

UNIVERSAL ARCHITECTURE DESIGN OF CULTURAL PARK IN MEDAN CITY

Salwa Salsabilah

Student Department of Architecture, Faculty of Engineering,
Universitas Sumatera Utara, 20155 Medan, Indonesia

*Corresponding Author: Salwasalsabilachalid@gmail.com

Abstract

In today's society, with its hectic activity levels, high life pressure, and increasing levels of stress and boredom, people's need for entertainment has never been more important. People who want to enjoy artistic entertainment and channel their artistic talents come from all walks of life, including those of diverse ages, genders, and physical abilities. However, in reality, many buildings in the arts sector have not provided adequate facilities to serve all groups in Medan City. To overcome this problem, the planning and design of the building can apply an architectural concept that is universal design architecture. The purpose of this planning is to realize the idea of the Department of Education and Culture in the field of architecture by providing facilities for the development of arts and culture. It also aims to meet the community's need for a cultural park as a center for learning and art appreciation. This research applies a qualitative descriptive method and focuses on the Cultural Park center. The result of this research is an emphasis on a number of important aspects in designing a building that is accessible to all.

Article History

Submitted: 7 Agustus 2024

Accepted: 13 Agustus 2024

Published: 14 Agustus 2024

Key WordsDesign; Universal
Architecture Design;
Cultural Park**Introduction**

The lack of a representative building for artists creates a crucial issue that prevents them from expressing their ideas and works in the form of exhibitions. The unavailability of this place makes artists unable to contribute to art and causes no increase in regional income for each region in Indonesia. In fact, the development of art in Indonesia was very advanced starting from the 1980s to the mid-1990s [1]. However, this is not apparent in this day and age where the issue has become complex. In fact in Medan City there are still not many places that provide representative facilities to be enjoyed by the public at large including Cultural Park. Everyone has the right to have the same opportunity to enjoy the various types of arts and culture that exist in Medan City, starting from an early age to regardless of status, economy, gender or even people with special needs. In today's era, culture is slowly being forgotten by the younger generation as a result of lack of interest and unavailability of information related to existing culture. The unavailability of a place to channel existing talents and culture is a supporting factor in not being able to develop and build cultural arts that can provide distinctive value for local and foreign tourists.

One of the places that can provide space to utilize arts and culture is Cultural Park. This place is a space that provides a Cultural Landscape whose scope is not only limited to preserving cultural heritage or to promote education, but can be a place to develop and support various types of economic development that utilize local culture as the main element [2]. A cultural park can also be interpreted as a project that can characterize the identity of a region by showing the various roles that can be shown through the identity of a region [3]. This cultural park can also be a place that can show and display various arts and cultural activities [4]. This provides assertiveness that shows an important role for Cultural Park to become a place that exhibits and organizes various types of activities from arts and culture [5].

Universal design is an environment that can provide benefits for various types of individuals without requiring additional adaptations or creating special designs for certain individuals [6]. According to Sherly Burgstahler [7] universal design entails the idea of a design concept that includes every individual by generalizing anyone without any significant

difference to the existing concept. The concept that has developed globally can be found in various fields such as architecture, interior, graphic design, or product design. Universal Design can refer to a process in which various design principles are combined to ensure that the resulting product or environment can be used by everyone, including those with different physical conditions, sizes, languages, cultures, and knowledge. Universal design can create an end product that is useful on a regular basis to improve the quality of life for all people in their environment and provide communication that is appropriate for each individual to provide special value to people of different ages and abilities [8]. The Center of Universal Design, North Carolina State University [9] issued several universal design principles that can be implemented for various types of activities in life, including the following:

1. A design that can have a positive impact and can be used by all users with various abilities.
2. Design that can accommodate different types and abilities of individual users.
3. A design that is easy and comprehensible for users without respect to their degree of knowledge, proficiency in a language, or level of focus.
4. A design that provides information to the user efficiently, irrespective of the user's surroundings or sensory capacities.
5. Design that minimizes dangers and negative consequences arising from unintentional or intentional actions.
6. Design that can be used efficiently without causing fatigue.
7. The amount of space designed to effectively provide anything irrespective of the user's body size, posture, or mobility through approach, reach, manipulation, and use.

With a population of about 2.9 million, Medan is Indonesia's third-largest metropolitan area. However, so far, the "platform" for arts development and performance is very small and the public still does not recognize the existence of Cultural Park. The North Sumatra Cultural Park in Medan serves as an art "space" for artists, but it has been criticized for its lack of facilities and the physical condition of the building is inadequate and unfriendly to people with disabilities. This can be achieved through planning and designing the Cultural Park using a universal architecture approach. Universal architecture is a method that can be used in general, regardless of age, disability, or other factors.

The goal of the cultural park's design in Medan City is to provide an enjoyable space where everyone can appreciate the arts and cultural acts. It should also serve as a venue for people to identify and nurture their innate artistic abilities. Furthermore, by providing open space for recreation, the redesign of this cultural park is anticipated to support the efforts of the governments of Medan City and North Sumatra Province to promote local culture, foster social interaction, and serve as a cultural information hub for the city's residents.

Methodology

The methodology used in the design of the There are two components to Medan City's Cultural Park. The first is choosing the design location, which is determined by the Medan City Regional Spatial Plan's regional regulation, An investigation of the layout of the city, the site's accessibility, its current state, general zoning laws, rules on the use of space, and utilities. In order to develop and produce a suitable and functional design, the second step is data collection based on primary and secondary data. Data can be gathered by direct or indirect observation and analysis, which is then thoroughly reviewed to provide the required studies.

Results and Discussion

The current design of the Cultural Park does not comply with the criteria to support the advancement of Universal Architecture. The explanation below will provide an overview and

a new concept of building form by utilizing land and the use of Universal Architecture in buildings and their outside spaces.

3.1 Project Location

The design of the Cultural Park is located on Jalan Perintis Kemerdekaan, Gaharu, East Medan District, North Sumatra. The land area to be designed in this area has an area of 12,000m² / 1.2 Ha with relatively flat land contours. The design location is a cultivation and convention area and close to the center of residential areas. The design area is a site that functions as a building of educational facilities, offices, or hotels that can provide opportunities and benefits for visitors interested in understanding about Medan City's arts and culture (Figure 1).



Figure 1. Project Site
Source: Google Earth.

3.2 Region Boundaries

This site is a Public Service Facility Zone-5 because this zone is a spatial planning included in the cultivation area designed to accommodate socio-cultural facilities with a scale and hierarchy adjusted to the population and developed horizontally and vertically. Therefore, the Regional Regulation of Medan City 2015-2035 must be followed which includes regulations such as: Intensity of Space Utilization of Medan City. The boundaries of the area on the Cultural Park design site are as follows.

Table 1. Region Boundaries

Direction	Boundaries
North	IAIN Street
East	Adinegoro Street
South	Perintis Kemerdekaan Street
West	Sutomo Street

The design site is located on a Secondary Arterial Road with a relatively low level of congestion, the road is Jalan Perintis Kemerdekaan, East Medan District, Medan City, North Sumatra with a road width of 12.5 m GSB.

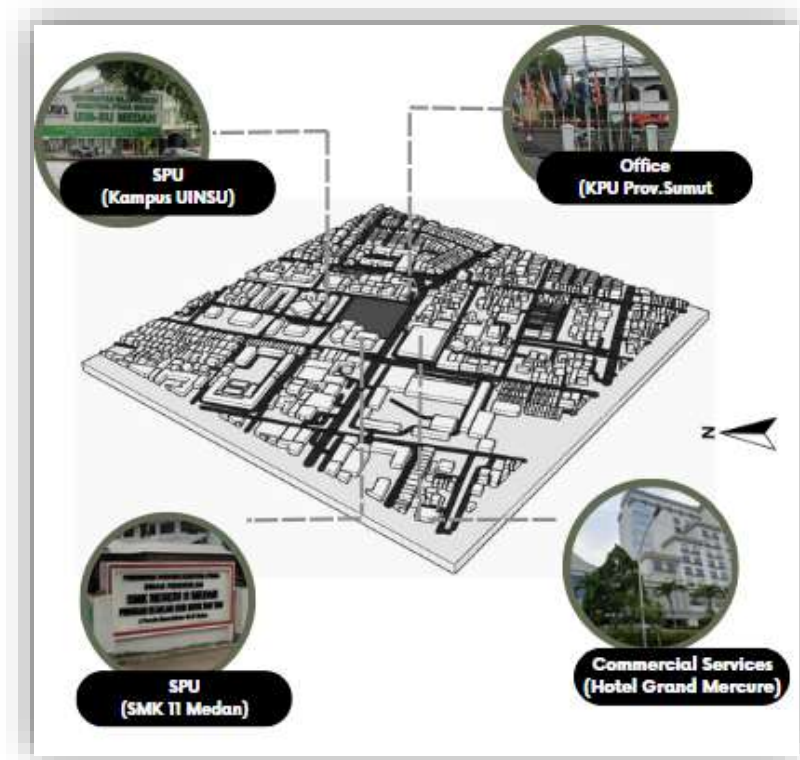


Figure 2. Region Boundaries

3.3 Project Site Zonation

The cultural park combines the concept of open and centralized space by applying zoning divisions to the building that create comfort within the building (Figure 3).

CONTEXT AND CONNECTIVITY



Figure 3. Context and Connectivity

Activities in the area demonstrate the range of amenities available at the Cultural Park. The cultural park's exterior is separated into a number of sections, including public spaces that are situated on the east and west edges of the property. Everyone, including those with impairments, can use the Cultural Park's amenities. Activities like concerts, festivals of the arts

and culture, yearly events, education, and recreation can all be supported by the facilities that are currently in place (Figure 4).



Figure 4. Concept of Outdoor Space

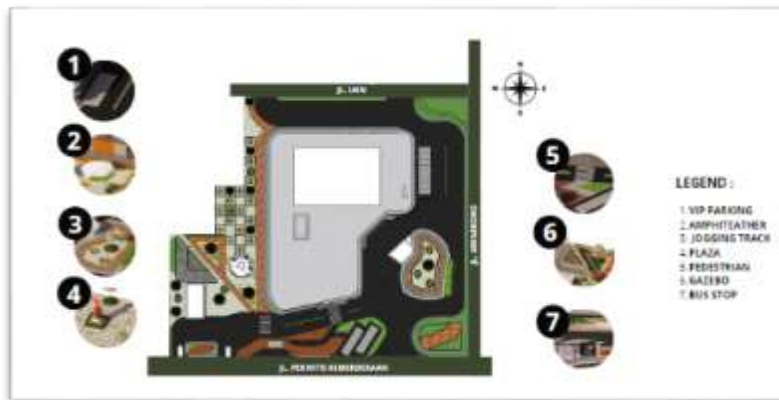


Figure 5. Masterplan Layout

3.4 Facilities

The external design of Cultural Park demonstrates the building's global nature, as established by the analysis carried out. It is directly tied to the exterior and includes building shape, climatic analysis, and harmony with the existing site. The layout of the building is determined based on the analysis of space requirements in the building based on circulation and dimensional requirements for each space in the building. In addition to creating a dynamic and expressive character, this will also create a harmonious and dynamic atmosphere by harmonizing the existing building site. (Figure 6).

Space is divided into eight elements. The first is the floor, which is an interior element consisting of a flat plane with a flat base that functions to support the activities and furniture in it. The second is the wall, which is an interior element that is a vertical plane that functions as the face of the building and provides privacy to the inner space it forms. It serves as physical and mental protection for those under its shade [10].

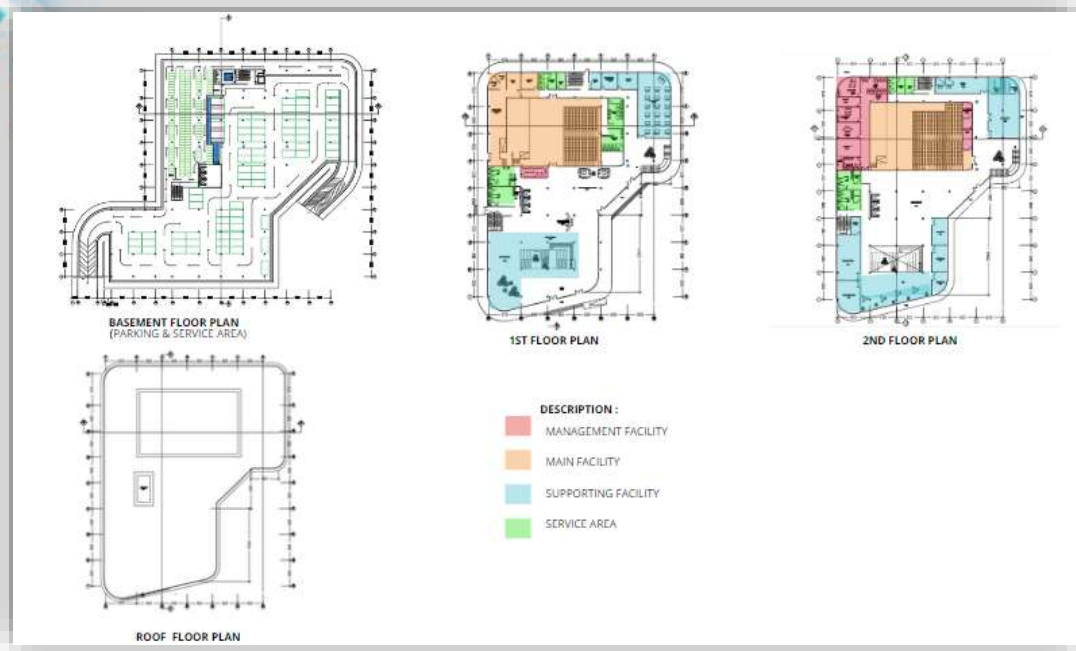


Figure 6. Floor Plan and Area Zoned

3.5 Concept

By taking into account how function and theme are balanced, the concept of Medan City cultural park uses the principles of universal architecture. The building design pays attention to universal design principles that are friendly to people with disabilities and can be used for all groups that follow the times that are implemented into the form of the building's outdoor space by displaying various types of different styles and innovations as well as having flexibility and attention to efficiency.

3.5.1 Building Mass Concept

Below is the concept of the mass of the Cultural Park building in Medan City (Figure 7).



Figure 7. Mass Transformation

3.5.2 Theme Implementation Concept

Universal design, which emphasizes the connection between user comfort and safety in artistic and cultural endeavors that make reference to universal design principles, is connected to the idea of Cultural Park. It aims to increase user safety in art and cultural creativity

activities. By paying attention to the site's response to buildings related to the design location and complex urban environmental issues. (Figure 8).

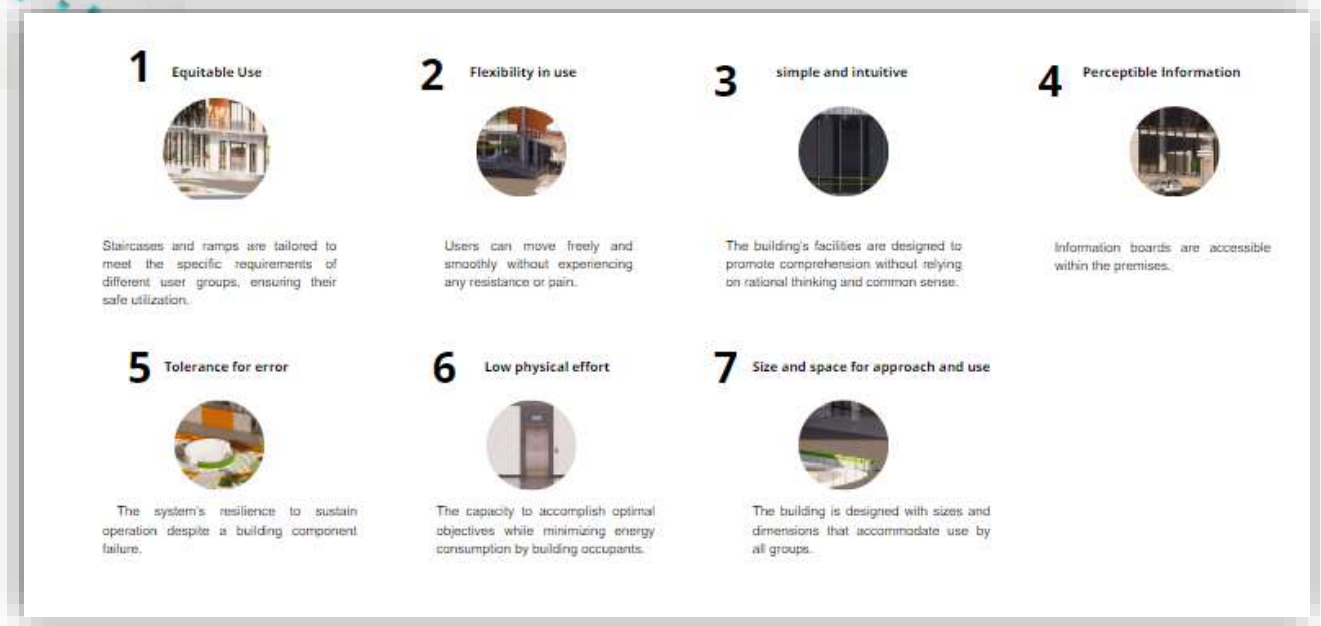


Figure 8. Implementation of the Theme into the Building

The concept of this building facade applies the principles of Universal Architecture. The manifestation of the application of universal architectural design can be seen from the design of buildings, facilities, and infrastructure that are safe and can be used by all groups by paying attention to user comfort and safety. The principles of universal architecture are to make it easier for all individuals to access public spaces so that all users can fulfill their needs during their activities [11].

The use of plants to create a sense of intimacy between structures and the natural world. The process of designing universal architecture in buildings should demonstrate the application of universal design principles into buildings (Figure 9).



Figure 9. Landscape Building



Figure 10. Landscape Building

The interaction between people and the building footprint is determined by the height between the plaza and the vehicular and pedestrian entrances. The landscape façade is designed to create the impression of people interacting with the vegetation as well as the building. The plaza can serve as a barrier between the building and the street. Not only that, the landscape on the building can be used as a place of recreation for users and as a resting place.

Conclusion

The designed Cultural Park has an area of 12,000 m² / 1.2 Ha. This relatively flat land contour has great potential for the development of cultivation areas and conventions for settlement centers. This design area has high potential for the use of strategic functions such as educational facilities, offices, and hotels that will be used as a forum for the development of various arts and cultural activities that will offer leisure and instruction related to Medan City's arts and culture. Cultural Park is designed in compliance with universal design principles and other universal architectural norms.

Acknowledgment

This research is a study of a cultural park with the concept of Universal Architecture which aims to be a source of information and knowledge that is expected to preserve local cultural arts. The author would like to thank the Department of Architecture, Faculty of Engineering, University of North Sumatra and all those who have helped in the research and design of the Cultural Park in Medan City..

Conflict of Interest

The authors whose names appear below declare that the manuscript has no conflict of interest.

Salwa Salsabilah

This statement is signed by all authors to indicate agreement that the above information is true and correct (a photocopy of this form can be used if there are more than 10 authors):

References

- [1] Jesica, E. S. & Ch. Budiman. 2019. RANAH SENI RUPA INDONESIA: Kolektor, Pasar, dan Penahbisan Karya. *Jurnal Imajinasi*. 13(2).
- [2] Wicaksono, Endri. 2018, Taman Budaya Kabupaten Landak.
- [3] Hidayatullah, Rahmat. 2018. Taman Budaya Dan Revitalisasi Ruang, Part I.
- [4] Taman Sriwedari Di Surakarta. *Jurnal Arsitektur PURWARUPA*. 4(1).

- [5] Bustamente, L. P and Ponce, C. P. (2004), *Paisajes culturales: el parque patrimonial como instrument de revalorizacion del territorio* , Theoria,13,pp.9-24.
- [6] Mace, Ron, *Publikasi, Accesible, Adaptable, and Universal Design*, NC State University Center for Accessible Housing, 1990.
- [7] Burgstahler, Sheryl PhD, 2012. *Universal Design of Instruction (UDI): Definition, Principles, Guidelines, and Examples*. Seattle : University Of Washington.
- [8] Andanwert, Noeratri. (2005). Universal Desain, Sebuah Pendekatan Desain untuk Menjawab Keberagaman, Jakarta: *Jurnal Visual*. Vol. 8 No. (ISSN 1410-4903).
- [9] Mace, R. (1997). *The Principles of Universal Design formulated by The Centre of Universal Design*, North Carolina State University.
- [10] Francis. D.K. Ching. (1991). *Arsitektur Bentuk, Ruang dan Susunannya*, Erlangga, Jakarta.
- [11] Naima, Sani Puspaning., Wijayanti., & Indriastjario. 2018. *Kajian Penerapan Prinsip Desain Universal Pada Museum Studi Kasus: Museum Geologi Bandung*. Modul. 18(2). p- ISSN 0853-2877. e-ISSN 2598-327X. DOI: 10.14710/mdl.18.2.2018.83-89.
- [12] “Google Earth, “
<https://earth.google.com/web/search/Taman+Budaya+Sumatera+Utara,+Jalan+Perintis+Kem+erdekaan,+Gaharu,+Medan,+Sumatera+Utara+> [Diakses 04 Maret 2024]
- [13] Peraturan Daerah (PERDA) Kota Medan Nomor 1 Tahun 2022 tentang Rencana Tata Ruang Wilayah Kota Medan Tahun 2022-2042. Diakses dari <https://peraturan.bpk.go.id/Details/205589/perda-kota-medan-no-1-tahun-2022> . [Diakses pada tanggal 05 Maret 2024].
- [14] <https://gistaru.atrbpn.go.id/rdrtrinteraktif/> [Diakses 05 Maret 2024]
- [15] <https://gistaru.atrbpn.go.id/rtronline/> [Diakses 05 Maret 2024]