

Approaching to Landscape and Design Elements in University Campus

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Abstract - The main aim of this paper is to point out that an outstanding example of a University Campus should be not only a well-functioned and clear are but also a beautiful and attractive one with pleasant sight. Only when the Campus is filled with such facts, with the students and the staff be able to carry out their respective assignments or duties with happiness as well might and main. There will bring about benefits to all, no doubt. First and foremost, the present and actual situation of the University is to be studied. The study will be followed by specialized studying on landscape Elements and Significance of Landscape Designing of the University Campus. This paper will focus on 'Nature of Campus Community' mainly to study and analyze. In connection with 'Nature of Campus Community', to be specific, the following will be included. They are: Campus Gateway, Building Entrance, Pedestrian Crossroad & Plaza Pathway, Parking, Site Lightings, Athletic Areas, Open Space, SiteFurnishings, Paving and Planting. Finally, an assessment including strengths and weaknesses will be obtained. Depending on the results already obtained, the facts that should be used for Landscape Designing will be suggested and then to be recommended. For this reason, it is sincerely expected that this paper will provide reliable support create a more pleasant and beautiful place of worth-living within the University Campus. As far as I have studied, for universities, to create a reasonable landscape planning, they have to face with major challenges (or big issues). Among them are financial support, consistent facilities and continuous maintenance.

Keywords - Landscape Design, University Campus, Open-space, Landscape Elements, Nature of Campus Community

I. INTRODUCTION

Landscape means more meanings or functions than 'a view'. Landscape has many functions to be done. If there is a building without a landscape, it will be quite lonely. In sight, it seems to be a 'dead' one. The building seems to be rough, too. If and when there is a landscape design for the building, it will become soft, consistent with its surroundings and it seems to become more natural and active. Therefore, landscape means connecting people with outdoor environment.

Moreover, Landscape plays an important role to improve the quality or sustain the quality of any environment on earth- either University environment, or a town, or a suburb, or a country.

In this paper, suggestions will be mentioned after finding the ways of how to develop or supply the University Campus

by studying and analyzing of landscape and Design Elements of the existing conditions of TUM Campus.

So, the identity of a cohesive campus is being valued and acknowledged which integrates the landscape and architecture and enhances its pleasure.

The aims and objectives of this paper are;

- (1) To explore the landscape and design elements from the existing condition of the University Campus
- (2) To study the movement in spaces.
- (3) To study the landscape elements and significance of landscape designing in the University Campus
- (4) To study application of landscape furniture depending upon the utilities of spaces
- (5) To understand the designing and shaping the environment and also scheming the interactive for resting places including the pathways
- (6) To bring about a green and pleasant environment
- (7) To create microclimate enhancement
- (8) On account of having to work in a good environment, their minds are always fresh and at the same time their standards of living become more convenient.
- (9) To make an environment or a campus filled with positive thinking come into existence

II. INFORMATION ABOUT THE STUDY AREA



Fig. 1 Technological University (Mandalay)

TUM is composed of (16) departments. There are over 3520 students and all the staff are about (250). Its campus is 65.37 acres.

TUM is situated at Aung Chan Tha Village-tract, Patheingyi Township, Mandalay Region. It can be reached from downtown area without any difficulties. It is also not quite far from the Mandalay-Myitkyina highway motor-road.

Within the TUM campus there are many buildings such as Administration Buildings, Academic Buildings, Student Hostels, Staff Residences, Workshop Buildings and Recreational Play Field.

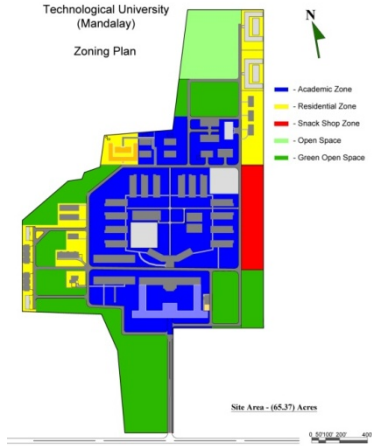


Fig. 2 Zoning Plan of TUM Campus

III. STUDY AND ANALYZE OF THE NATURE OF CAMPUS COMMUNITY

A. Campus Gateways

Campus Gateway is, in fact, the starting point of the area demarcation and it is also a significant symbol of a university. By studying a gateway or a campus entry, a university is image such as quality and dignity can be guessed. This is the gateway of TUM Campus.



Fig. 3 TUM Campus Gateways

B. Building Entrance

Campus crossed and Plaza can be designated as the joining points of Pedestrian Walkways.



Fig. 4 TUM Entrance Showing Visual Transition from Exterior

C. Pedestrian Crossroads & Plaza

Campus crossroad and Plaza can be designated as the joining points of Pedestrian Walkways. There is no plaza in TUM Campus in existing condition.

D. Pathway

(The Campus-wide system of pathways) Campus pathway is an effective and wide system to connect buildings, parking and activity sites. It also serves as a helping hand for other developmental patterns and forms.



Fig. 5 Pathway of TUM Campus

E. The Parking

In reality, parking area is the area for car accommodation (or) parking places, It is only land use for cars. However, it can be attached with landscape feature of pedestrian circulation. There is no parking lots separately. In existing condition, it can be seen unorganized parking.



Fig. 6(a)



Fig. 6(b)

Fig. 6(a)&(b) The Parking of TUM Campus

F. Sitting Spaces

A common vocabulary of site walls should be developed for sitting, retaining grade, edging planting areas, security and for other design purpose. The vocabulary for walls should be well-matched with campus facilities, paving, and other site and campus improvements. It is clear that the character of campus buildings should be reflected by the height, materials and design of site walls



Fig. 7 Sitting Spaces at TUM CAMPUS

G. Open Space

By good making use of open spaces in a campus, pleasant environment can be created. It can also be used to regenerate the community. Besides, it can be used for enjoyment and recreation to help Education in one way or another



8(a)

8(b)

Fig. 8 (a)&(b) Unorganized Open Space in TUM Campus

H. Site Furnishings

University Campus can be made more pleasant and alive by applying furnishings that can help make the campus improve.

To improve the campus environment such as campus life and appearance it can be made by adding campus furnishings. Traditional and contemporary design styles should be integrated in a way of using traditional materials in a contemporary design context to get the style of campus furnishings. In order to reduce maintainace effort, furnishings should be made of materials that are locally and easily available, durable and serviceable.



Fig.9 Trash Bin

Fig. 10 Bench



Fig.11 Trees Planter Box



Fig. 12 Athletic Areas

I. Paving

The color, pattern and texture of paving should be compatible with the facilities of university campus for infrastructure. Paving can play a supporting role to make building entries and pedestrian activities become attractive settings.

Locations can be used for special uses and circulation zones by applying prominent paving design. It can be effective, do doubt.

In special pedestrian areas along the streets eyes there should be a wider accent paving area ie corners, entry areas and possible crossing locations.

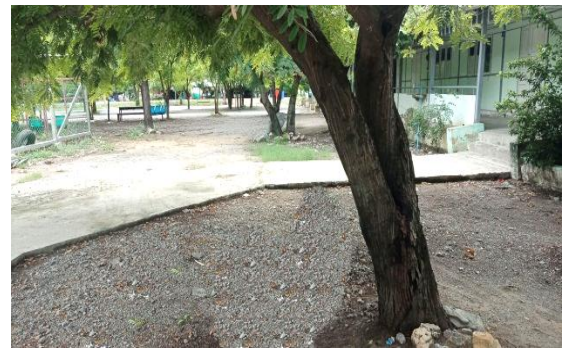


Fig . 13 Showing lack of Pattern and Texture of Paving

J. Planting

It is necessary to develop a hierachy of landscape materials to distinguish key areas of the campus and to reflect site-specific functional objectives (should, buffering, solar access, climate control, etc)

Campus edges and streets capes are to be reinforced with simple and memorable linear planting patterns of conopy trees so that they will reflect circulation patterns and reinforce the campus perimeter.

Moreover, campus entries are to be emphasized with ornamental shrub planting and accent trees. They will help establish unique color and form as a complement to architectural features.

To save costs, to conserve water and to reinforce planting appearance and technology, low maintenance landscape materials in low use areas are to be established.



Fig. 14(a)



Fig. 14(b)

Fig . 14 (a)&(b) Planting in TUM Campus

IV. ASSESSMENTS FOR NATURE OF CAMPUS COMMUNITY

After studying and analyzing of nature of TUM Campus Community, these assessments factors are found:

TABLE I ASSESSMENT TABLE

Observation	TUM Campus
- Campus Gateways and well-maintained	- need to develop gate design
- Campus Entrance	- showing visual transition
- Pedestrian Crossroads And plazas	- not well-maintained
- Path Way	- not well-maintained
- Parking	- Unorganized Parking
- Site Lighting	- Random Lighting
- Athletic Areas Open Spaces Wall	- Football field, Open spaces are not maintained
- Site Furnishings	- Incomplete, not well-maintained
- Paving	- No materials used with special purpose, random materials (readily available ones)
- Planting	- Be in greening condition but not a systematic manner; not well-maintained.

V. SUGGESTION

- In connection with Campus Gateway, the design should be changed to more developed one that is in line with the image or dignity of the campus.
- From the campus entrance to its way onward, visual transition effect is to be considered.
- Pedestrian crossroads and plazas should be in the center of the campus.
- For pathways, there should be well-linking from one place to another. Pathways should be of better quality than the present ones, and it is necessary to maintain them well.
- For parking space, a certain area should be designated as a parking space, and it should be kept separately.
- Site lightings are placed generally, not in specific places according to the need. There should be well-organized site lighting at necessary spots.
- Walls and fence of the campus should be complete and quite safe for security. Walls should be the ones that are suitable for the campus condition.
- In connection with Athletic Areas, only a single football field (playground) is seen. All open spaces

- should be carefully maintained because they can be created for athletic areas, recreation parks, and so on.
- For site furnishings, they should be of better and more complete facilities and systematic than the existing area. They should also be attractive in appearance.
- For the part of paving, materials as well as patterns should be changed in their respective places to look more interesting.
- According to the existing condition, for the part of planting, it seems to be in greening situation. However, it is not in a systematic pattern and so unwanted bushes, trees and natural vegetation should be cleared. At every necessary spot, in keeping with its function, planting is to be done systematically and creatively.

VI. CONCLUSIONS

The campus will become active and alive after the landscape has been improved by applying reasonable designs with the help of site and landscape improvements, larger passive courtyards, campus greens and quads are to be maintained and enhanced.

Establish new larger scale multipurpose pedestrian plazas and gathering places. At the meeting points like gathering places, consideration should be taken to install water features.

Reinforce circulation patterns and campus spaces with the development of distinct landscaped edges. A clear design which can get to circulation patterns should be created. At key locations along the edge of the campus, uniform campus elements are to be developed. University Campus facilities such as library, Indoor stadium and Amphitheatre should be included. It is also necessary to maintain the planting in the campus to be in a well-designed condition.

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