and community sport partners to address the needs and interests of all students.
- * Ensure a satisfactory range of developmentally appropriate community-based sport and physical activity programs.
- * Work to ensure that communities have physical sport and play environments that are accessible and safe.

- * Focus sport programs on education and development (not merely on winning), emphasizing skills improvement, tactical knowledge, success for all participants, enhanced confidence, positive social relationships, diverse choices, and real enjoyment.
- * Create opportunities for children and youths to participate in dialogue and decision-making process with regard to the day-to-day activities of sport and physical activity programs.
- * Build mechanisms for effective planning and reflective actions in all programs.
- * Ensure that prospective coaches and physical education teachers are properly screened by program managers and helped to improve their teaching and coaching skills to become positive and effective role models.
- * Design programs to promote parents engagement in physical education instruction as well as in extracurricular or community sport and physical activity events.
- * Develop simple, clear and practical resource materials on sport for the use of who may not have access to training programs or processes, such as parents and community volunteers.
- * Monitor and evaluate on a regular basis.

“Sports do not build character. They reveal it.” - John Wooden, Legendary UCLA Basketball Coach

The positive effects of youth sport as stressed by literature on youth sport:

- **Higher grades, expectations, and attainment;**
- **Greater personal confidence and self-esteem;**
- **Greater connections with school— that is, greater attachment and support from adults;**
- **Stronger peer relationships;**
- **Greater family attachment and more frequent interactions with parents;**
- **More restraint in avoiding risky behavior; and**
- **Greater involvement in volunteer work**

“These outcomes are thought to be related to the contribution of sport to learning values and skills associated with initiative, social cohesion, self-control, persistence, and responsibility. 36 Theories of positive youth development stress the importance of sport in acquiring skills that

are beneficial in other domains (e.g., school, family, work) that lead to better adaptive skills. People who work together will win, whether it be against complex football defenses, or the problems of modern **society.**" - Vince Lombardi, American Football Coach

2.1.3 Social and Economic benefits of Physical Education College

Economically, aggregate demand of the economy can increase due to building of a physical education college, thus resulting in the creation of new jobs, thus increasing employment. This could lead to an economic growth based on the multiplier effect. This may lead to economic development. Therefore there will be increase in investment, which also increases the total income of the city or country.

Social benefits are qualitative as there may be an increase in marginal utility of the population (happiness). A boost in the morale of the city if a team wins a championship may occur. The younger population may be motivated to become superstars, thus perhaps stimulating further the need for education.

2.2 HOW TO BECOME PHYSICAL EDUCATION TEACHER OR TRAINER

Physical education teachers (P.E. teachers) are educators. They instruct students in health, fitness and sports. The key skills required of P.E. teachers include instructing, public speaking, active listening and learning, critical thinking, monitoring and assessment.

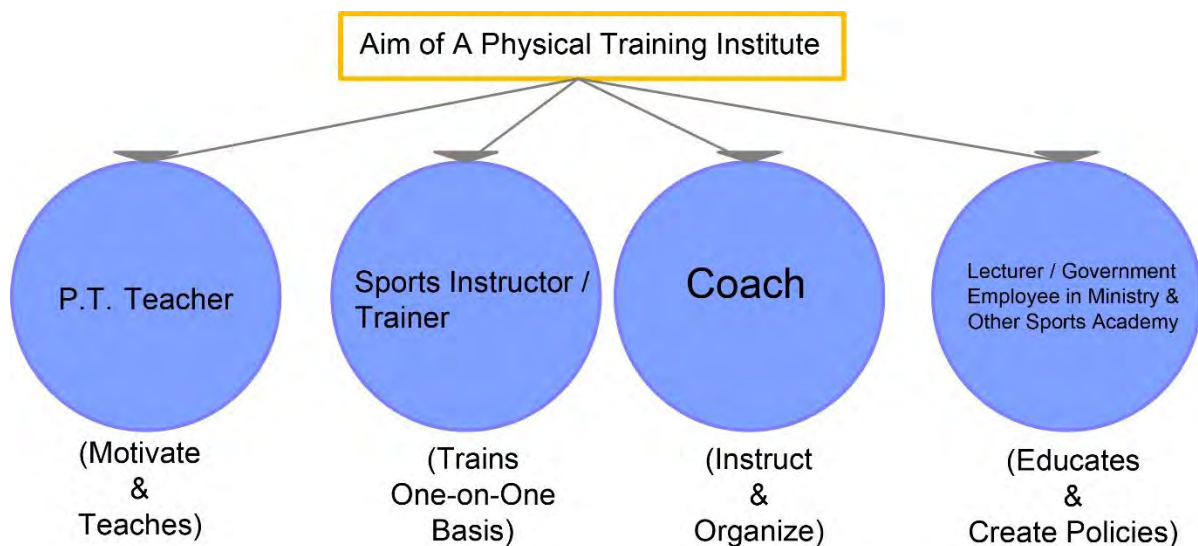


Fig: 2.2 Types of Positions. Source: Author (2018)

Coach

Coaches teach, instruct and organize both amateur and professional athletes for team sports or individual sports. Athletes are trained with the aim of optimizing their physical potential

and, for team sports, their ability to make decisions and participate in teamwork. Coaches also advise on strategies for maximum success with minimum risk of injury. High school sports coaches are frequently also teachers. Working hours for full-time coaches can be irregular and involve travel. The work can be stressful owing to the intensely competitive nature of the job.

Sports Instructor

Sports instructors generally train athletes on a one-to-one basis and usually concentrate on one specialty such as tennis, swimming or soccer. They use their knowledge of the sport in question, training equipment and human physiology to improve the performance and endurance of an athlete with the least amount of injury. They need to be skilled in motivational psychology. The work is intense and challenging but can be very rewarding. Irregular hours that are often seasonal, depending on the sport, are common and travel can be expected.

Physical Education

Teachers who specialize in physical education work in elementary, middle and high schools, teaching students the skills and techniques for effective exercise, training and sports participation. Physical education teachers who work in elementary schools might oversee and implement games that primarily encourage physical activity, while middle- and high school P.E. teachers instruct students using more regulated and structured activities such as basketball games or soccer matches.

A degree in physical education can be applied to a career as a coach, sports instructor or physical education teacher. You may need specialized certification to become a coach or a sports instructor, while physical education teachers at public elementary or high schools will also need state licensure or certification. Employment opportunities in this field are projected to increase at about the same rate as the national average for all occupations through 2024.

2.3 ROLE OF A PHYSICAL EDUCATION TEACHER IN THE SOCIETY

2.3.1 Teach Skills and Activities That Transfer Into Physical Activity Outside of Physical Education Class

According to NASPE, 2003, Physical education programs have the responsibility to teach skills that students will need to participate in physical activity outside of the physical education class and skills they will need for a lifetime of physical activity. Skills learned in physical education **class transfer to skills used in a child's play. From the kindergarten-age child playing tag, to the second grade child jumping rope, to the older child playing a game of kickball, the skilled child is more likely to participate in physical activity.** If a child is confident in his or her skills,

there is typically no hesitation to play; however, the low-skilled child, especially in the upper grades, is less inclined to take part in group activities for fear of failure and peer ridicule. Students need skills to be participants in physical activity.

Good physical education programs take the time to teach children activities they may do on their own. Examples of these are jump rope chants, no elimination tag games, hopscotch, Four Square, tetherball, and basketball activities such as Horse and Around the World. Including these activities briefly in a physical education class and then encouraging children to play them on their own is likely to promote more physical activity on the playground and in their neighborhoods.

2.3.2 Motivate Children to Be Active

Another role of the physical educator is to encourage and motivate children to be active. There are many ways to do this, including promoting community activities, assigning physical activity homework or home fun, showing an interest in the out-of-class physical activity in which children participate, and leading by example.

2.3.3 Promoting Community Activities

There are typically numerous activities in communities that promote physical activity, such as organized recreational sports, dance classes, gymnastics programs, and martial arts. A bulletin board in the gym, the school Web site, and regular announcements are simple ways to promote these opportunities. Brochures, Web sites, or newspaper announcements are available from most physical activity venues.

2.3.4 Homework and “Home Fun”

While homework is often not a pleasant part of a child’s evening, physical activity homework or home fun can be. Home fun may be practicing jump rope tricks with or without a jump rope; participating in simple exercises when commercials come on television; playing outside; walking the dog; talking a walk with a parent or guardian; participating in electronic games that specifically promote physical activity; or practicing manipulative skills such as throwing, kicking, and striking. Physical education homework or home fun can be checked through an honor system by asking for a show of hands with young children and documenting on a physical activity calendar for older children. Sending a physical activity calendar home when children go on holiday or summer vacation is another way to encourage physically active lifestyles. Physical education teachers could ask the classroom teachers to send a physical activity calendar home with the summer reading list.

2.3.5 Praise for Participation

A word of encouragement is a simple way to promote physical activity. Praising young students for play may sound somewhat strange to most of us; but for a generation that experiences limited physical activity, it may be necessary. Simply inquiring about student involvement in physical activity and praising students for that involvement carry weight with young children. To take this a step further, if a teacher shows up at a youth league sporting event or a dance recital, the child will be elated.

2.3.6 Leading by Example

One final way to motivate children to be active is for the physical education teacher to lead by example. A physically active and fit physical education teacher is a positive influence. The physical education teacher should occasionally share with the students how physical activity fits into his or her life.

By maximizing physical activity time in physical education class, aiding students in transferring skills and activities to out-of-class play, and making efforts to motivate children to be physically active, the physical educator can greatly influence the daily physical activity needs of students.

Play a Leadership Role in the Development of the School Physical Activity Program

The increase in the number of overweight children and the decrease in physical activity time in school make for a national problem. Curtailing this national epidemic can be addressed at **a local level, and the physical education teacher must be the “go-to” person to promote change** in the schools. The physical education teacher is the physical activity expert in the building and should take on the role of physical activity director for the school. The responsibilities should include the following:

- Being active members of the school wellness committee
- Helping in the evaluation and planning process for the school
- Actively learning about and promoting opportunities for physical activity in the community
- Serving as a resource person for classroom teachers
- Informing classroom teachers about the need for and benefits of adding small bouts of physical activity to the school day
- Providing resources and training to the classroom teachers
- Aiding teachers in understanding and implementing appropriate practices for physical activity (see chapter 5)

- Providing opportunities for the teachers to engage in physical activity before or after school
- Organizing school wide physical activity experiences
- Planning school wide activities such as field day, fun runs, a walking program, and morning exercise breaks
- Encouraging fund-raisers that promote physical activity
- Planning before- and after-school clubs for activities such as jump rope, walking, dance, gymnastics, and intramural sports

2.4 COLLEGE CURRICULUM

Government Physical Education College is situated in many parts of Bangladesh under National University and they are as follows:

- Dhaka
- Rajshahi
- Chittagong
- Bagerhat
- Barisal
- Mymensingh
- Jessore

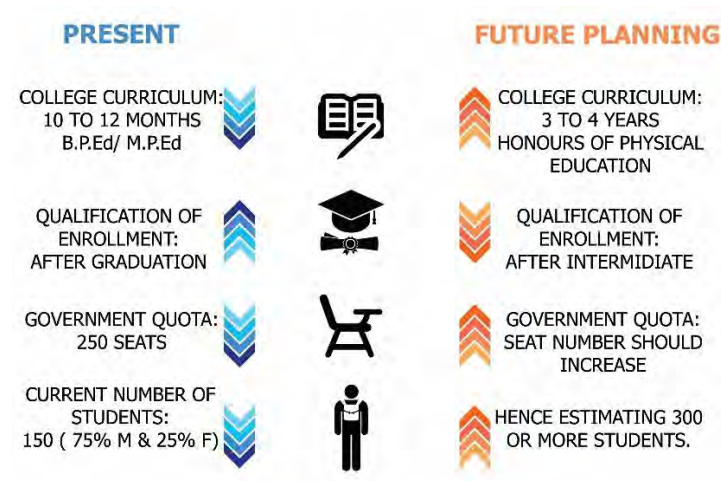


Fig: 2.3 College Curriculum. Source: Author (2018)

Yearly once admission test takes place. Classes take place from Saturday to Thursday, 6 days a week.

Time Schedule:

- Assembly at 6:30 am for 15 minutes
- Practical class from 6:30 am – 9:00 am divided into two groups female and male. Separately in gymnasium and field simultaneously.
- Theoretical class from 10:30 am – 12:30 pm
- Break from 12:30 pm – 4:00 pm
- Practical training from 4:00 pm – 6:00 pm

2.4.1 Program Requirements

Bachelors of Physical Education has 2 semesters

THEORETICAL SUBJECTS:

- Theory & principle of Physical Education
- History of Physical Education
- Organization & Administration of Physical Education
- Education & Sports Psychology
- Rules of Games & Sports
- Method of teaching Physical Education
- Physiology & Sports Medicines
- Health Education & First Aid

PRACTICAL SUBJECTS:

- Games Part 1: Football, Cricket, Handball, Volleyball, Hockey
- Games Part 2: Basketball, Badminton, Table Tennis, Kabbadi, Tennis
- Athletics: Running, Jumping (high, long, triple), Throwing (javelin, discuss, shotput)
- Gymnastics: (Floor exercise, Vaulting table, Roman ring, Parallel bar, Horizontal bar, Pummel horse- for boys) & (Floor exercise, Side horse, Balance beam, Uneven bar- for girls).
- Swimming
- Squad drill
- Mass P.T. & Country Games
- Practice Teaching.

Masters of Physical Education has 2 semesters

PART A

1ST SEMESTER

- Research Methods & Elementary Statistics
- Exercise Physiology
- Science of Sports Training
- Management of Physical Education
- Measurement & Evaluation of Physical Education

2ND SEMESTER

- Kinesiology & Sports Bio-mechanics
- Sports Psychology
- Health Education
- Sports Sociology
- Sports Medicine

PART B

PRACTICAL

- Football
- Cricket
- Athletics
- Volleyball
- Handball
- Swimming
- Gymnastics
- Basketball
- Badminton

In master's degree one is supposed to master him/herself in one specific field that is in a specific type of sport from the above mentioned games. So that he/she becomes properly trained and educated in that specific sport and can help in coaching and training others. Usually those take this degree eventually becomes a coach or trainer.

Those who take only bachelor's degree they usually tends to become P.T. teachers at schools and colleges.

2.5 DIFFERENT SPORTS AND REQUIREMENTS

2.5.1 Basketball

Basketball is a team sport involving two teams of five players. Each team tries to score by shooting a ball through hoops elevated 10 feet above the ground. The game is played on a rectangular floor called the court. There is a hoop at each end of the courts. The courts are divided into two main sections by the mid-court line.

2.5.2 Volleyball

Volleyball court specifications require the court to be 18 meters (60 feet) long and 9 meters (30 feet) wide.

Volleyball courts need a centerline that divides each team side into a 9 by 9 meter area of court space. Volleyball nets should be 1 meter wide and placed in the center of the court running sideline to sideline.

2.5.3 Hand Ball

Handball is a sport in which two teams of seven players pass a ball using their hands. The aim of it is throwing the ball into the goal of the other team. A standard match of handball consists of two 30 minute periods, and the team scoring more goals wins.

Modern handball is played on a court 40 by 20 meters (131 by 66 ft), with a goal in the center of each end. The goals are surrounded by a 6-meter zone where only the defending goalkeeper is allowed; the goals must be scored by throwing the ball from outside the zone or while "jumping" into it.

2.5.4 Tennis

Tennis is played on a rectangular flat surface, usually of grass, clay, concrete (hard court) or a synthetic suspended court. The dimensions of a tennis court are defined and regulated by the International Tennis Federation (ITF) governing body and are written down in the annual 'Rules of Tennis' document. The court is 23.78 meters (78.0 feet) long, 10.97 meters (36.0 feet) wide. Its width is 8.23 meters (27.0 feet) for singles matches and 10.97 meters (36.0 feet) for doubles matches. The service line is 6.40 meters (21.0 feet) from the net.

Additional clear space around the court is needed in order for players to reach overrun balls for a total of 18.3 meters (60 feet) wide and 36.7 meters (120 feet) long. A net is stretched across the full width of the court, parallel with the baselines, dividing it into two equal ends.

The net is 1.07 meters (3 feet 6 inches) high at the posts, and 0.914 meters (3.00 feet) high in the center. The net posts are 3 feet (0.91 m) outside the doubles court on each side or, for a singles net, 3 feet (0.91 m) outside the singles court on each side.

2.5.5 Badminton

Badminton Court Dimensions are of 13.4m length and 6.1m width.

The post should be 1.55m in height from the surface of the court and should remain vertical when the net is strained. The net should be made of fine cord of dark color and even thickness with a mesh of no less than 15mm and no more than 20mm. The net should be 760mm in depth and at minimum 6.1m wide.

The top of the net should be edged with a 75mm white cloth. The top of the net from the surface of the court should be 1.524m (5ft) at the center of the court and 1.55m (5ft 1in) over the side lines for doubles. There should be no gaps between the ends of the net and the posts. The full depth of the net should be tied at the ends if necessary.

2.5.6 Swimming Pool

Olympic-size swimming pools are used in the Olympic Games. The race course is 50 meters in length, referred to as the "long course", different from the "short course" which refers to competitions in pools 25 meters in length. The distance between touch panels, if used, should be either 25 or 50 meters to qualify for FINA recognition.

Olympic pools are generally oversized for accommodation of touch panels.

CHAPTER 3: SITE APPRISAL & CONTEXUAL STUDY

3.1 SITE INTRODUCTION

3.2 CLIMATIC CONDITION

3.3 SOCIO-CULTURAL DATA AND HISTORY

3.4 EXISTING SITE

3.5 CONTEXTUAL STUDY

3.6 S.W.O.T. ANALYSIS



Fig: 3.1 Source: Google Earth, 2018.

3.1 SITE INTRODUCTION

LOCATION: Government Physical Education College, Shatmashjid Road, Mohammadpur, Dhaka, Bangladesh.

LOCATION COORDINATE: **23°45' 18.92"N, 90°21' 47.34" E (49 feet above sea level)**

AREA: 7.9 ACRES

Physical Education College is the first in Bangladesh which is located beside one of the busiest roads of Dhaka city that is Shatmashjid road as shown in Fig: 3.1. The site is surrounded by other government plots like institutions such Graphic Art Institute and on the opposite is the old Mohammadpur Thana. Besides those plots rests the full band of commercial plots, private institutions, hospitals, residents, library, gallery, mosques and even informal settlements. Moreover, the land use pattern is changing according to the morphological pattern of the urban growth of the area which includes the idea of mixed use building as well.

3.1.2 ROAD NETWORK

The site is surrounded by the main roads axis of Mohammadpur and Dhanmondi area and the two main junctions that heads to Dhanmondi Road 27 and another one that connects Bosila road and asad avenue with Shatmashjid Road. And the physical college road connects with Katasur road which is directed towards Bhoddho Bhumi which is a national landmark and creates a direct access from the site as shown in Fig: 3.2.

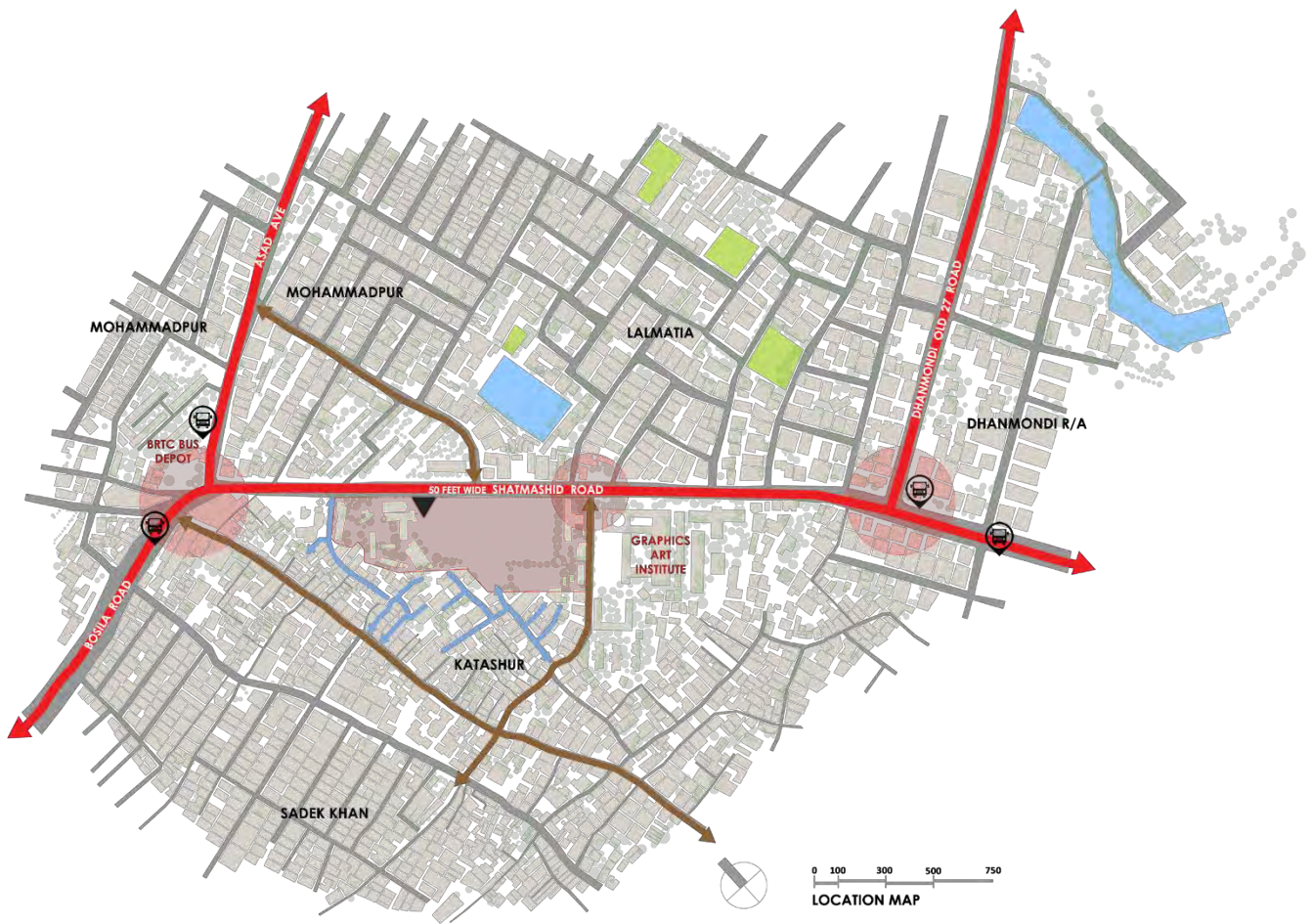


Fig: 3.2 Source: Author, 2018.

3.1.3 LAND USE PATTERN

According to the MOUZA map from rajuk as show in Fig: 3.3 the site is in the midst of institutions and has a potential land that connects the residential, commercial, hospitals, police station and so on. The zones are clearly shown and the legends shows the different category of zoning henceforth.

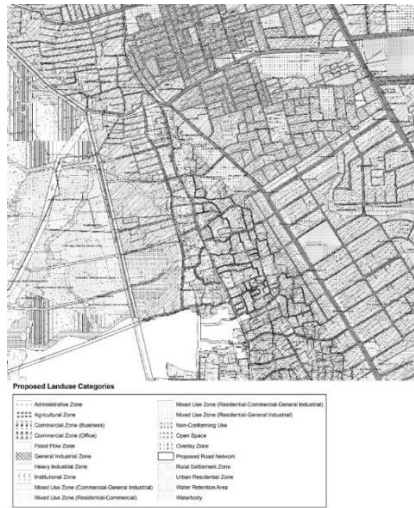


Fig: 3.3 Source: Ministry of Housing and Public Works, Rajuk, 2018.

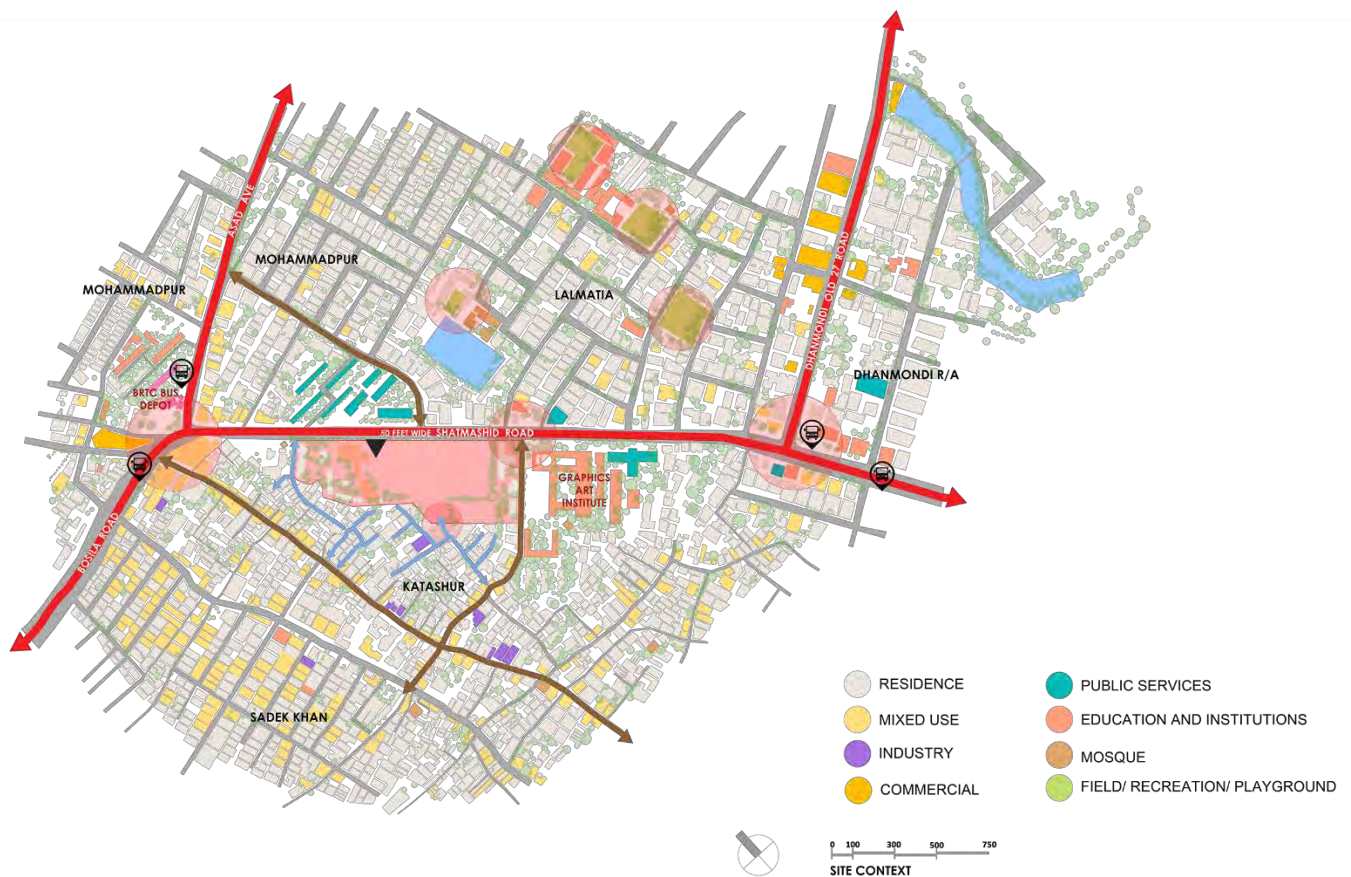


Fig: 3.4 Source: Author, 2018.

On the left side of the site is almost residential area with bands of mixed use on the roadsides and there is only one industry that lies within the crowd of residential buildings which is a **garments factory**. It's been there since late 80's and that too has been built in a private property. Numbers of mosques surrounding the site indicates the possible accessibility for the students of the college to go there within their walking distances. There are lines of other

institutions beside the site like, Graphic Art Institute and Mohammadpur Government College, which is a band of public institutes. Other than the presence of Mohammadpur Thana and RAB office shows the security of the site. Furthermore, there are hospitals other private schools, restaurants, markets, banks and ATM booths and so on as shown in Fig: 3.4.

3.1.4 ACTIVITY MAPPING

Students have access to their daily necessities within their reach of walking distance. There are restaurants, markets, salons, etc. for their daily or recreation purpose. Moreover, there are banks, ATM booths, hospitals, and police station, RAB office which assures their security and safety as well as shown in the Fig: 3.5 below. Furthermore, there are designated bus stands, as well as BRTC main depot which indicates the easy transportation for the students, as they mainly belong from the different districts of Bangladesh. The number of mosques around the area shows that the students can go to mosques within their walking distance. Although having a dedicated mosque within the premises is more preferable but the existence of mosques nearby helps the idea of not having one within the site with proper specific space for having a mosque.



Fig: 3.5 Source:

Author

3.2 CLIMATIC CONDITION

The climate is tropical in Dhaka. The summers here have a good deal of rainfall, while the winters have very little. The Köppen-Geiger climate classification is Aw. The average temperature in Dhaka is 25.9 °C. In a year, the average rainfall is 2022 mm.

CLIMOGRAPH DHAKA

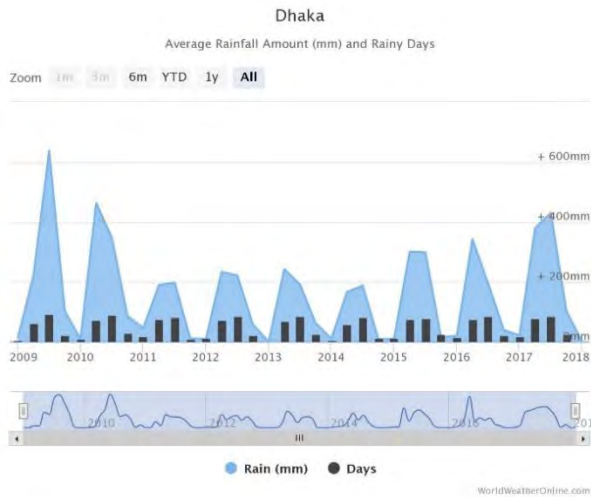


Fig: 3.8 Source: World weather, 2015.

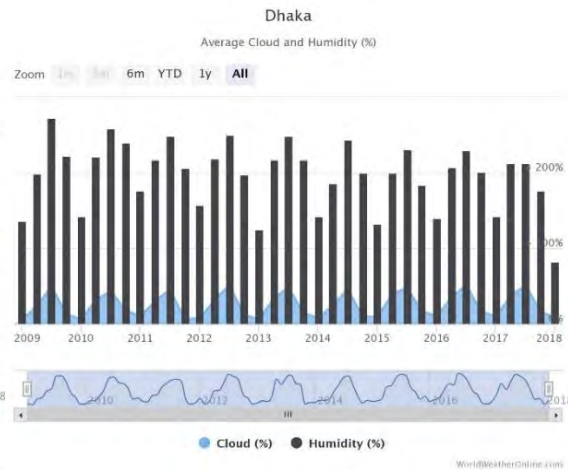


Fig: 3.9 Source: World weather, 2015.

The driest month is January. There is 6 mm of precipitation in January. Most of the precipitation here falls in July, averaging 377 mm.

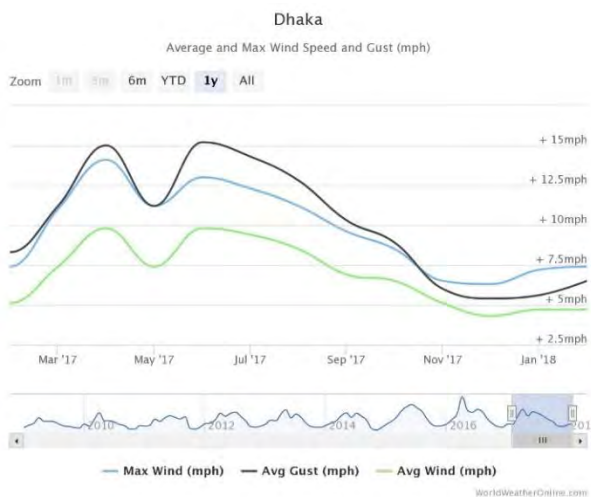


Fig: 3.10 Source: World weather, 2015.

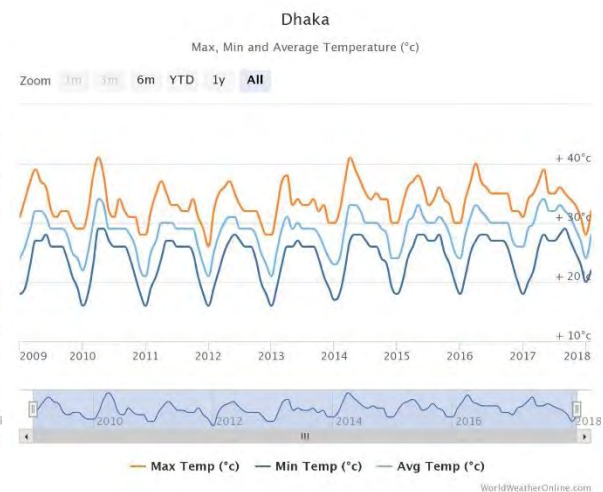


Fig: 3.11 Source: World weather, 2015.

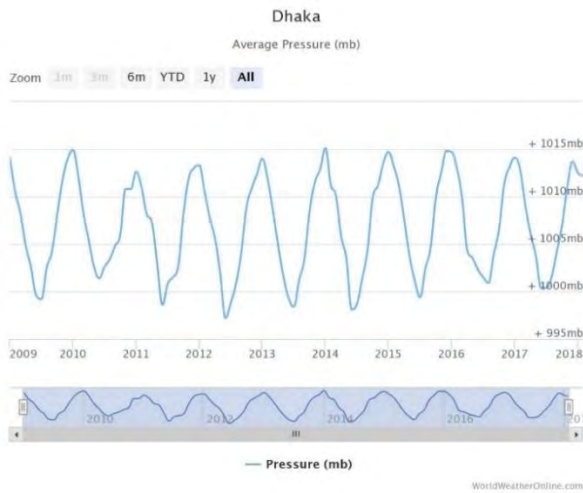


Fig: 3.12 Source: World weather, 2015.

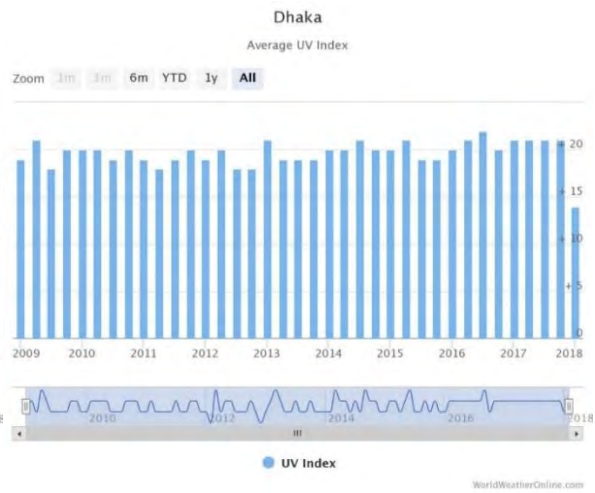


Fig: 3.13 Source: World weather, 2015.

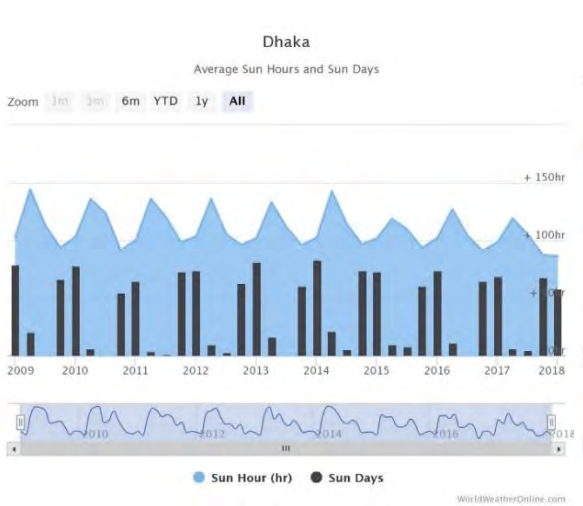


Fig: 3.14 Source: World weather, 2015.

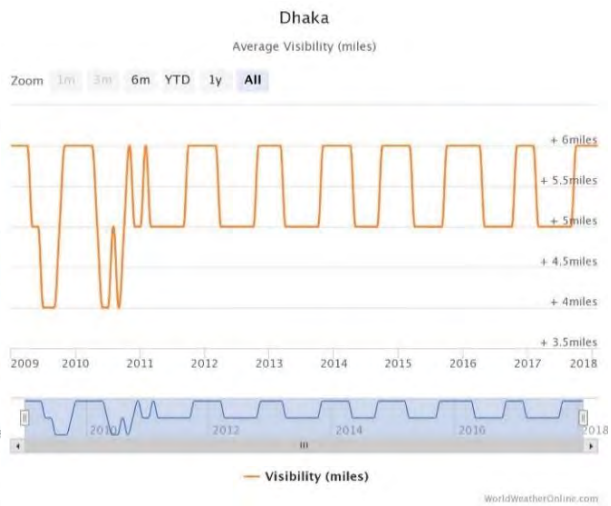


Fig: 3.15 Source: World weather, 2015.

TEMPERATURE GRAPH DHAKA

With an average of 29.1 °C, May is the warmest month. January is the coldest month, with temperatures averaging 19.0 °C.

The precipitation varies 371 mm between the driest month and the wettest month. Throughout the year, temperatures vary by 10.1 °C.

3.3 SOCIO-CULTURAL DATA AND HISTORY

Mohammadpur Thana (Dhaka metropolitan) area 7.44 sq km, located in between 23°44' and 23°46' north latitudes and in between 90°19' and 90°22' east longitudes. It is bounded by ADABAR THANA on the north, DHANMONDI and HAZARIBAGH thanas and SAVAR upazila on the south, SHER-E-BANGLA NAGAR thana on the east, Savar upazila on the west.

Population Total 241343; male 133557, female 107786; Muslim 233580, Hindu 6366, Buddhist 1148, Christian 213 and others 36.

Water bodies Main River: TURAG.

Administration Mohammadpur Thana was formed on 2 February 1976.

Thana							
Ward Union	and Mahalla and Mouza	Population		Density (per sq km)	Literacy rate (%)		
		Urban	Rural		Urban	Rural	
3+2 (part)	32	241343	-	32439	67.62	-	

Ward	Area (sq km)	Population		Literacy rate (%)
		Male	Female	
Ward no. 45	1.37	26077	20740	65.38

Source Bangladesh Population Census 2011, Bangladesh Bureau of Statistics.



fig: 3.16 Source: Rajuk, 2009.

History of the War of Liberation During the [WAR OF LIBERATION](#) in 1971 the Pak army, in collaboration with the razakars and Al-Badars, abducted many innocent people including the intellectuals and killed them at the Rayer Bazar area.

Marks of the War of Liberation Buddhijeebi Smriti Soudha at Rayer Bazar.

Religious institutions Mosque 50, temple 2. Noted religious institutions: [SATGUMBAD MOSQUE](#), Bibi Mosque, Baitul Falah Mosque, and Mosque-E-Nur.

Literacy rate and educational institutions Average literacy 74.70%; male 72.58%, female 76.82%. Educational institutions: university 2, medical college 2, college 7, secondary school 30. *Cultural organizations* Library 1, club 11, cinema hall 2, gymnasium 2.

Communication facilities Total roads: 247.08 km.

Noted manufactories Garments industry.

Market and shopping centers' Town Hall Market, Mohammadpur Kancha Bazar, Meena Bazar and Aarong are notable.

Main exports readymade garments.

Access to electricity all the mahallas of the thana are under electrification net-work. However 97.35% of the dwelling households have access to electricity.

Sources of drinking water Tube-well 13.42%, pond 0.04%, tap 85.50% and others 1.04%.

Health centers Hospital 4, clinic 20.

NGO activities operationally important NGOs are [BRAC](#), [ASA](#), CARE. [Syed Shabbir Ahmed]

References Bangladesh Population Census 2011, Bangladesh Bureau of Statistics.

3.4 EXISTING SITE

SITE PHOTOS



Main entrance

Auditorium

Academic building



Academic building

Pedestrian

Female Dormitory



Boy's Dormitory

Principal's Quarter

Teacher's Quarter



Fig: 3.17 Source: Author, 2018.



Gymnasium



Gymnasium



Cricket course



Swimming pool



3rd grade Quarter



Football and race course

Physical Education College is a fully designed college with all the facilities and had a motive of enhancing the importance of physical fitness for the whole city. At the initial stage, the planning of the college fulfilled all the requirements according to the student's need but as years passed by, the buildings has become very old structurally as well as facilities wise and does not meet the criteria of a proper global physical education institution as shown in the above pictures. Perhaps, the current situation has detreated to the extent that corruption has taken its place by allocating tenants from outside of the institution students and teachers to become a via for illegal earnings.



Fig: 3.18 Source: Department of Public Works, 2017.

3.4.1 EXISTING SITE CONDITION

Fig: 3.7 shows the existing plan of Physical Education College, which has been drawn by the Department of Architecture Bangladesh, which is under the Ministry of Public works.

- Dormitories for the students, teachers and staffs are not in a livable condition due to the structural issues and lack of maintenance and pesticides issues.
- The gymnasium is not structurally stable anymore, so it is not in use. Hence, informally time to time this place is used by the students to play random free time games, rather being used as a part of the educational facility
- College building is also old and the maintenance and quality of education and environment for the students are not suitable anymore.
- Although the auditorium building is 30 years old but the planning of it is not according to the requirement and moreover the positioning of the mass is not appropriate as it stands right in front of the college building and has created narrow spaces which is a dead space.
- The swimming pool is also not working and it has been like this for 12 years, mainly due to the lack of maintenance of the drainage system and pump machine, which is currently has completely rusted.
- **The football+ race course is being used for multipurpose as city's different schools and college hire this ground of their annual sports day, fairs, etc. basically working as a revenue generator for the college.**

3.5 CONTEXTUAL STUDY

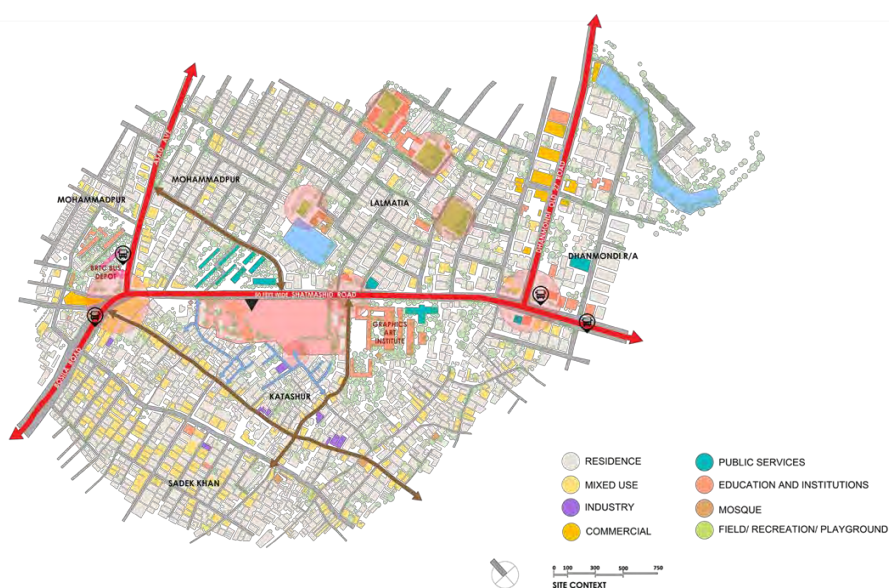


Fig: 3.19 Source: Author (2018)

3.5.1 SPORT COMPLEXES ALL OVER DHAKA CITY

Government Physical Education College is under Dhaka University and Ministry of Sports, Bangladesh which is located in Bangabondhu National Stadium and is related to it. Other than this, the students of this college gets their training from Sher-e-Bangla stadium and Sultana Kamal Mahila complex as well. All these are inter related to each other due to government policy for sports. Moreover, the students graduates from this college and gets job in these government sectors and complexes, like BKSP, Sheikh Kamal complex, Sultana Kamal Mahila complex, Sher-e-Bangla stadium, Bangabondhu stadium and even Army stadium for their degrees. Although few of them are half public but the strata of job sectors allows them to get a job both in public, semi-public and private as well. The whole connection of this is shown in Fig: 3.20



Fig: 3.20 Source: Google earth, 2018. Author, 2018.

3.5.2 SPORT COMPLEXES NEAR THE COLLEGE



Fig: 3.21 Source: Google Earth, 2018. Author, 2018.

There are other sports clubs and complexes near to the Physical Education College, those are, Sheikh Kamal Complex, Sultana Kamal Complex and Dhanmondi cricket club, which are mainly used for playing and teaching sports only and moreover, the teachers or coaches are mainly the students graduated from this college as they have practical as well as theoretical knowledge of sports.

3.5.3 ROAD INFRASTRUCTURE



Fig: 3.22 Source: Author, 2018.



Fig: 3.23 Source: Author, 2018.

Dhaka city is the most densely populated city in the whole world and the impact of it shows in the congestion of roads. The number of roads has become inefficient due to the increase of number of people. Accommodating more people is becoming a problem. Many study

suggests about decentralization of the city to bring a permanent solution to it. But it is not easy and not a work of few years rather a planning that needs time to deliberate. Although the government kept trying to come up with new solutions throughout the years.

First it was horse carts and then other vehicles and only few cars were on the road back then and later came public transportation. But as years pass by and with the advancement of technology and as well as the economic growth of the country, people started owning more cars, migration brought more rickshaw puller to the city and in the other hand public transportation did increase but couldn't be sufficient enough to serve the whole city. Furthermore, according to Fig: 3.23 violation of traffic, reckless driving, untrained drivers, insufficient traffic police, unplanned parking, road space, poor signaling system and unplanned footpaths has increased the problem of road congestion.

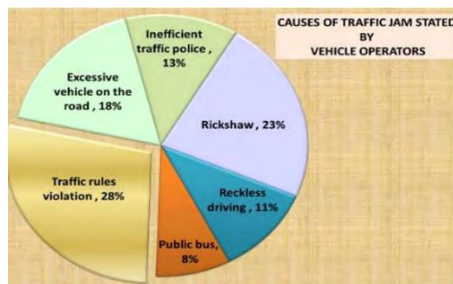


Fig: 3.24 Source: online



Fig: 3.25 Source: online

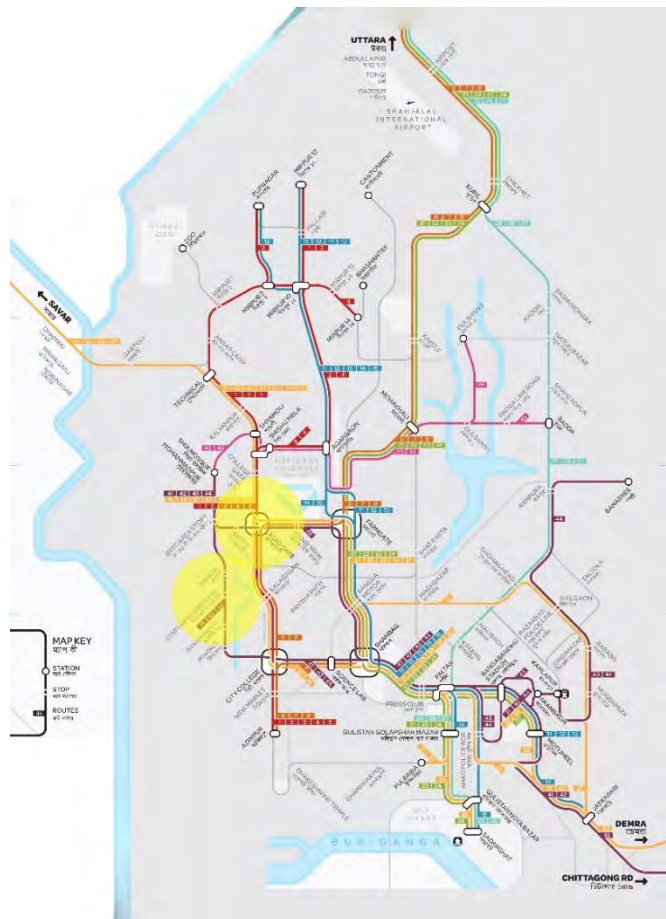


Fig: 3.26 Source: Dhaka Bus Map. Mappingamman, 2015.

The road that is the main entrance to the site is Shatmashjid road which is one of the busiest roads of Dhaka city and it interconnects with Mohammadpur, Dhanmondi road 27, and all

these are main axis roads of the area as shown in Fig: 3.22. Traffic congestion is a main problem here. Due to bus depot of BRTC in the junction of Mohammadpur and Shatmashjid road, the congestion is more evident. The yellow highlighted area in the above Fig: 3.26 shows the bus routes that crosses the site of the college and this shows how busy the road is.

According to Fig: 3.25 the METRO routes shows that there will be metro line connecting Dhanmondi to Mirpur that is the MRT line 5 which is soon to start with its construction. The impact of having a rapid mass transit system in the area can have an effect in the traffic flow to these roads. Future estimation and planning suggests the decrease of road congestion, hence the traffic of the road connecting the site have a future with lesser congestion.

3.5.4 OPEN FIELDS AROUND THE SITE



Fig: 3.27 Source: Google Earth, 2018, Author, 2018.

The site is surrounded by residential area both formal and few informal settlements. On the other side of the Shatmashjid road is Lalmatia which is a residential zone with a proper planning and play fields to serve the whole area as shown in Fig: 3.27. Whereas, on the side of the college, the area has grown in an organic pattern with mainly residential zoning and does not have any fields for the children at all. The only scope of an open field is the college field and that too is restricted and is not allowed for the public.

Total area of Mohammadpur thana is 7.44 sq.km

Total female= 1,15,110 above 18

7.44 sq.km has 1,15,110 female

1 sq.km will have $1,15,110/7.44 = 15,741$ female

0.222 sq.km will $15,741 * 0.222 = 3,403$ female

Child rate per 1000 female is 286 in Dhaka city urban zone

Therefore, number of children in the area surrounding the college on the same side of the road,

1000 female has 286 child

1 female has $286/1000 = 0.286$ child

3,403 female has $0.286 * 3403 = 973$ child

Reference: Population and Housing, Zila Report: Dhaka, 2011, 331.

973 children age range 5-15 has no play field in their area, they are left with the little spaces within their house which means according to children mental growth they are not getting a proper space to grow as they insufficient amount of recreation left for themselves. Furthermore, if the range of youth counted in the area it will be more but as far considering children should be the main aspect for the purpose as they cannot travel on their own. So, they need to travel within their walking distance to play from their houses. Thus, the whole study of this portion concludes with the fact that the physical college can provide this children a field to play in, maybe not for all the time but a slot can be given to the neighborhood kids to come and play, perhaps introducing a public domain with the design to incorporate the idea of children to get their recreation.

3.5.5 POSSIBLE ACCESSIBILITY FOR THE NEIGHBORHOOD



Fig: 3.28 Source: Author, 2018.

The yellow highlighted points in the Fig: 3.28 shows the cul-de-sacs which ends at the peripheral walls of the college to ensure security of the premises. But these pockets can become access within the site by creating pedestrian accessibility for the children of the neighborhood to come and play in the field on a designated slot given to the public. Although this college gives their field on rent to other schools and colleges for different academic

purposes, so why not allowing this underprivileged children who does not have open space within their neighborhood whereas this is the only nearby field to go to? Any public institute have accessibility for public and when it comes to open field it should more emphasize on this issue. Even though there are demerits to this idea but creating a policy and schedule can help both the college and neighborhood gain to create a proper urban hub. This will not only help the city to grow but will own its place as a landmark.

3.6 S.W.O.T. ANALYSIS

STRENGTH

- The site is situated in the midst of a proper urban zone like between Dhanmondi and Mohammadpur and also has neighboring sport complex to create a proper zoning.
- Site is mostly surrounded by residential buildings on its north, west and south side making it easily accessible for all the people living around. There are lots of commercial buildings on the south east and north east side upon Shat Masjid road which also includes police station, RAB office and hospitals and banks.
- So a noise attenuated atmosphere is created due to surrounded by residential area.
- **It is situated beside a main road (50' wide) that gives** more accessibility and value.
- Good amount of existing vegetation within the site.

WEAKNESS:

- Main road on the north east side often face traffic congestion.
- Existing car parking issue.
- High land value
- Less connectivity with secondary roads

OPPORTUNITIES:

- Can become a very effective sports hub.
- Helping to preserve vegetation while increasing the efficiency of the land
- Place for recreation and healthiness.
- Can have more accessibility for the neighborhood to create an effective urbanization solution.
- Can promote Physical education all through the city to help the youths get a proper lifestyle.

THREATS:

- Nearby buildings may face noise disturbance
- Becoming a point of attraction can cause more traffic congestion in the existing road

CHAPTER 4: CASE STUDIES
4.1 JYVASKYLA UNIVERSITY
4.2 BALDIVIS SECONDARY SCHOOL
4.3 LOS ANGELES MISSION COLLEGE

4.1 JYVASKYLA UNIVERSITY

4.1.1 PROJECT BRIEF

ARCHITECT: ALVAR AALTO

LOCATION: JYVASKYLA, FINLAND.

PROJECT YEAR: 1959

BUILDING TYPE: UNIVERSITY

BUILDING FOOT PRINT: 1250 SQUARE METER

TOTAL AREA: 14 ACRES

FLOORS: 3 (RESIDENTIAL AND ACADEMIC), 2 (LIBRARY)

STYLE: MODERN

ATERIAL: TRUSS, BRICK, CONCRETE, GLASS, WOOD.



Fig: 4.1 Jyvaskyla University. Source: Luke Fiederer. "AD Classics: Jyväskylä University Building / Alvar Aalto" 28 Mar 2016. ArchDaily. Accessed 4 Oct 2018.

4.1.2 ARCHITECTURAL FEATURES

- ✚ The U pattern designed by the buildings frames the open center space, where a sports field is accessible by foot.
- ✚ Notable for the mixture of placing views of landscape
- ✚ The main building is comprised of a fan-shaped area, a three-story rectangular wing full of classrooms, and a wing for the laboratory, all of that are connected by a hall containing a Venetian galvanized staircase.
- ✚ Stress on materiality and thus the mixture of white walls with wood, brick and glass is essentially present altogether of these buildings, notably the main building.
- ✚ Use of high glass panes to virtually seamlessly combine on the within with the peripheral atmosphere.

- ✚ The library is 2 stories high with a flat roof, virtually completely windowless. This allowed light to solely come in through the long clerestory windows and 6 barrel skylights on the top of the roof.
- ✚ Extremely interested by the classification of rigid and rectangular with curvilinear.
- ✚ The stairwell, that's enclosed by a gathering of pine that closely resembles a deeply forest within the encircling context.



Fig: 4.2 Jyväskylä University. Source: Luke Fiederer. "AD Classics: Jyväskylä University Building / Alvar Aalto" 28 Mar 2016. ArchDaily. Accessed 4 Oct 2018.

4.2 BALDIVIS SECONDARY SCHOOL

4.2.1 PROJECT BRIEF

ARCHITECT: JCY Architects And Urban Designers

LOCATION: PERTH, WESTERN AUSTRALIA.

PROJECT YEAR: 2015

BUILDING TYPE: SCHOOL

BUILDING FOOTPRINT: 1200 SQUARE METER

TOTAL AREA: 16 ACRES

FLOORS: 3 STOREY

STYLE: CONTEMPORARY

MATERIAL: STEEL, GLASS, CONCRETE.



Fig: 4.3 Balddivis Secondary School Source: © Peter Bennetts. "Balddivis Secondary College / JCY Architects and Urban Designers" 06 Aug 2015. ArchDaily. Accessed 3 Oct 2018.

4.2.2 ARCHITECTURAL FEATURES:

- ✚ Aesthetic of warehouse set in an indigenous forest.
- ✚ A vibrant new community hub inside its ever dynamic and growing neighborhood.
- ✚ Designed with over 1450 students in mind.
- ✚ Closely connected to the Balddivis physical, cultural and historic context, one being outlined in nice half by a protracted horticulture and industrial heritage underpinned by a powerful community centered on property and community development.
- ✚ The roof of the cafeteria forms a usable deck that conjointly provides the pedestrian affiliation between the second levels of encompassing buildings as well as an area for college kids to pay time or sit on the wide steps facing the sports hall to watch a game.
- ✚ A manner that creates a 'place' of remarkable school civic worth instead of merely being distributed around every building component as a series of 'verandahs'.

- ✚ Connections are clear and sensible however in their temperament also produce a web of movement and permit the passage of individuals not solely in and out of areas but conjointly through, around and over each circulation components.
- ✚ A village with an exquisite set of intersecting areas between them whereas conjointly making a carved and active courtyard between themselves and therefore the central warehouse buildings.
- ✚ All building are designed with automated passive energy systems that with glorious orientation, sun shading, insulation and water harvesting, have created a extremely sustainable school campus.
- ✚ A combination of light colored precast concrete panels embossed with large imprints of 'checkered plate' patterns are closely connected to an intensive use of aluminum.
- ✚ Roofs are steel with a series of orange, yellow, vermillion and charcoal stripes which continue onto walls, making continuous bands.
- ✚ The various courts and playing fields that produce a buffer, through distance, to the freeway along with a generous mound at the site's freeway boundary.
- ✚ The landscape is straightforward and a mass planting of trees has been applied throughout the location.

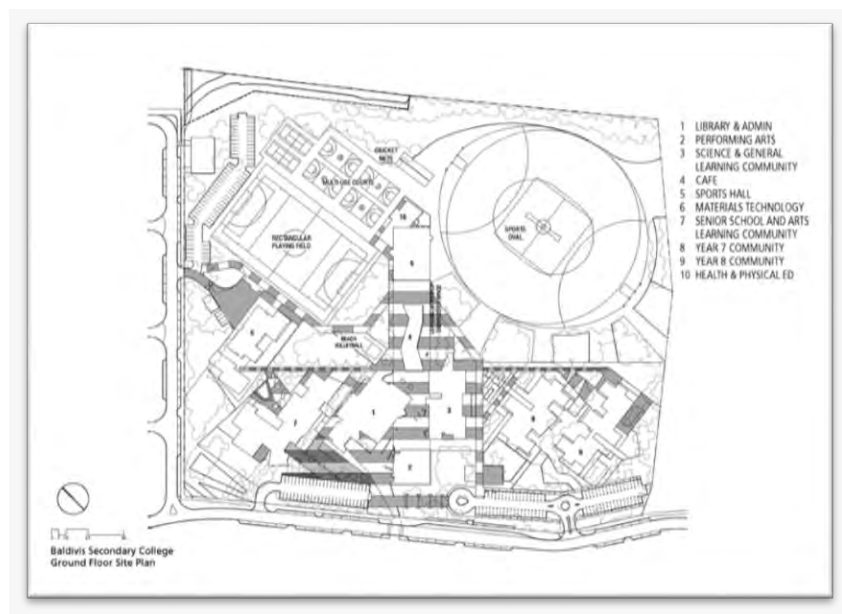


Fig: 4.4 Ground floor plan. Source: "Baldvis Secondary College / JCY Architects and Urban Designers" 06 Aug 2015. ArchDaily. Accessed 3 Oct 2018.

4.3 LOS ANGELES MISSION COLLEGE

4.3.1 PROJECT BRIEF

ARCHITECT: CANNON DESIGN

LOCATION: LOS ANGELES, CA, USA.

PROJECT YEAR: 2011

BUILDING TYPE: COLLEGE

BUILDING FOOTPRINT: 87,000 SFT

TOTAL AREA: 7 ACRES

FLOORS: 2 STOREY

STYLE: MODERN

MATERIAL: STEEL, GLASS, CONCRETE, TRUSS



Fig: 4.5 Los Angeles Mission College. Source: © Feinknopf Photography. "Los Angeles Mission College / Cannon Design" 24 May 2011. ArchDaily. Accessed 4 Oct 2018.

4.2.2 ARCHITECTURAL FEATURES:

- ✚ Includes a three-court gymnasium with elevated jogging track; fitness/weight training and cardio/stretching rooms; three multipurpose rooms; five classrooms; offices for coaches, faculty, and administrators; student and faculty/staff locker rooms; an athletics training room with hydrotherapy area; and gracious, welcoming lobby spaces.
- ✚ Multi-use activity spaces.
- ✚ Achievement of economies of scale.
- ✚ Reduction of energy cost by 20% more than standard require.

- Geometric design
- White and earth tone aesthetics
- Efficient and practical use of space to create a sense of openness

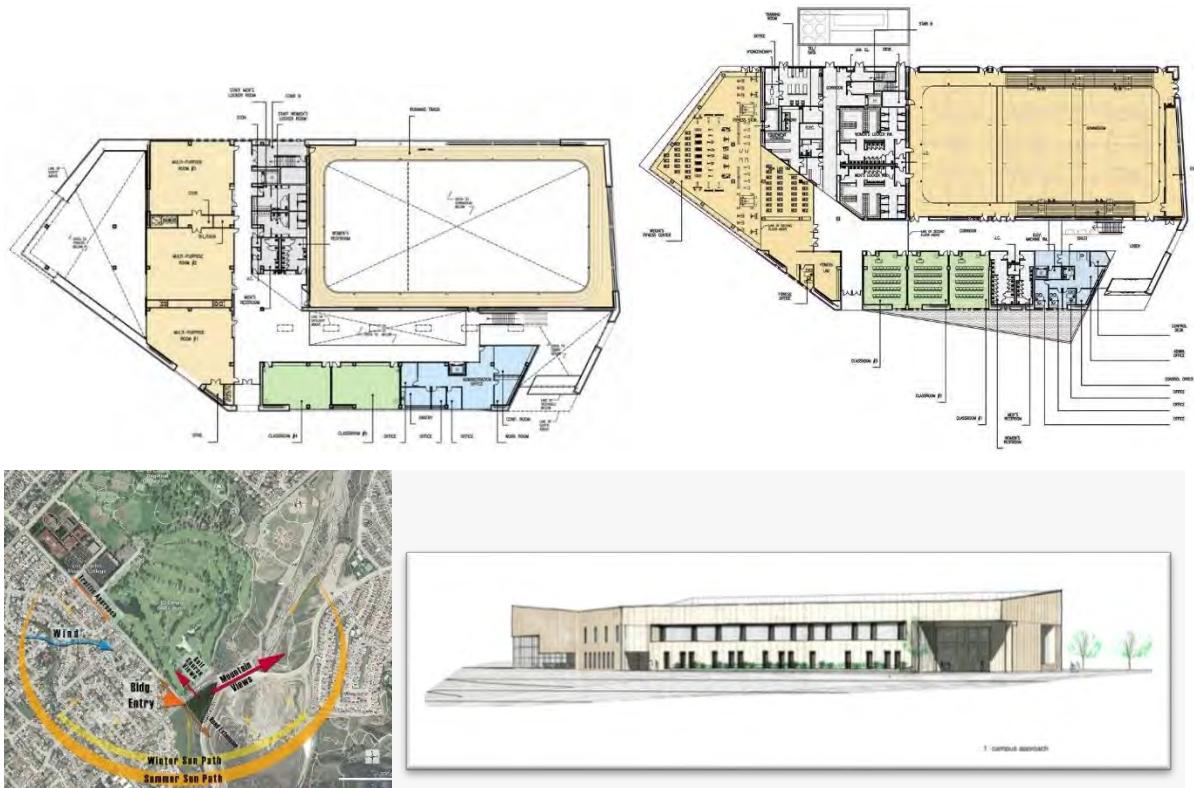


Fig: 4.5 Los Angeles Mission College. Source: © Feinknopf Photography. "Los Angeles Mission College / Cannon Design" 24 May 2011. ArchDaily. Accessed 4 Oct 2018.

CHAPTER 5: PROGRAM DEVELOPMENT & ANALYSIS

5.1 CLIENT'S GIVEN PROGRAM REQUIREMENT

5.2 RATIONALE OF THE PROGRAMS

5.3 PROGRAM LAYOUTS

5.4 FINAL PROGRAM DEVELOPMENT

5.5 MAXIMUM GROUND COVERAGE

5.1 CLIENT'S GIVEN PROGRAM REQUIREMENT

- a. 12 storied administrative building with following functions-
 - Administrative unit
 - Academic unit
 - Auditorium (1000 person)
 - Medical center (including physiotherapy, occupational therapy and 20 bedded rehabilitation)
 - Conference hall
 - Seminar rooms
 - Meeting rooms
 - Reception, lift lobby and lounge
 - Toilets
 - Basements with car parking
- b. 400m Athletic track accommodating all events and a football field
- c. Resting shades for athletes
- d. cricket practicing pitch
- e. Swimming pool
- f. Gymnasium
- g. 7 storied staff quarter
- h. 8 storied dormitory male
- i. 8 storied dormitory female
- j. guest dormitory
- k. utility building
- l. cafeteria

5.2 RATIONALE OF THE PROGRAMS

Government Physical Education College is a public institute, so the planning of the whole institution is under the Ministry of Public Works and Department of Architecture, Bangladesh. The above list of programs are given by the clients and in the initial stage they have given the programs of the administrative building in complete details, which has been elaborated in the program development below with a very few changes. The new government planning is adding a part of Ministry of Sport within this institution premises so that it is easier to circulate the work load within the educational sector of sports. Meanwhile, this decision of the programs has been taken but further detail master planning is still in the process. The planning of the whole institute will be done in phases so that the classes stay uninterrupted. First phase is to demolish some of the quarters at south west corner and built a 12 storied admin block which will include facilities of the college as well according to their planning. Their idea is to stack up the programs to create more space for the fields.

Later, other old buildings will be demolished one by one in phases as the proposal also includes the devastating structural issues of the buildings as they are 60 years old. And moreover, due to very poor maintenance, the environment for the students has also become poor which includes their diet and nutrition as well. All of these above issues concludes into a planning of a new infrastructure for the institution as number of students in Physical Education has also been decreasing. The new aim is to promote Physical Education in the whole nation via designing a proper, attractive and inspirational institute by accommodating more students and giving them all the facilities that are required. The client has also mentioned about introducing four years course of Physical Education degree, as till date it was only 2 years course. Hence, emphasizing in more detailed courses means more knowledge to be gathered in this sector, this gives another scenario for the increased number of students in the future. So, the number of rooms and facilities would be increased in the new planning of the institution.

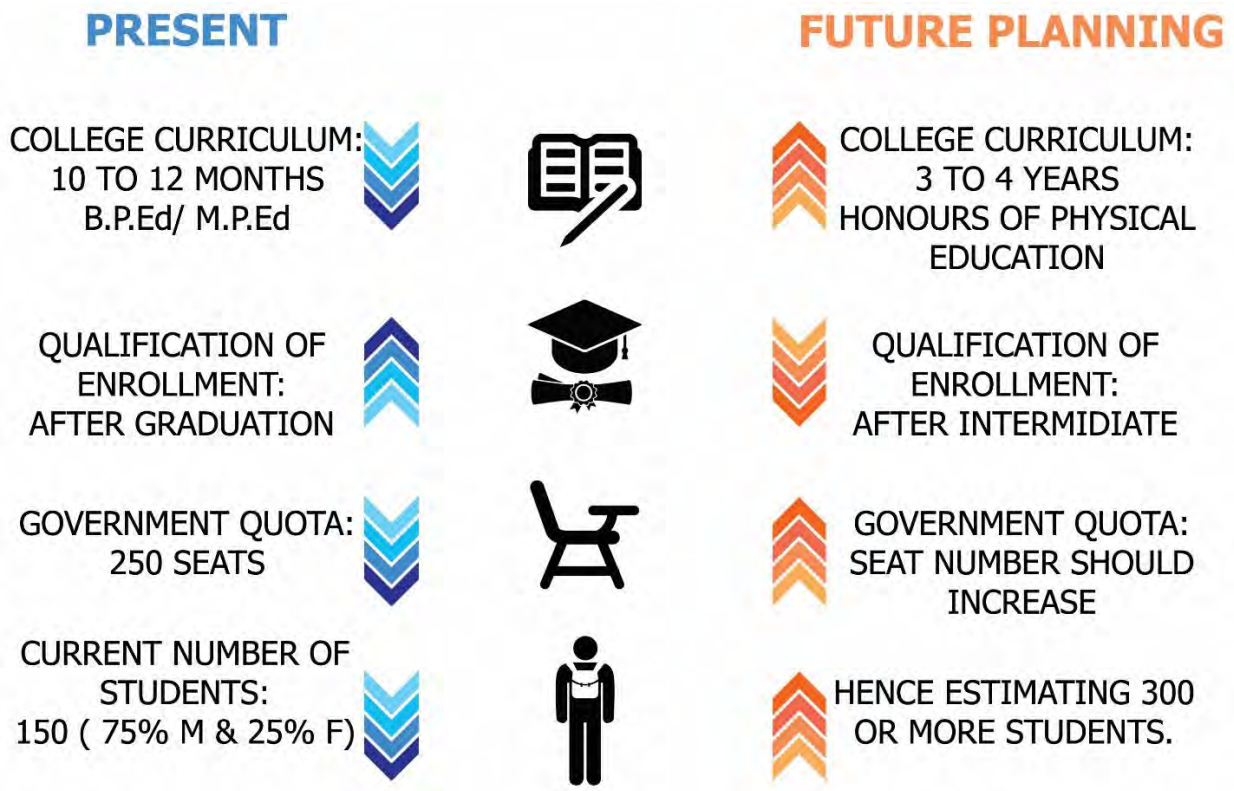


Fig: 5.1 Source: Author (2018)

This concludes the fact that there is a need of extra dorm rooms while planning the new master plan as there will be new curriculum added to this college. So in total 80 rooms for boys and 40 rooms for girls are the minimum requirement that needs to be fulfilled in accordance to accommodate the extra number of students that will be newly added to the this new college curriculum that is the honors of physical education.

Field size

The sports field is one of the biggest functions and is supposed to make the whole site constraint for which designing or accommodating the required functions becomes a bit challenging. But then again it is a sports training college so using the standard sizes of the functions are necessities so using proper universal dimension the field has been accommodated. Moreover, this field is supposed to be of multi-purpose use, it will be rented to other schools and colleges to generate revenue as well. Furthermore, this multi-functionality of the field is the approach for which the size of it mattered and has to main the universal standard.

5.3 PROGRAM LAYOUT

ADMINISTRATION BUILDING PROGRAM LAYOUT

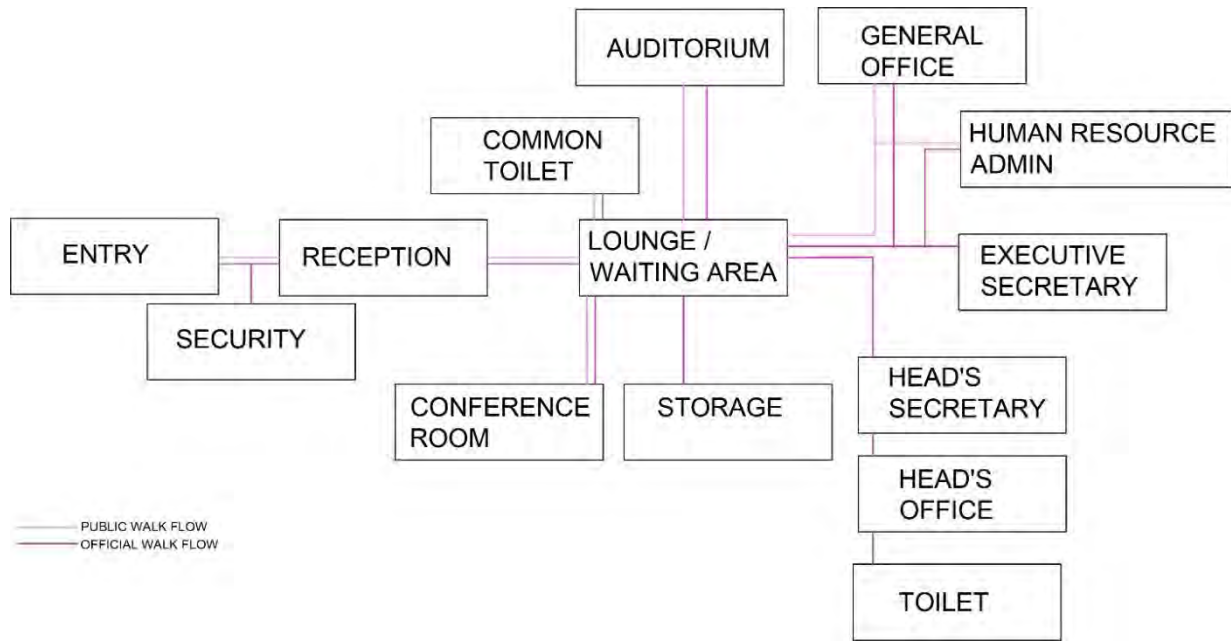


Fig: 5.2 Source: Author (2018)

COLLEGE BUILDING LAYOUT

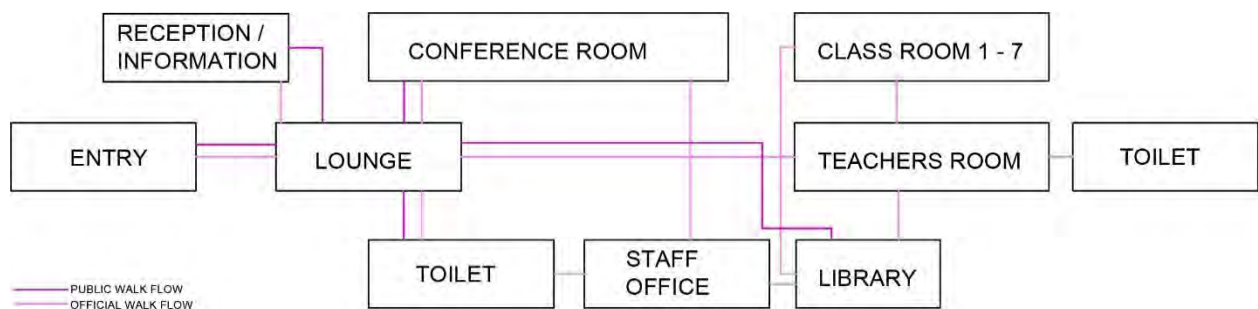


Fig: 5.3 Source: Author (2018)

MEDICAL OFFICE LAYOUT

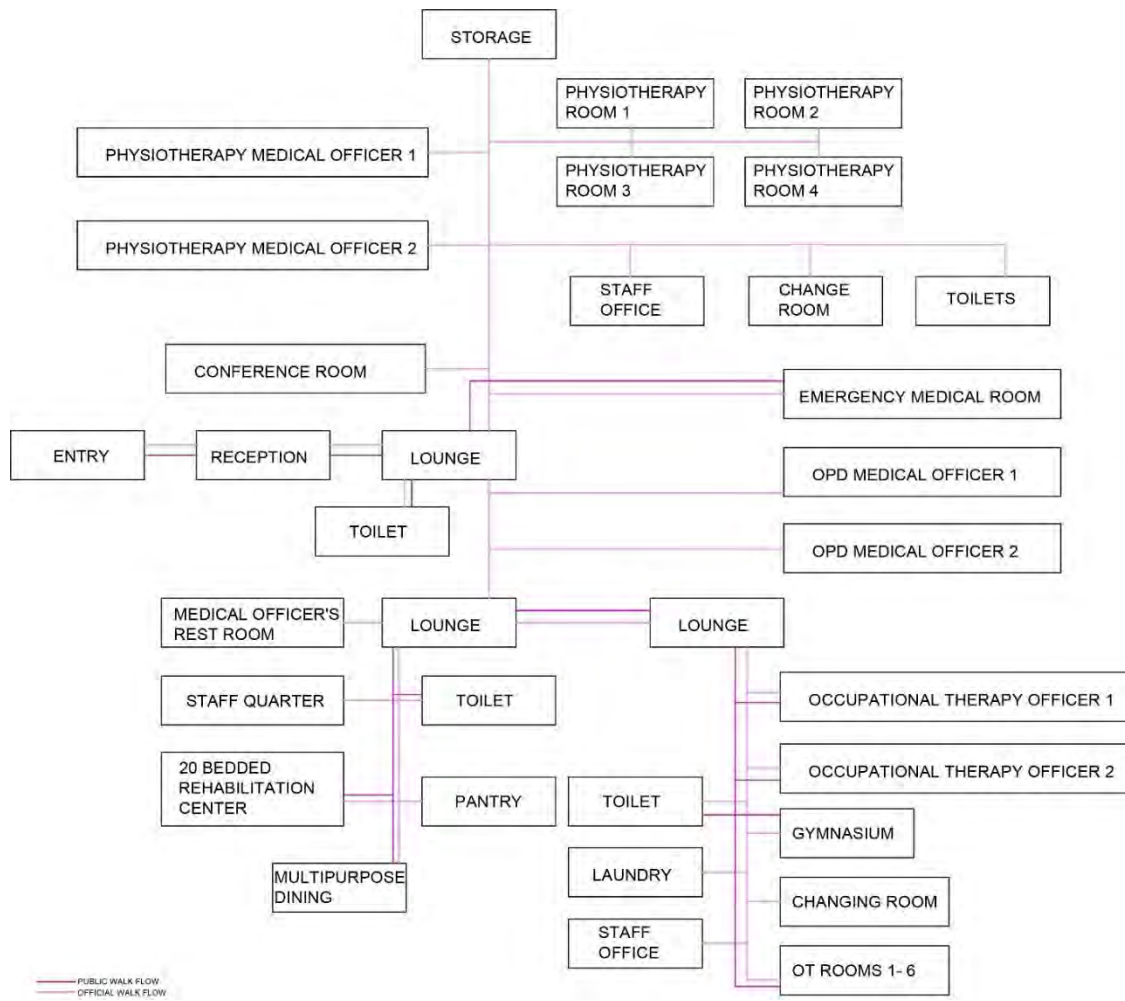


Fig: 5.4 Source: Author (2018)

SPORTS FACILITIES LAYOUT

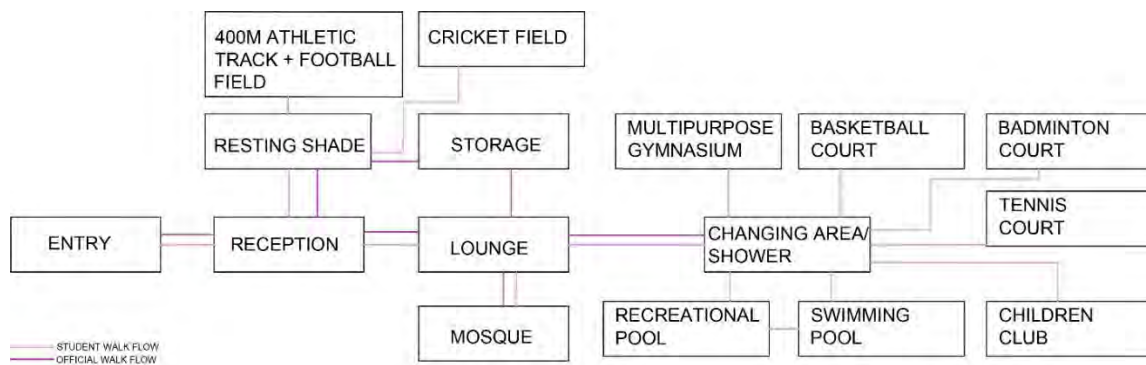


Fig: 5.5 Source: Author (2018)

BOY'S DORM LAYOUT

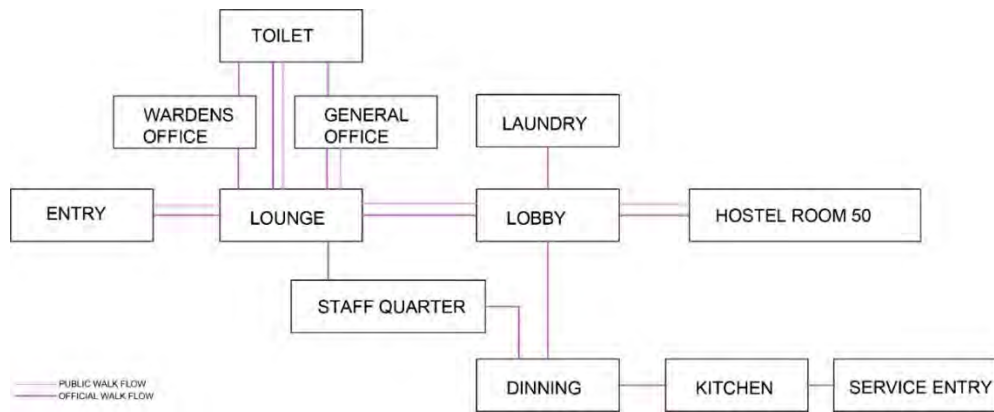


Fig: 5.6 Source: Author (2018)

GIRL'S DORM LAYOUT

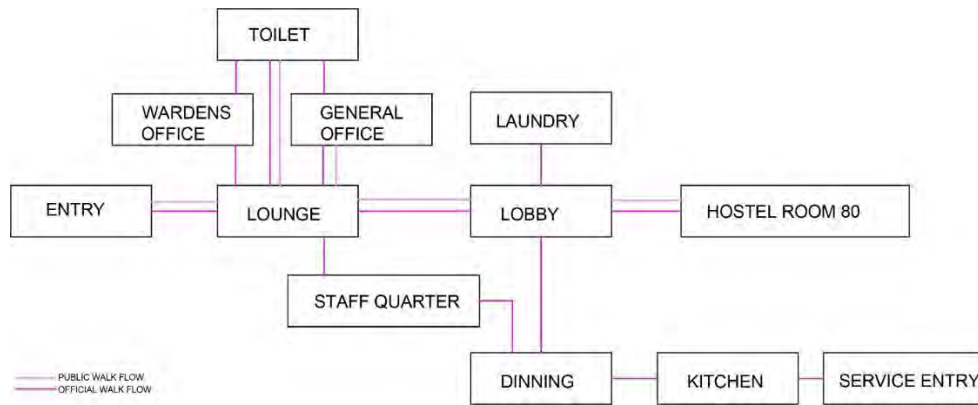


Fig: 5.7 Source: Author (2018)

TEACHER'S QUARTER LAYOUT

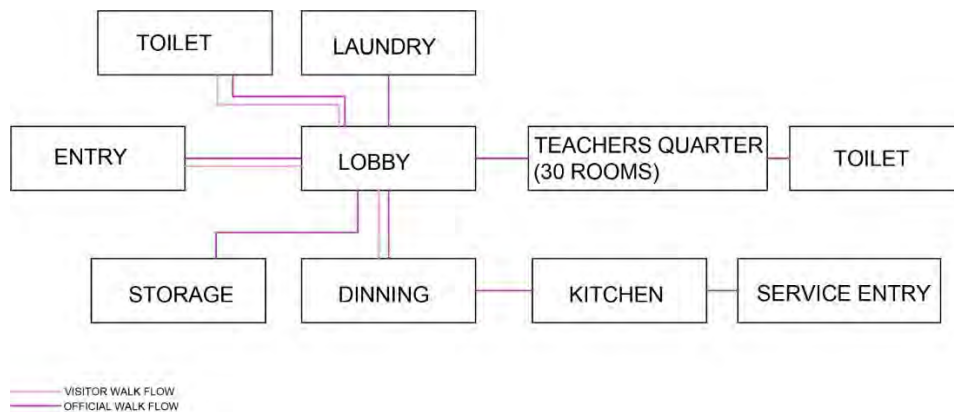


Fig: 5.8 Source: Author (2018)

5.4 FINAL PROGRAM DEVELOPMENT

CLASSIFICATION	FUNCTION	ACTIVITIES	AREA (sft.)	Qty	AREA (sft.)	REMARKS
ADMINISTRATION OFFICE	DIRECTOR GENERAL	MANAGING	300	1	300	
	PERSONAL ASSISTANT		70	1	70	
	WAITING ROOM		150	1	150	
	MEETING ROOM	MEETING	1200	1	1200	
	DIRECTOR	MANAGING	240	4	960	
	PERSONAL ASSISTANT		70	4	320	
	WAITING ROOM		150	4	600	
	MEETING ROOM	MEETING	480	4	1920	
	DEPUTY DIRECTOR'S ROOM	MANAGING	240	5	1200	
	PERSONAL ASSISTANT		70	5	350	
	ASSISTANT DIRECTOR	MANAGING	150	5	750	
	ASSISTANT PROGRAMMER		150	1	150	
	ASSISTANT MANAGER		150	1	150	
	ACCOUNT'S OFFICER		100	1	100	
	ACCOUNT'S BRUNCH		500	1	500	
	ADMINISTRATIVE OFFICER		100	1	100	
	ASSISTANT ENGINEER		70	1	70	
	RESEARCH OFFICER		70	1	70	
	STORE OFFICER		70	1	70	
	HELP DESK		70	1	70	
	CONFERENCE ROOM		3000	1	3000	
	SPORTS STORE		20,000	1	20,000	
	GENERAL STORE FOR SPORTS		1000	1	1000	
	ADMIN OFFICE	FOR 20 PEOPLE	50	20	1000	
	SERVER ROOM		150	1	150	
	TELEPHONE OPERATOR		150	1	150	
	RECPTION +WAITING ROOM		200	1	200	
	PRAYER ROOM	MALE & FEMALE	500	2	1000	
	PARKING		20,000	60	20,000	
	BREAST FEEDING ROOM		200	1	200	
	DRIVER'S WAITING ROOM		200	1	200	

CLASSIFICATION	FUNCTION	ACTIVITIES	AREA (sft.)	Qty	AREA (sft.)	REMARKS
	WASHROOM	MALE & FEMALE	40	6	240	
	TRAINING ROOM	60-70 PEOPLE	1600	4	6,400	
	TRAINING ROOM	100 PEOPLE	2400	2	4,800	
	HALL ROOM	300 PEOPLE	2700	1	2700	
	TRAINER'S DORM		100	10	1000	
	FIELD STAFF		100	7	700	
	CARETAKER ROOM	MAINTENANCE	100	1	100	
	SECURITY GUARD	SECURITY	100	4	400	
MEDICAL CENTER	MEDICAL OFFICER		150	2	300	
	RECEPTION+LOBBY +WAITING		300	2	600	
	PHYSIOTHERAPY ROOM	TREATMENT	150	2	300	
	LAUNDRY ROOM		200	1	200	
	STORE		200	1	200	
	OPD MEDICAL OFFICER		150	2	300	
	OCCUPATIONAL THERAPY OFFICER	COUNCIL	150	2	300	
	WASHROOM		50	4	200	
	EMERGENCY		200	1	200	
	OFFICER REST ROOM		150	1	150	
	CHANGING ROOM		50	6	300	
	KITCHEN	COOKING	200	1	200	
	REHABILITATION ROOM		400	1	400	
	CONFERENCE ROOM	50 PEOPLE	1500	1	1500	
EDUCATION	RECEPTION+LOBBY	INFORMATION	200	1	200	
	CLASSROOM	30-40 STUDENTS	841	10	8410	
	TEACHER'S ROOM	RESTING	300	1	300	
	WASHROOM	MALE + FEMALE	50	12	600	
	CONFERENCE ROOM	MEETING	2500	1	2500	
	STAFF ROOM		200	1	200	
	STORE		200	1	200	
	LIBRARY		2000	1	2000	
	PRINCIPAL'S ROOM		300	1	300	
	PERSONAL ASSISTANT		70	1	70	
	TYPIST		70	1	70	

CLASSIFICATION	FUNCTION	ACTIVITIES	AREA (sft.)	Qty	AREA (sft.)	REMARKS
AUDITORIUM	AUDITORIUM	1000	9000	1	9000	
	WASHROOM		50	12	600	
	GREEN ROOM		200	2	400	
ENTERTAINMENT	MULTI- PURPOSE GYMNASIUM		13000	1	13000	
	CHANGING ROOM	MALE + FEMALE	2000	2	4000	
	WASHROOM		50	20	1000	
	SHOWER ROOM		50	20	1000	
	BASKET BALL		4500	2	4500	
	SWIMMING POOL	50m 8 lane	4500	1	4500	
	RECREATIONAL POOL		1350	1	1350	
	TABLE TENNIS+ BADMINTON		700	4	2800	
	RECEPTION+LOBBY +CIRCULATION		5000	1	5000	
	STORE		5000	1	5000	
	GALLERY	SITTING	1400	2	2800	
FIELD GAMES	FOOTBALL + 400M RACE COURSE		145500	1	145500	
	RESTING SHADE	SITTING	1400	1	1400	
	CRICKET FIELD		126840	1	126840	
	PAVILLION	SITTING	3500	1	3500	
	DRESSING		50	12	600	
	WASHROOM		50	12	600	
FEMALE DORM	WARDEN'S OFFICE	MANAGEMENT	150	1	150	
	GENERAL OFFICE	INFORMATION	150	1	150	
	BEDROOM	2-BED ROOM	400	50	20,000	
	WASHROOM		50	8	400	
	SHOWER		50	8	400	
	KITCHEN		800	1	800	
	DINNING		3000	1	3000	

CLASSIFICATION	FUNCTION	ACTIVITIES	AREA (sft.)	Qty	AREA (sft.)	REMARKS
	COMMON ROOM		1000	1	1000	
	LAUNDRY		300	1	300	
MALE DORM	WARDEN'S OFFICE	MANAGEMENT	150	1	150	
	GENERAL OFFICE	INFORMATION	150	1	150	
	BEDROOM	2-BED ROOM	400	80	32,000	
	WASHROOM		50	10	500	
	SHOWER		50	10	500	
	KITCHEN		800	1	800	
	DINNING		3500	1	3500	
	COMMON ROOM		1000	1	1000	
	LAUNDRY		300	1	300	
TEACHER'S QUARTER	BEDROOM 10		100	20	2000	
	WASHROOM		50	20	1000	
	KITCHEN		300	1	300	
	SHOWER		50	20	1000	
	DINNING		500	1	500	
	LAUNDRY		300	1	300	
	STAFFS		150	1	150	
PRINCIPAL'S QUARTER			2000	1	2000	
STAFF QUARTER			5000	1	5000	
	CIRCULATION		10000		10000	
INCIDENTAL	INTERNAL VEHICULAR ROAD					
	INTERNAL PEDESTRIAN					
	LANDSCAPING AND OTHER AMENITIES					
	ELECTRICAL SUB- STATION, PUMP HOUSE, GENERATOR ROOM					
	ENTRY GATE					

CLASSIFICATION	FUNCTION	ACTIVITIES	AREA (sft.)	Qty	AREA (sft.)	REMARKS
	BOUNDARY WALL					
SUB TOTAL WITH INCIDENTAL					5,13,080	
SUBTOTAL WITHOUT THE FIELD					2,34,640	

5.5 MAXIMUM GROUND COVERAGE

Phase 1 consists of 7.9 acres of land, i.e. 3, 44,124 sft area in total.

Here,

Green Space = 40%

Water body = 5%

Roads and Internal Hard Surface = 15%

Total = 60% of 7.9 acres = 2, 06,474 sft.

Hence, Designing a built space of (3, 44,124 - 2, 06,474) sft or, 1, 37,650 sft is possible, i.e.

40% of the total land area.

According to given functional analysis and calculated sft, ground coverage area comes up to

1, 05,102 sft, i.e. 31% of the site.

Hence, approximately 32,548 sft still remains.

CHAPTER 6: CONCEPTUAL STAGE & DESIGN DEVELOPMENT

6.1 INTRODUCTION

6.2 CONCEPT DEVELOPMENT

6.3 FORM DEVELOPMENT

6.4 FINAL DESIGN DRAWINGS

6.5 PERSPECTIVE RENDERED IMAGES

6.6 FINAL MODEL

6.1 INTRODUCTION

My design approach started with the fact of increasing the student number from understanding that there is a need of physical education to glorify physical activity among people.

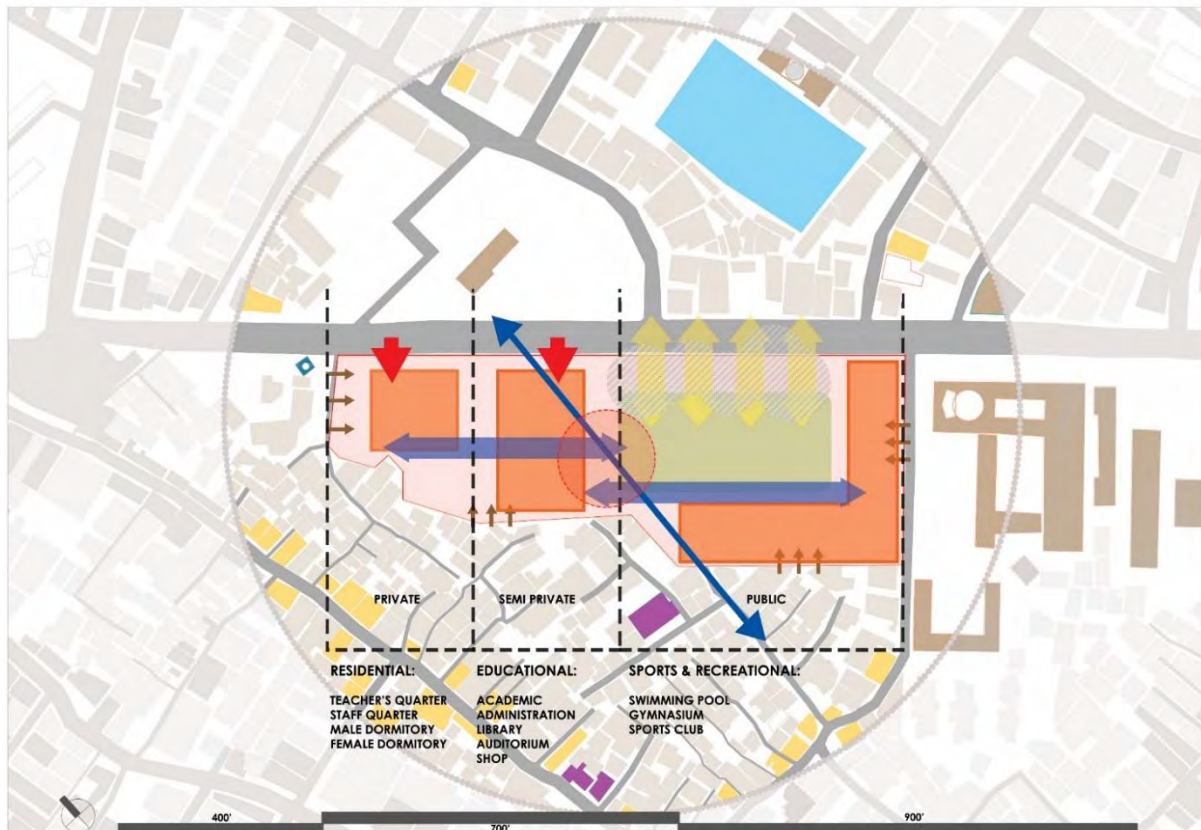


Fig: 6.1 Source: Author (2018)

From the contextual study the zoning has been derived accordingly. According to the fig: 6.1 there are three zones public; this zone consists of the sports and recreational functions which are accessible to the public. Then the semi-private zone which consists of the academic block along with the auditorium and library where public has access rather with certain barrier. Lastly, the private zone which consists of the residents for the principal, teachers and staff quarters and student's dorms. **The blue arrows shows the pedestrian possible entries and walkable routes in between the functions.** As described before from the contextual analysis of incorporating public within this project, the diagonal blue arrow shows the passage is through a narrow pathway from the neighborhood which was before a cul-de-sac later can be drawn out be a possible pedestrian entry. The horizontal arrow from the right shows the access from a secondary road to give direct access to the sports facilities from the main road. The other

blue arrow denotes the pathway with in the functions and these arrows create a node within the site which can be the main plaza or people gathering and later distributed accordingly.

The red arrows shows the two vehicular accesses to the site one to the academic block and other through the residential.

6.2 CONCEPT DEVELOPMENT

As this is a public college and its needs own security and ease of running the curriculums within. But incorporating public is a challenge due to such measurements. So the design considerations that had to be taken in account as such:

WAYS TO INCORPORATE PUBLIC

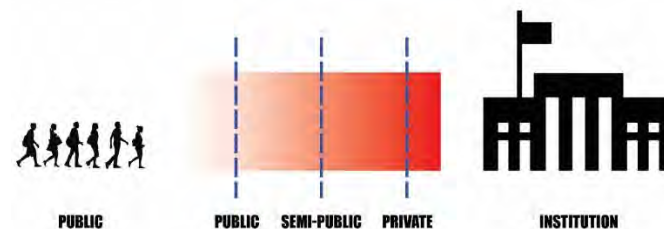


Fig: 6.2.1 Source: Author (2018)

Firstly, as shown in fig: 6.2.1 using a gradient barrier via functions and its zoning to stop public from interrupting the college curriculum.

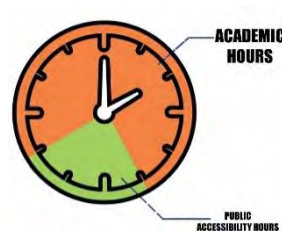


Fig: 6.2.2 Source: Author (2018)

Secondly, as shown in fig: 6.2.2 dividing the academic hours and public accessibility hours so that public has access to this site for limited time which also stops the public use this site to walk through just for crossing.

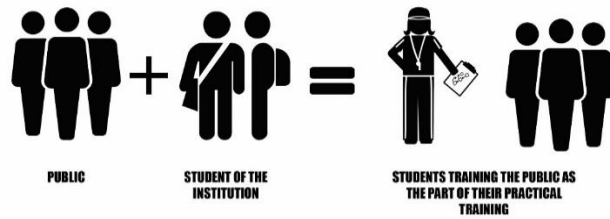


Fig: 6.2.3 Source: Author (2018)

Thirdly, public accessing to this site will be using the field and facilities through the help of the students. As in usually this students are supposed to have their practical training by training their classmates, if the policy is made where these students trains the children or neighbors on behalf of their practical training exercise that helps to create a win-win situation. As shown in fig: 6.2.3 Thus incorporating public to this project can be legit and workable.

Based on the design considerations and rationale of the project the following activities have been identified to be accommodated in the project



Fig: 6.2.4 Source: Author (2018)

According to fig: 6.2.4 these are the main consideration for the activities along with the functional relations as such so that the main idea of incorporating public with certain measurements is legit. As the main idea of the project is to glorify physical activity through sports education, promoting it is one of the main agenda of this project. Starting from

participation, visibility and awareness building seminars to let public know about the importance of physical activity.

Furthermore, incorporating a proper multifunctional field to encourage other schools and college to use this field for their sport functions purposes. Creating a win-win situation for this project as this also will generate revenue for the college funds. Multi-functionality is like playing football, cricket, race and other field sports for which the field has to have the international standard with its dimension so that it can be used for many sports.



Fig: 6.2.5 Source: Author (2018)

According to fig: 6.2.5 integrating the society and harmonizing with the fabric of the neighborhood through pedestrian connectivity throughout the site. Giving priority to the accessibility and easy direction of the circulation is one of the concepts to derive the design.

Prioritizing the pedestrian the route and changing the orientation of the massing is just to the show the direction for pedestrian. On the other hand making the entrance in such a way that create a colonnade entry on both the entrances. Moreover, the lift of the masses create vertical gaps in between which also denotes the entrances as well as the academic block creates a visual barrier for the residential buildings from the public zone.

Furthermore, as shown in fig: 6.2.6 the main entry from the main road which follows underneath of the academic block has the access to the auditorium which is under basement and over it on the ground level, to create a fascinating entrance to the auditorium, shallow **level water pool has been designed which is of 5", decorated with lotus to create an effect of walking through bridges of pedestrians over the water.** And that also is the node of the pedestrian which then divides into two directions, one to the sports facilities and the other narrower to the private residential zone.

6.3 FORM DEVELOPMENT

Thus the design solution I developed grouped the activities in different zones located in

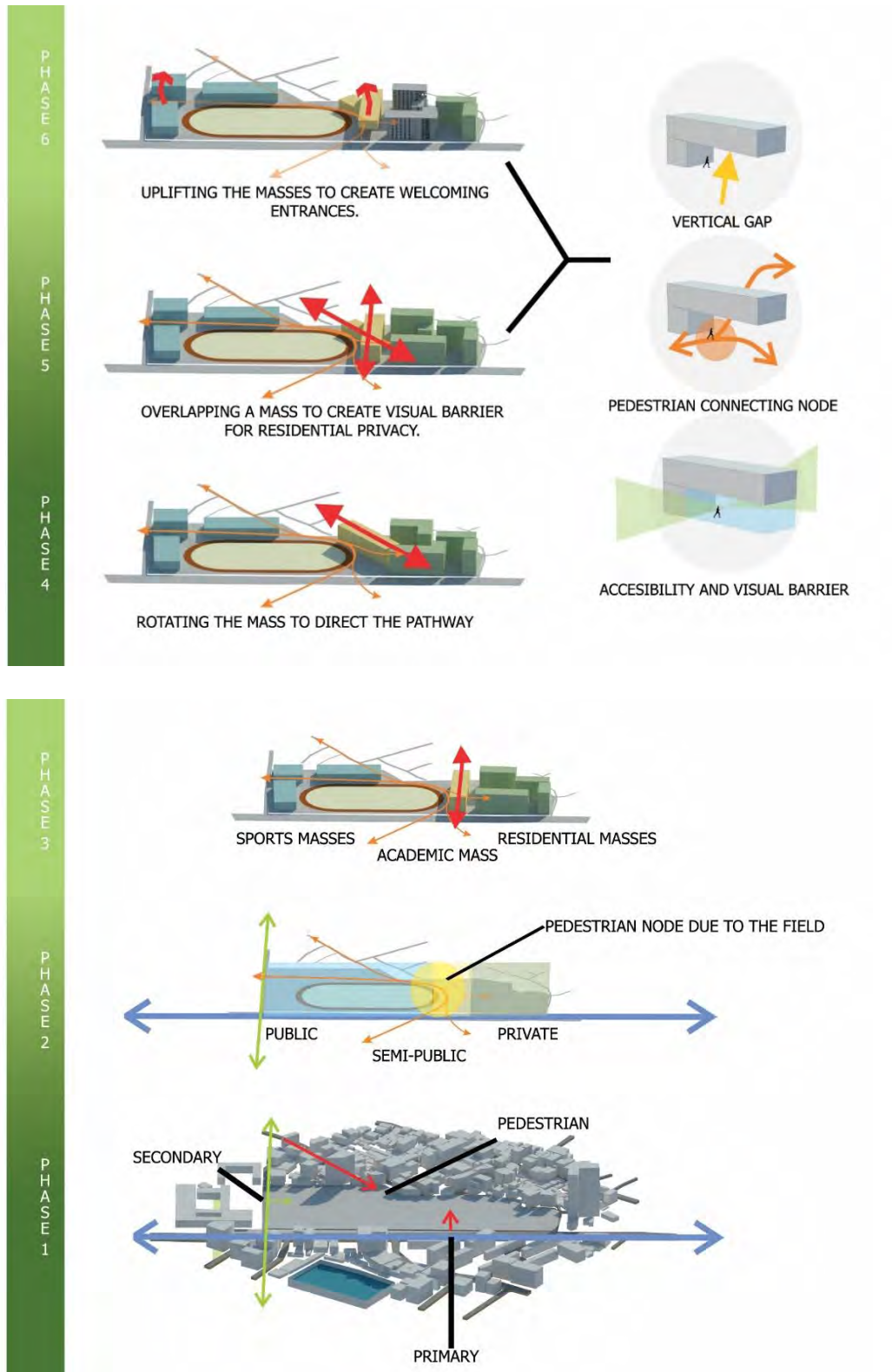


Fig: 6.3.1 Source: Author (2018)

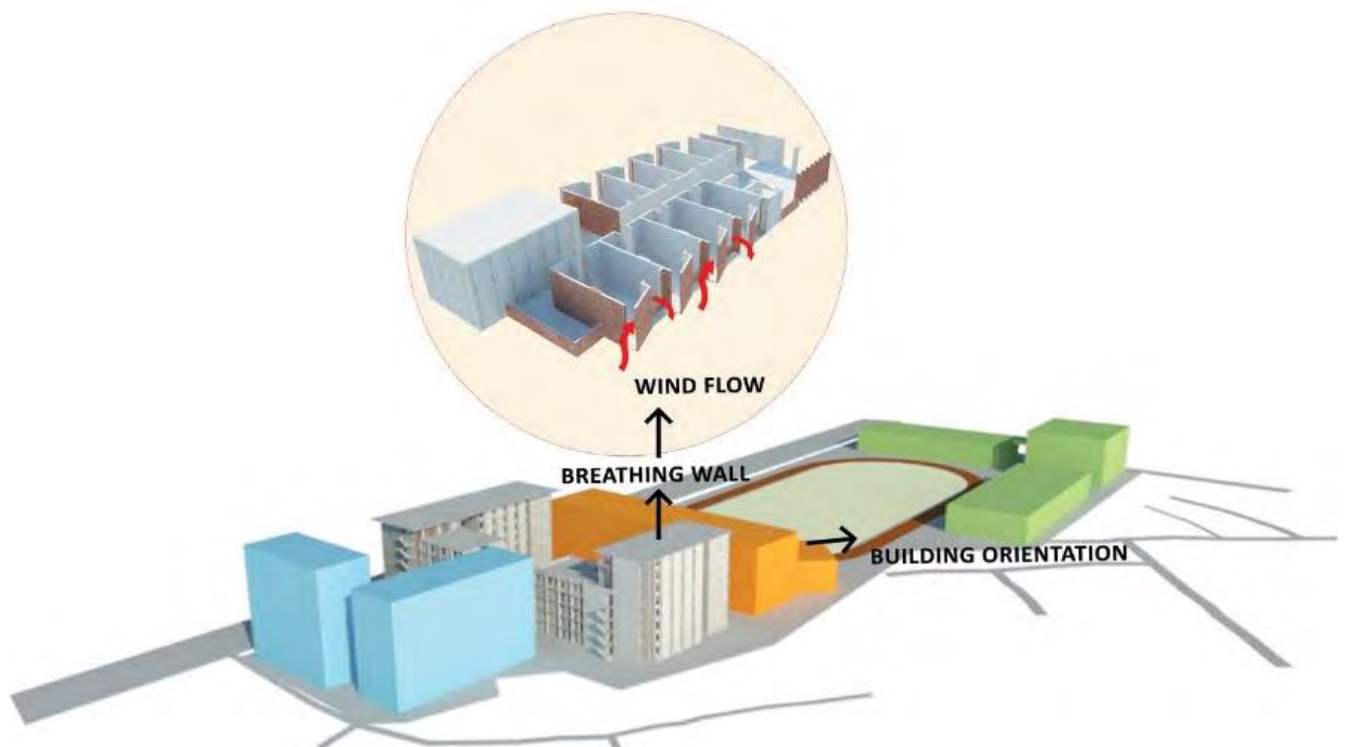
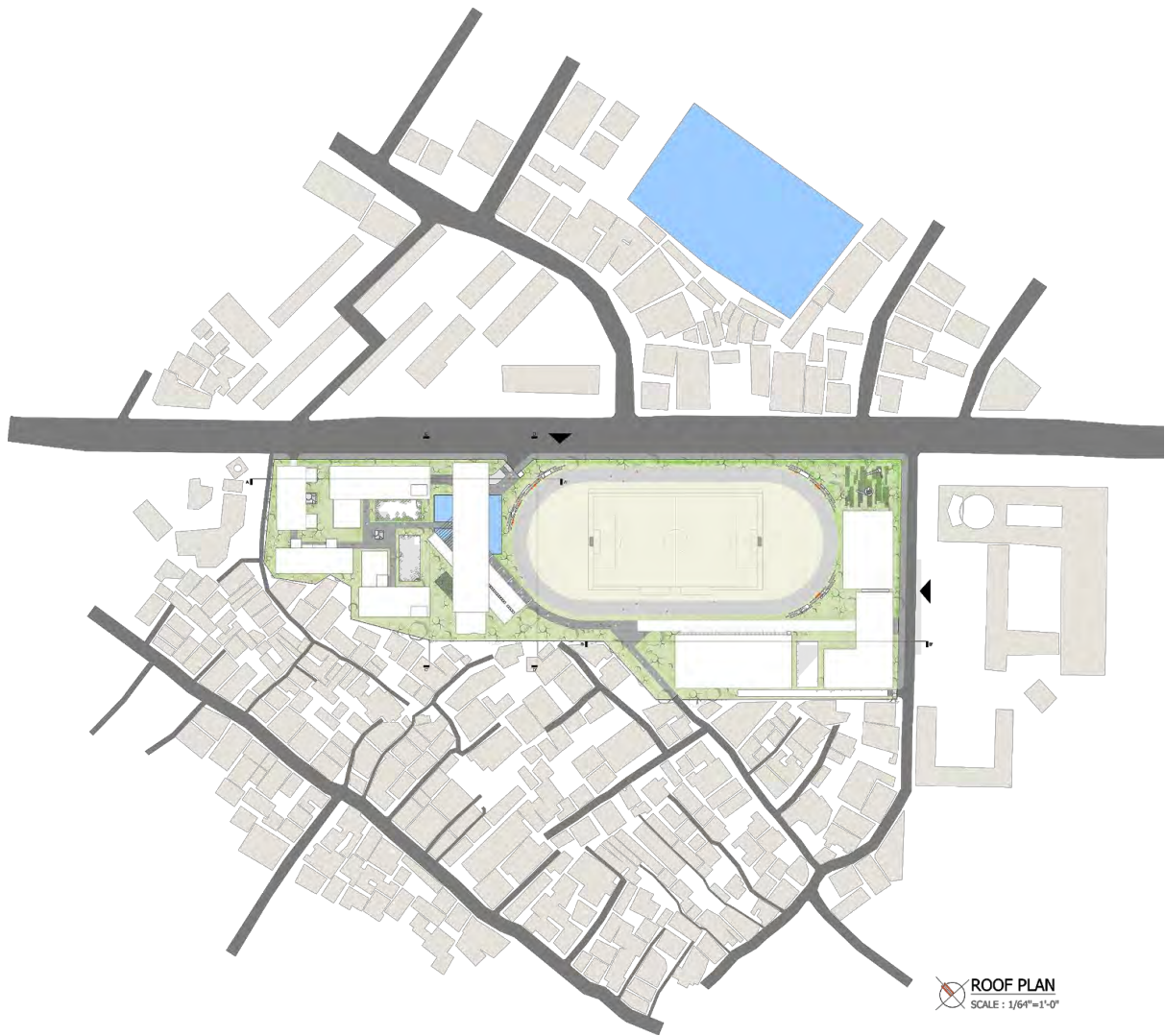
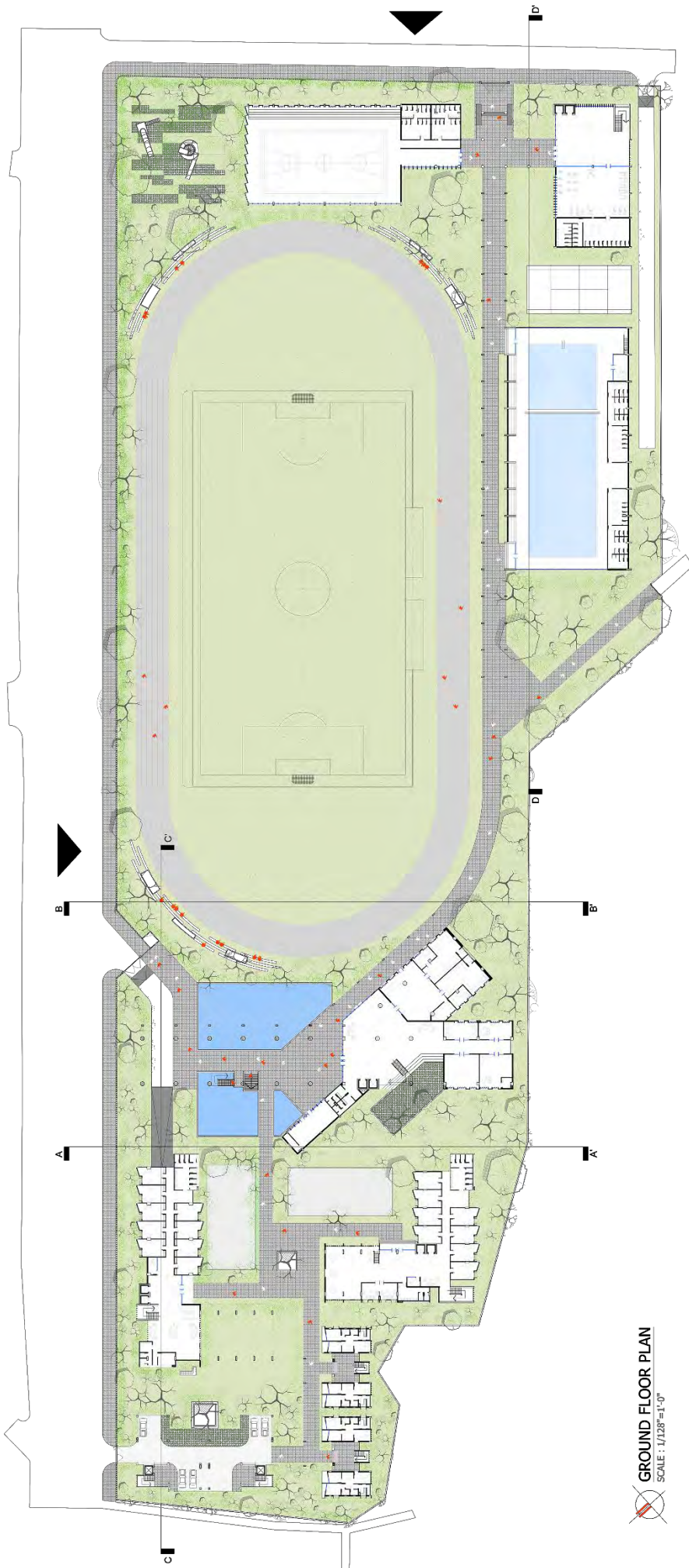


Fig: 6.3.2 Source: Author (2018)

The dormitories are designed with double loaded corridor so there are two rooms on both sides. Thus no proper way of ventilating each rooms. However, the solution to this was to build a wind directional window with a smaller open to bring in air which is supposed to air out from a bigger opening window within the same room, creating an air ventilation system **through simple physics**. As shown in the diagram above fig: 6.3.2 it's been properly described about how it will work and this type of ventilation has been used in both the male and female dormitories. Designing sustainable and green was one of the

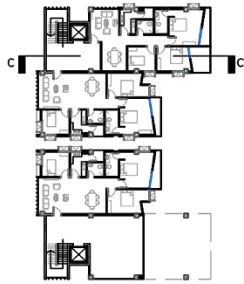
6.4 FINAL DESIGN DRAWINGS



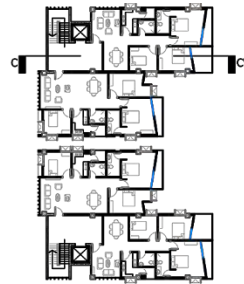


GROUND FLOOR PLAN
SCALE: 1/128"=1'-0"

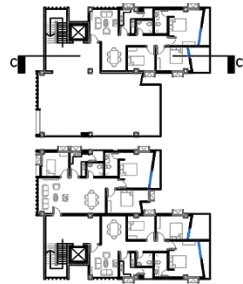
TEACHER'S QUARTER



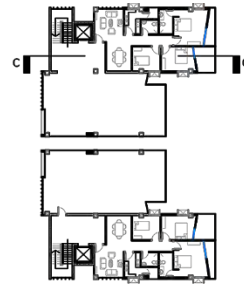
1ST FLOOR PLAN
SCALE : 1/16"=1'-0"



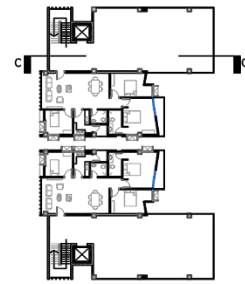
2ND, 3RD & 6TH FLOOR PLAN
SCALE : 1/16"=1'-0"



4TH FLOOR PLAN
SCALE : 1/16"=1'-0"



5TH FLOOR PLAN
SCALE : 1/16"=1'-0"



7TH FLOOR PLAN
SCALE : 1/16"=1'-0"

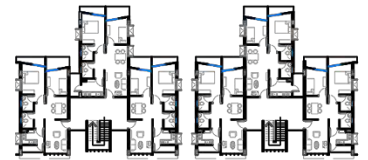
STAFF QUARTER



2ND FLOOR PLAN
SCALE : 1/16"=1'-0"

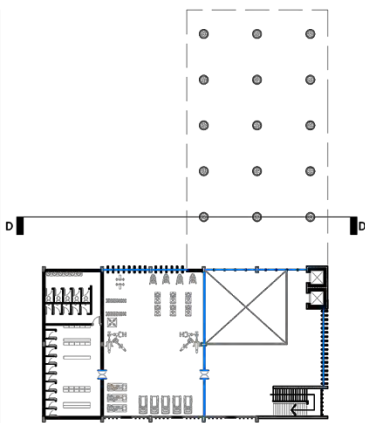


3RD FLOOR PLAN
SCALE : 1/16"=1'-0"

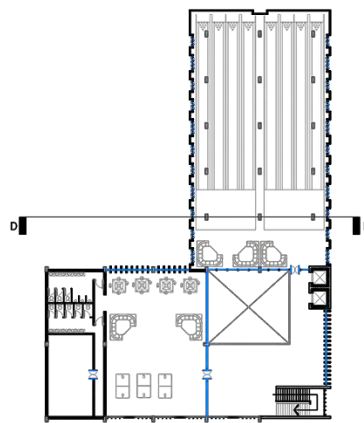


4TH & 5TH FLOOR PLAN
SCALE : 1/16"=1'-0"

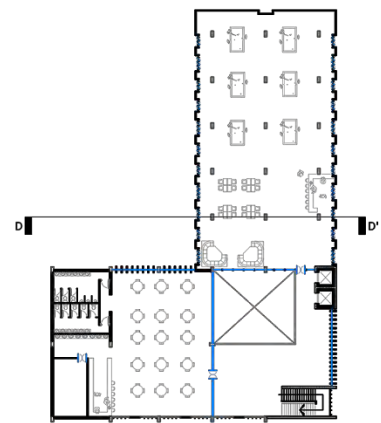
SPORTS FACILITIES



1ST FLOOR PLAN
SCALE : 1/16"=1'-0"

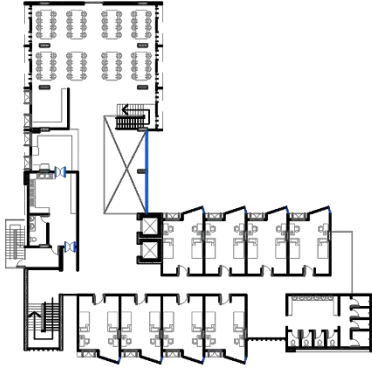


2ND FLOOR PLAN
SCALE : 1/16"=1'-0"



3RD FLOOR PLAN
SCALE : 1/16"=1'-0"

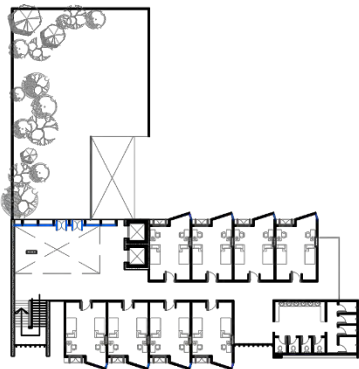
FEMALE DORM



2ND & 3RD FLOOR PLAN
SCALE : 1/16"=1'-0"



4TH FLOOR PLAN
SCALE : 1/16"=1'-0"

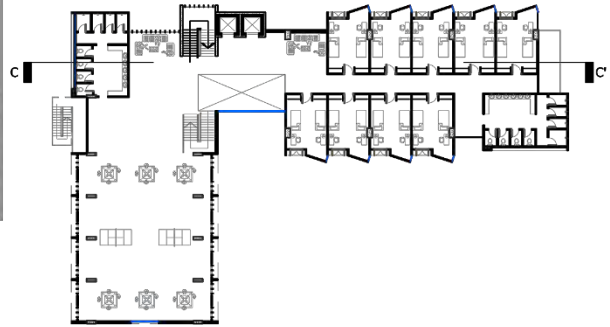


5TH FLOOR PLAN
SCALE : 1/16"=1'-0"

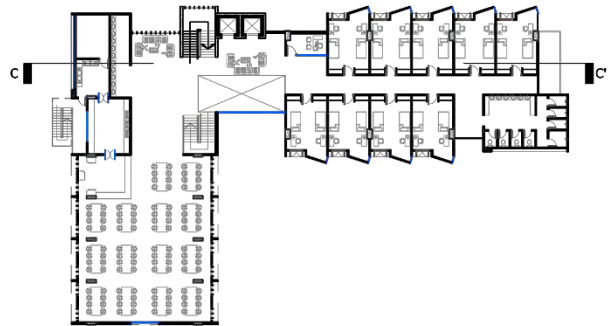


6TH & 7TH FLOOR PLAN
SCALE : 1/16"=1'-0"

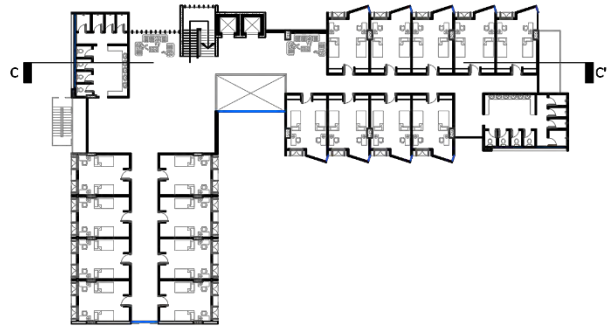
MALE DORM



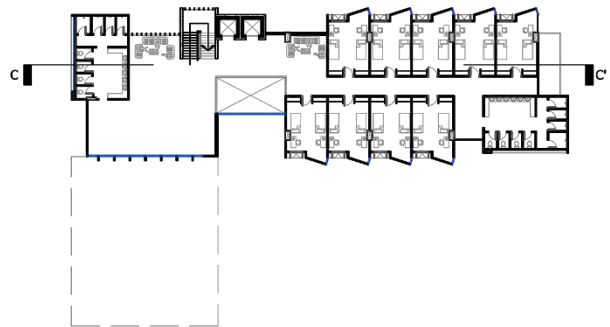
2ND FLOOR PLAN
SCALE : 1/16"=1'-0"



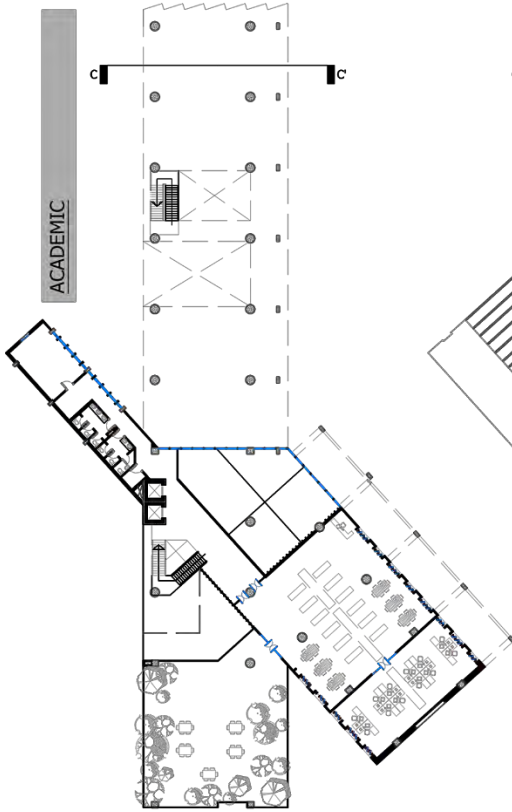
3RD & 4TH FLOOR PLAN
SCALE : 1/16"=1'-0"



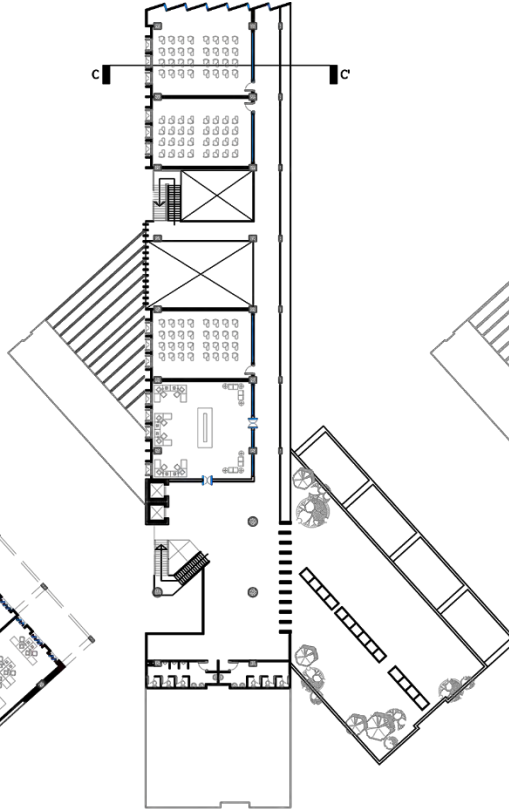
5TH & 6TH FLOOR PLAN
SCALE : 1/16"=1'-0"



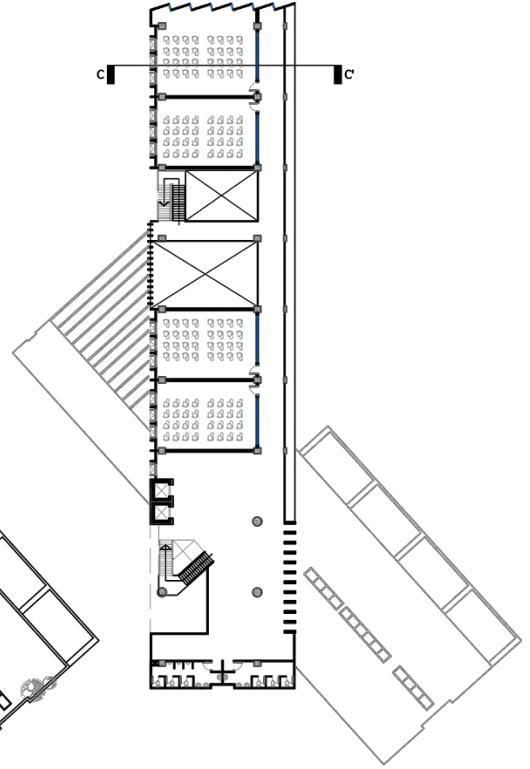
7TH FLOOR PLAN
SCALE : 1/16"=1'-0"



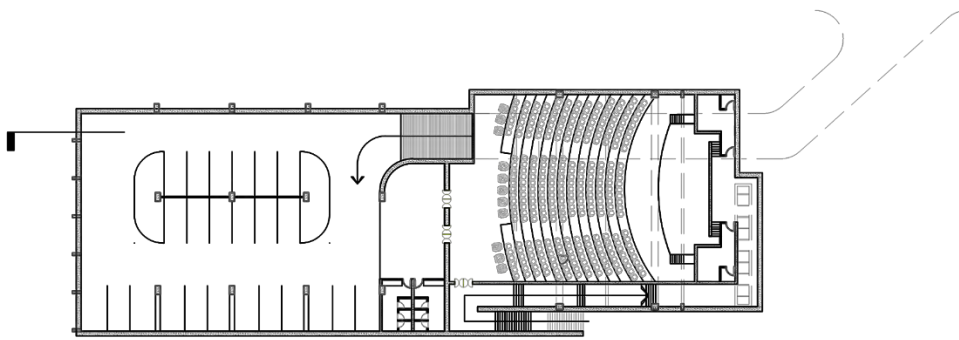
1ST FLOOR PLAN
SCALE : 1/16"=1'-0"



2ND FLOOR PLAN
SCALE : 1/16"=1'-0"



3RD & 4TH FLOOR PLAN
SCALE : 1/16"=1'-0"



BASEMENT PLAN
SCALE : 1/16"=1'-0"



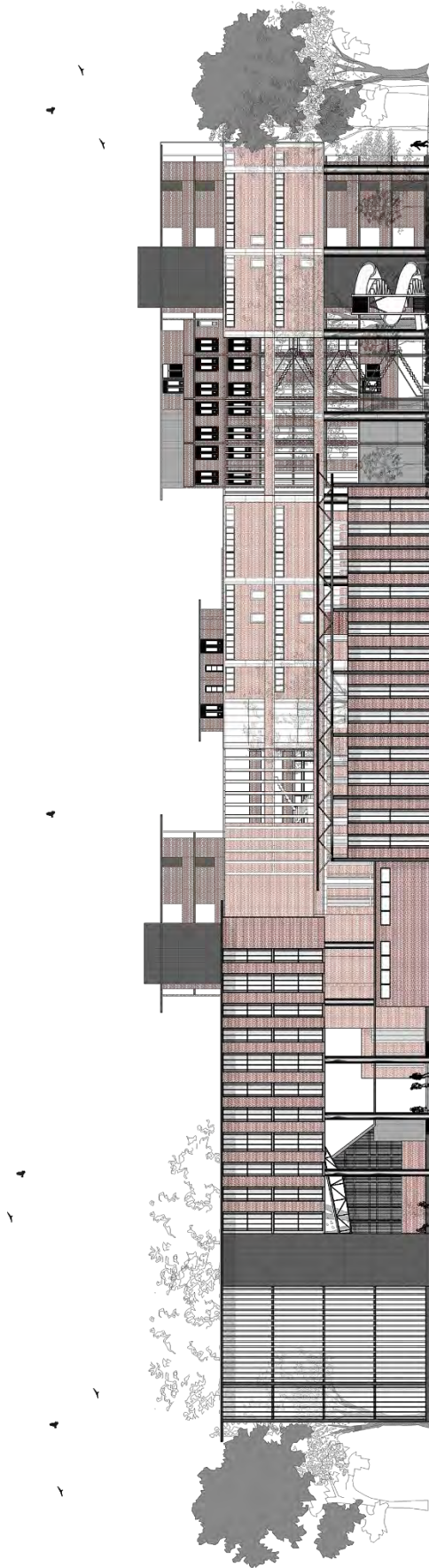
SECTIONAL ELEVATION AA'

SCALE : 1/16"=1'-0"

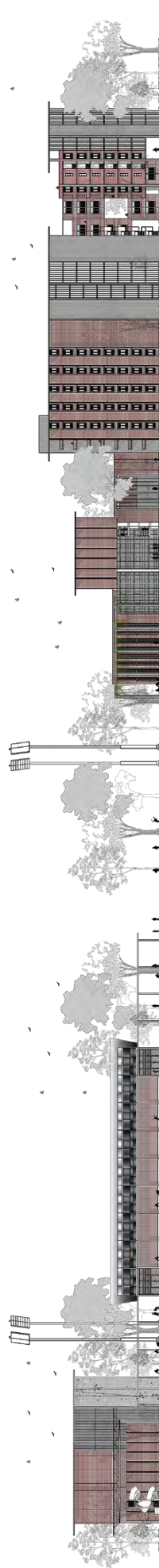


SECTIONAL ELEVATION BB'

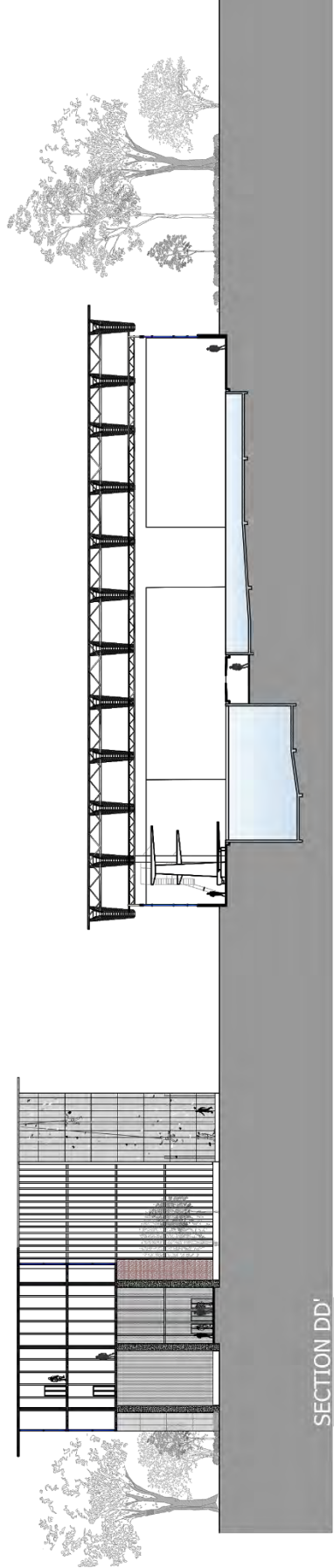
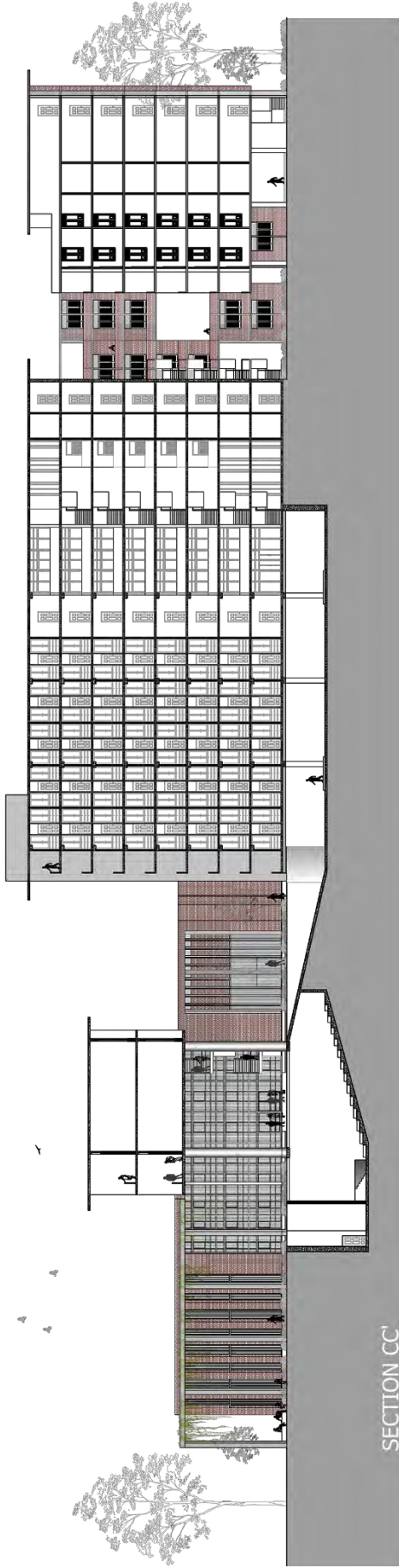
SCALE : 1/16"=1'-0"



SOUTH EAST ELEVATION
SCALE : 1/16"=1'-0"



NORTH EAST ELEVATION
SCALE : 1/8"=1'-0"



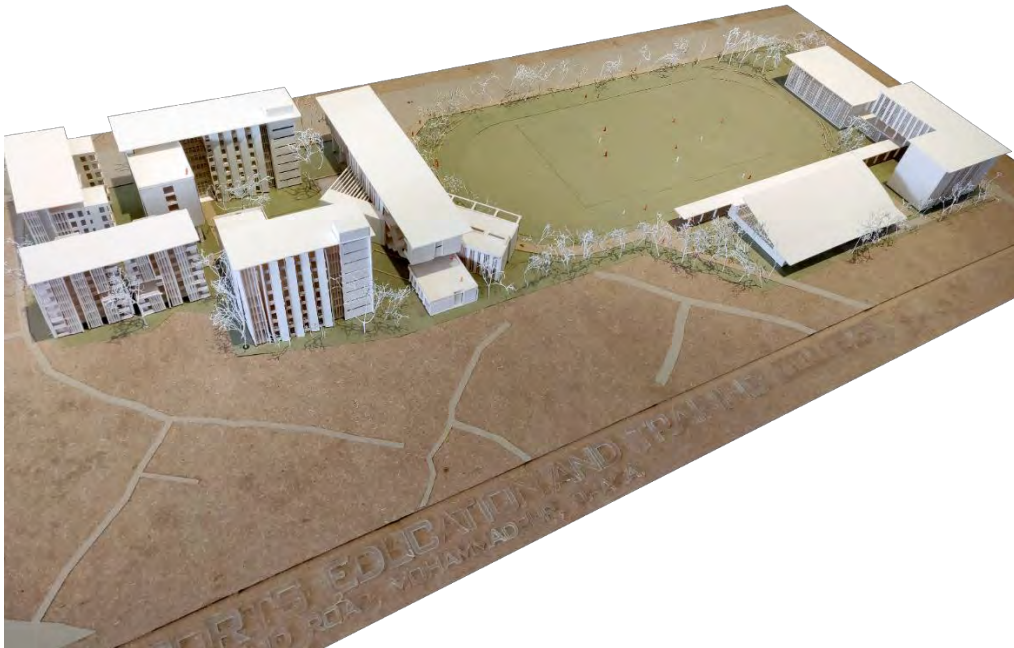
6.5 PERSPECTIVE RENDERED IMAGES

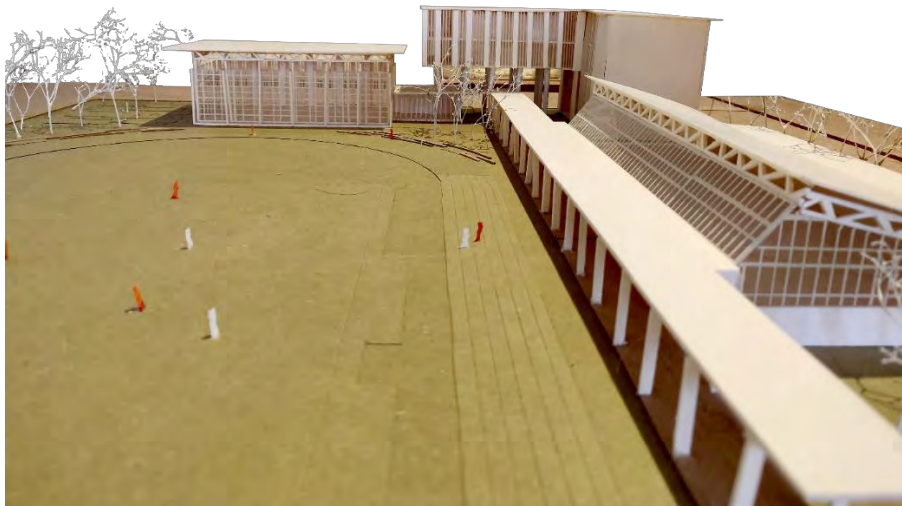




6.6 FINAL MODEL











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