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ANALYSIS OF SPATIAL ASPECTS OF MEDAN TELADAN STADIUM RENOVATION

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Abstract: Based on the purpose of the Feasibility Study on the Renovation of the Medan City Exemplary Stadium, is to obtain a Foundation for the Planning and Design Program regarding the Renovation of the Exemplary Stadium in Medan City which has supporting facilities and is worthy of national fit. Spatial aspects in the feasibility study of the renovation of the Medan City Exemplary Stadium are adjusted to Regional Regulation No.1 of 2022 of the city of Medan (Regional Spatial Plan 2022 to 2042). The feasibility study of the renovation of the Medan City Exemplary Stadium used quantitative descriptive research, with the data used were primary data and secondary data. The Feasibility Study Method of Exemplary Stadium Renovation Planning to explain the design requirements (design needs) and design determinants related to the planning and design of the Exemplary Football Stadium with the analysis of spatial aspects. The results of this study are reviewed from the aspect of spatial planning, so the concept planned for the renovation of the Exemplary Stadium is feasible to be implemented.

Keywords: Medan Teladan Stadium; Renovation; Spatial Aspects.

INTRODUCTION

Football has become a phenomenon in itself, in its development now, this sport has been transformed into a football industry. His success has not only been based on pursuing achievements but has also been sold out for sale and entertainment. Inevitably, football must be managed professionally to bring in economic functions.

One of the most important means in this sport is the stadium. The stadium must be able to provide comfort and safety for spectators, players, and managers following stadium building planning standards. Supported by supporting facilities and an attractive form of stadium architecture a plus.

In the field of Football, North Sumatra province, especially the city of Medan, has quite a good potential. In its development, people's interest in Medan city towards the development of the sports world tends to increase. However, the increase in public interest in sports itself is not balanced by an increase in the quality or quantity of sports facilities

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in the city of Medan, especially the current football field facilities, namely the Teladan Stadium. There is even a tendency to decrease the quality of sports facilities due to a lack of maintenance. The city of Medan currently really needs a representative stadium as a forum for coaching players and also as a place to hold football competition events in the country.

In general, it can be concluded that three factors make the condition of the Exemplary stadium what it is today. First, the one that is directly related even though it can still be improved, namely the field. The uneven and muddy field when it rains directly affects the fun of playing and watching, even though it can still be repaired. The second is still related and can also be improved, that is, the stadium facilities. The quality of the stadium automatically also affects the concern of the audience. And thirdly, what is somewhat related but very difficult to repair, is, the supporting land and the carrying capacity of the road.

Thus, it is necessary to hold a renovation of a football stadium in Medan City which will be an effort to meet the needs of football development in the Medan City area. The stadium is also expected to meet the demands of modern football which requires supporting facilities that meet the standards of eligibility. The feasibility study of the renovation of the Medan City Exemplary Stadium in this case was reviewed from the spatial aspect.

LITERATURE REVIEW

Based on the purpose of the Feasibility Study on the Renovation of the Medan City Exemplary Stadium is to obtain a Foundation for the Planning and Design Program regarding the Renovation of the Exemplary Stadium in the City of Medan that meets the community's need for football as a national viable sports facility.

Through spatial aspects in the feasibility study of the renovation of the Medan City Exemplary Stadium, it is to analyze the suitability of the spatial plan (land use) and analyze the location by considering the accessibility, and location of the surrounding environmental infrastructure.

RESEARCH METHOD

Feasibility Study of Exemplary Stadium Renovation Planning Dhi Preparation of Feasibility Study of Medan City Exemplary Stadium uses quantitative descriptive research, while the data used are primary data and secondary data. The Feasibility Study Method of Exemplary Stadium Renovation Planning is to explain, elaborate, and explain the design requirements (design needs) and design determinants related to the planning and design of the Exemplary Football Stadium.

Feasibility Analysis of Medan City Exemplary Stadium Renovation is an analysis of suitability with the spatial plan (land use).

RESULT AND DISCUSSION

The Teladan Stadium area has a land area of 53,872 m2, located on the Medan Kota District Stadium road. The position of Teladan Stadium is very close to the Sisingamangaraja road (primary arterial road classification), which is a road that connects the National activity center and the National activity center to the regional activity center. Medan Kota Subdistrict is also one of the parts of the City Strategic Area (CSA) which is designated as the center of primary activities to realize a regional-scale trade and service area that can serve the residents of Medan city and the surrounding area and is equipped with facilities and infrastructure that can support economic activities. With the plan to develop and upgrade the Teladan Stadium as an international sports service center, it will also support the economy of the city of Medan and its surroundings.

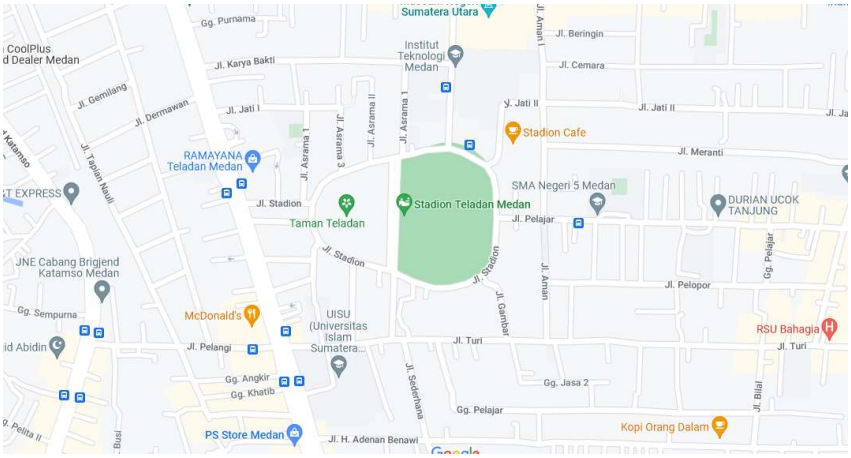

Figure 1. Location of Teladan Stadium – Medan

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Spatial Aspects

In the spatial pattern plan for the Medan city area from 2022 to 2042 (Medan City Bylaw No.1 of 2022), it is designated as a protected area with a GOS (Green Open Space) designation with a GBC (Green Basic Coefficient) of at least 80% of the land area. GOS itself has a social and aesthetic function as a means of recreational activities, education, or other activities at the environmental level which is a piece of land arranged in such a way that it has beauty, comfort, and safety for its owner or user. The space pattern plan of the Exemplary Stadium can be seen in the following figure 2.

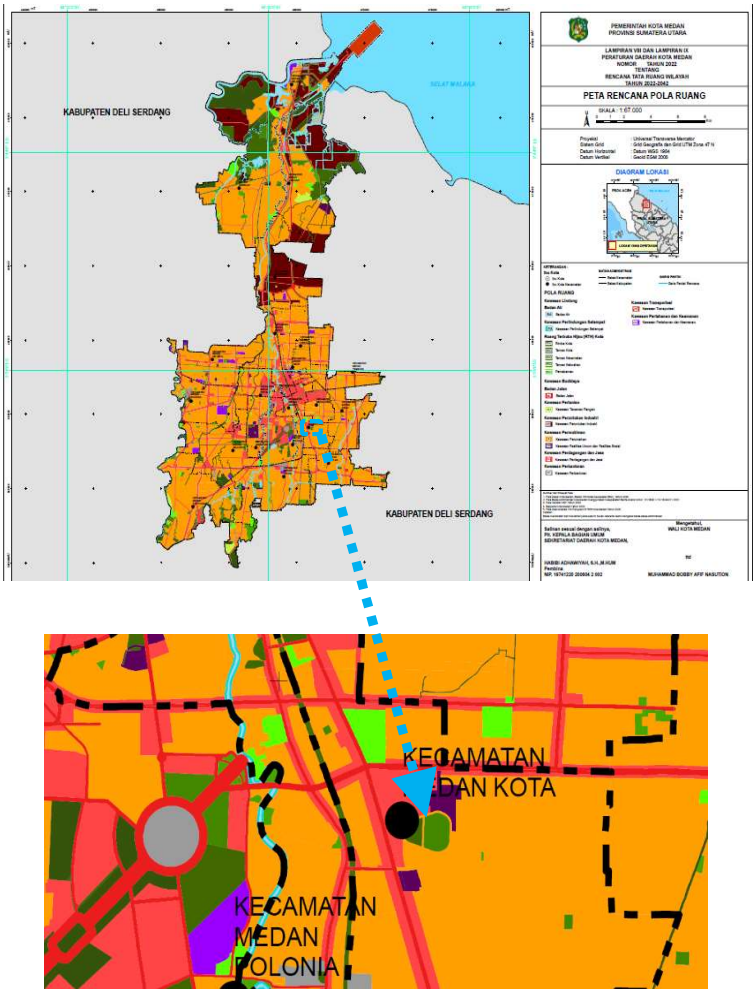

Figure 2. City Medan Space Pattern Plan Map – Exemplary Stadium

The objectives of the Medan city government to renovate the Teladan Stadium are to:

1. Increase the capacity of the original audience from 10,000 to 15,000 spectators to 20,000 spectators.

2. Improving the services of sports facilities, especially football, so that they can provide services that are safe, comfortable, and meet AFC (Asian Football Confederation) standards.

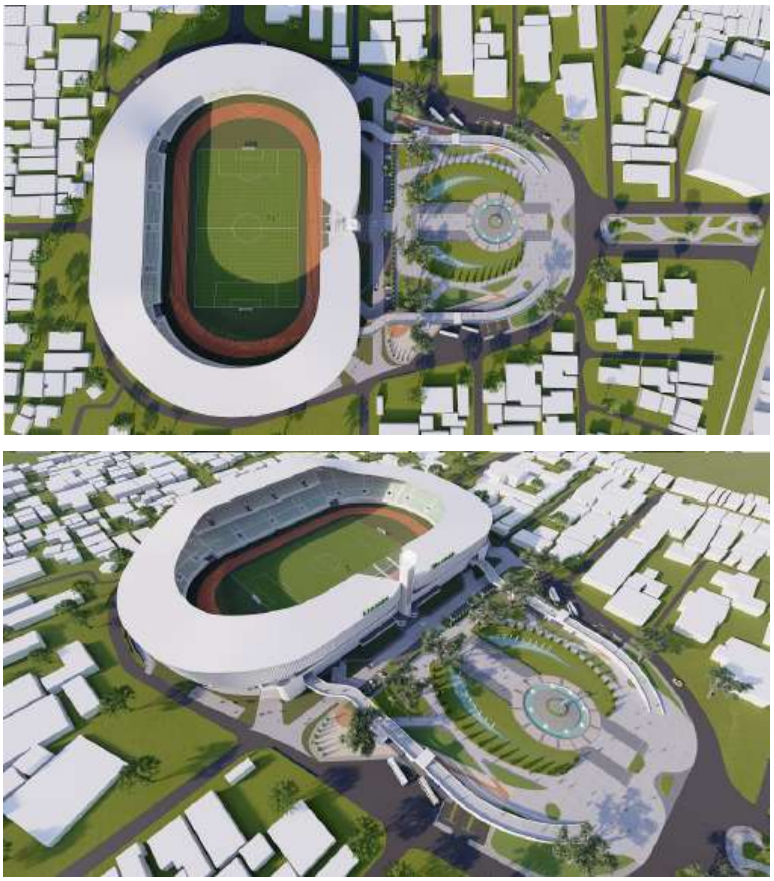

Figure 3. Teladan Stadium Area Concept – Medan

The Teladan Stadium is planned with a modern minimalist concept, but still maintains the front side of the stadium which has cultural heritage values. The function of the area as a GOS was also renovated so that it has better aesthetic value.

Based on Local Government Regulation No.1 of 2022 of Medan city (RSP 2022 to 2042), the feasibility of utilizing the space from the renovation plan for the Teladan Stadium area can be seen in table 1 below.

Table 1. Feasibility of Space Utilization

Regional Spatial Plan (RSP) Medan City – Teladan Stadium (Local Government Regulation No.1 the Year 2022)			Renovation Plan	Information
Designation	GOS	Green Open Space	- GOS - Sports Field Stadium	According to designation
BCR (maks)	10%	5.387,20 m2	- 5.130,38 m2 (9,52%)	Less than the allowable building footprint area
GBC (min)	80%	43.097,60 m2	- 44.842,29 m2 (83,24%)	More than required

Following its designation, the Teladan Stadium in Medan is planned with the concept of green open space and pavement (non-green). With a building base of 5,130.38 m2, the building concept is still within the allowable site area limit Building Covered Ratio (BCR < 10%). For the required Green Base Coefficient (GBC) a minimum area of 43,097.60 m2 (90% of the land area). Meanwhile, the planned GOS covers an area of 44,842.29 m2 (83.24%).

Based on the analysis above, it can be concluded that the concept of renovating the Exemplary Stadium is planned to meet the requirements that have been set (Perda No.1 of 2022 of Medan City: Medan City Regional Spatial Plan for 2022-2024). Thus, in terms of spatial aspects, the concept plan for the renovation of the Exemplary Stadium is feasible to be implemented.

CONCLUSION

Based on some of the results of the analysis that has been carried out in the previous chapter, it was concluded that the spatial concept in the renovation of the Medan City Exemplary Stadium is following the Regional Spatial Plan (RSP) of the city of Medan by remaining a Green Open Space (GOS) which functions as a catchment area. The planned GOS is 44,842.29 m2 or 83.24% of the land area, greater than the required GOS (43,097.60 m2 or 80%). Meanwhile, the building footprint area is 5,130.38 m2, and this is still smaller than the required building footprint area (BCR 10%, 5,387.20 m2).

REFERENCE

Badan Standarisasi Nasiona. 2017. Standar Nasional Indonesia; SNI 2398:2017 tentang Tata cara perencanaan tangki septik dengan pengolahan lanjutan (sumur resapan, bidang resapan, up flow filter, kolam sanita).

Badan Standarisasi Nasiona. 1994. Standar Nasional Indonesia; SNI 19-3964-1994. Metode pengambilan dan pengukuran contoh timbulan dan komposisi sampah perkotaan

Denny Zulkaidi. 2016. Teknik Zonasi Dalam Menangani Persoalan Densitas dan Intensitas

Pemanfaatan Ruang. Seminar Pengembangan Keprofesian Berkelanjutan.

Husnan, Suad & Muhammad, Suwarsono. 2014. Studi Kelayakan Proyek Bisnis Edisi Kelima. Yogyakarta. UUP STIM YKPN.

Kasmir & Jakfar. 2012. Studi Kelayakan Bisnis. Cetakan ke Delapan. Jakarta: Kencana.

Peraturan Menteri Pekerjaan Umum dan Perumahan Rakyat Nomor 4/PRT/M/2017 tentang Penyelengaaraan Sistem pengelolaan Air Limbah Domestik

Peraturan Pemerintah Nomor 21 Tahun 2021 Tentang Penyelenggaraan penataan ruang

Peraturan Pemerintah Nomor 22 Tahun 2021 TentangPenyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup

Peraturan Menteri Agraria dan Tata Ruang / BPN. RI nomor 37 Tahun 2016 tentang Pedoman Penyusunan Rencana Tata Ruang Kawasan Strategis Provinsi dan Rencana tata Ruang Kawasan Strategis Kabupaten

Peraturan Menteri Pekerjaan Umum Nomor 05/PRT/M/2008 tentang Pedoman Penyediaan dan Pemanfaatan Ruang Terbuka Hijau di Kawasan Perkotaan

Peraturan Daerah kota Medan Nomor 1 Tahun 2022 tentang Rencana Tata Ruang Wilayah Kota Medan Tahun 2022 -2042

Peraturan Daerah Kota Medan Nomor 3 Tahun 2016 tentang retribusi tempat rekreasi dan Olahraga

Peraturan Daerah kota Medan Nomor 9 Tahun 2012 tentang Retribusi Pemakaian Kekayaan Daerah

Peraturan Walikota Medan Nomor 4 tahun 2021 tentang Klasifikasi dan besarnya nilai objek sebagai dasar pengenaan pajak bumi dan bangunan perkotaan Kota Medan Tahun 2021

Peraturan Walikota Medan Nomor 16 tahun 2021 tentang Retribusi Izin Mendirikan Bangunan

Perkim. 2022. Desain Stadion teladam. Perumahan Kawasan Permukiman dan Penataan Ruang