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SMEC INTERNAL REF. C1978

Eikestad Parking PPP

Feasibility Study: Executive Summary

Client Reference No. **B/SM 13/21-TT.9**
Prepared for Stellenbosch Municipality
24 January 2024

Document Control

Document	Feasibility Study: Executive Summary
File Location	P:\C1978_Elkestad Parking PPP\3_Working\3-4_DivT\Reports
Project Name	Eikestad Parking PPP
Project Number	C1978
Revision Number	Revision No. 0

Revision History

Revision No.	Date	Prepared By	Reviewed By	Approved for Issue By
0	24/01/2024	M. Marais Pr Eng	J.W. Botha Pr Eng	J.W. Botha Pr Eng

Issue Register

Distribution List	Date Issued	Number of Copies
Stellenbosch Municipality	24 January 2024	1

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Executive Summary

It should be noted that this summary should be read in conjunction with the Summary Report.

Stellenbosch experiences major congestion in the CBD and other parts of the city. In addition, the Comprehensive Integrated Transport Plan indicates a need for sustainable transport that amongst other factors requires a reduction in traffic congestion and an increase in mode shifts, such as public transport and/or non-motorised transport.

A prefeasibility study and demand investigation was conducted for parking the Stellenbosch CBD and Techno Park in 2021. Due to the section 78(4) resolution in 2019 on the matter, the preferability was developed to assess the possibility of a parking gauge facility as a possible external mechanism project while at grade facilities would be done through an internal mechanism. As part of that study the following was recommended:

- The Eikestad Parking Garage be considered as a viable option as a PPP contract and could further be considered to be registered with National Treasury as a possible PPP project, so that a feasibility analysis of the possible PPP project can be done through the appointed transaction advisor.
- The analysis of the techno park parking needs clearly identified the need for additional parking. However, due to the parking utilisation and the nature of the space time needs for the Techno Park demand, as well as the willingness for employees of Techno Park to pay for parking, it resulted in the feasibility of a parking garage being unfavourable. However, based on the same considerations, an at-grade facility located as per the concept designs, returned a sustainable financial assessment.
- It is recommended that the at-graded facility be developed into a formal project and the designs and construction of the facility move forward internally with the municipality.

Based on the above, SLM register the Eikestad Parking Garage with National Treasury as a possible PPP project and appointed the Transaction advisor as per phase one of the PPP project cycle. The structure and methodology of the feasibility was done as follows:

Phase 1: Needs Analysis

This phase was the review of the needs for sustainable transport and improved transport in Stellenbosch.

Phase 2: Demand Analysis

The Demand Analysis phase is done through assessing the existing congestion levels in Stellenbosch and at existing parking facilities in Stellenbosch, as well as surveys of all public parking facilities in the CBD. The surveys conducted were both actual counts, as well as preference surveys.

Phase 3: Concept Developments

The concepts have been developed using the parking demands, historical and heritage significance, financial considerations, functionality and impact on the surrounding road networks. The concepts have been prepared in a 3D model and the impact on the road network have been assed using SIDRA and based on the level of service that the accesses have on the road network.

Phase 4: Options Analysis and Project Due Diligence

- Environmental assessment
- Traffic study
- Desktop geotechnical investigation
- Heritage study
- The legal study
- Socio-economic studies regarding BBBEE Targets in PPP Reference

Phase 5: Value Assessment

- Affordability of the facility though conversional process:
- PPP reference model

- Appropriate risk transfer
- Value for money

Economic Evaluation

- Social accounting matrix
- Cost benefit analysis

Needs Analysis

The needs analysis was done to align the current strategic objectives to the current CITP, DITP municipal needs, internal or external mechanism, type of external structure, available budget and resources for an internal structure, the review of the existing section 78 council decisions, environmental needs, heritage needs, job creation, geotechnical investigation and BBBEE and socio-economic requirements.

A section 78 was previously done in 2019 and the recommendations from council was that:

- Parking forms an important part of the total Mobility concept within Greater Stellenbosch Area and relates to other major parts such as: Traffic Flow, Public Transport (PT), Non-Motorised Transport (NMT), Transit Oriented Development (TOD), and Movement of Disabled Persons (normally seen as a primary part of NMT).
- That the municipality needs to provide enough public parking.
- That the continuous provision of road infrastructure for private vehicles is not sustainable.
- That the future demands of parking must also be advised on and provided for.
- That Council uses an approach where a private company is to be procured to provide a parking service to build, own, operate and transfer the entity to Council after a period of 20 years.
- That Council, in terms of the Municipal Systems Act (MSA), Act 32 of 200, as amended, Section 78(4), accepts that the method of providing parking be considered as follows:
    - Provision of open one level parking space needs, be performed on an internal mechanism
    - Provision of multi storied parking space needs, be performed on an external mechanism

Of the ten major types of PPP contracts, the BOOT contract was deemed the most suitable for the multi-story type parking structure based on the following:

- The Municipality does not have the finances to build the facility, while the private sector does;
- The BOOT system is widely used in SA and encourages private investment;
- It has the potential to inject new foreign capital to the country;
- With this model and the concession ownership, there is ample time to transfer skills and know-how;
- Will allow for a faster construction and procurement phase;
- This type of system allows for financial sources from the municipality to be allocated to other priority projects;
- Releasing the burden on public budget for infrastructure development.
- A private company has the technical expertise and resources to manage and maintain such a project while training municipal staff.
- The financial, equity and operational risks are transferred to the private sector.

Demand Analysis

A detailed parking inventory of all the existing public parking facilities in the study area was undertaken on 24 August 2020, where the following were recorded: parking area type, number of parking spaces per parking facility operating times and parking duration time limit, and parking fees and method of collection.

An updated inventory was undertaken on 3 October 2023 to record the operating times, parking duration time limit, parking fees and method of collection.

Parking surveys were undertaken in the study area from 06:00 to 18:00 between 15 and 19 September 2020 as well as between 22 and 24 April 2021, for the pre-feasibility study done in 2021 for a parking facility in the study

area. The same parking surveys were undertaken for the Public Private Partnership for Eikestad Parking Development appointment between 18 and 20 May 2023 for the peak period and 11 and 15 July 2023 for the off-peak period.

A 20% increase in the peak Parking Accumulation was observed from 2020 to 2021 and a further 85% increase was observed from 2021 to 2023 during typical weekdays. It was also noted that the usable capacity was exceeded in 2023.

The base year for the study was selected for 2023 while the horizon year was selected as 2028. The demand was calculated in four phases for the base year with an additional two phases for the horizon year:

Base Year:

1. **Stage 1:** 2023 Status Quo:
    - The estimated percentage of the current illegal parking demand.
    - Existing overflow estimated percentage.
    - Current utilisation of the off street Eikestad Facility.
2. **Stage 2:** Incorporate projects and policies that will increase the parking demand, such as:
    - Pedestrianisation of certain streets; and
    - Elimination of parking to increase street capacity.
3. **Stage 3:** Optimise parking search time and utilization of parking areas with the implementation of a parking management system. This allows vehicles to find parking quicker and thus may reduce congestion in the CBD, it would however, not affect the max demand for parking in the CBD but would reduce waiting and circulating traffic there by allocating parking more effectively. For this scenario, it was estimated to have an effect of 10% of the parking bays required. This was estimated form the proportion of overflow vehicles that may utilise the paid off-street parking. However, this does not reduce the total demand for parking.
4. **Stage 4:** Incorporate measures and systems that will reduce the demand for parking, such as:
    - Park and ride systems;
    - Shuttle routes; and
    - Public transport systems, etc.

Horizon Year:

1. **Stage 2:** Apply a compound growth of 2.57% per annum to the status quo peak parking demand to calculate the 2028 horizon year parking demand.
2. **Stage 3:** Incorporate measures and systems that will reduce the demand for parking, such as:
    - Park and ride systems;
    - Shuttle routes; and
    - Public transport systems, etc.

The results were as follows:

Stages	2023			Comments
	Method 1	Method 2	Method 3	
Stage 1	255	314	340	2023 is influenced by the available capacity in the underground for M1 and 2
Stage 2	321	384	**475**	
Stage 3	248	258	382	
Average	285	319	399	

Stages	2028			Comments
	Method 1	Method 2	Method 3	
Stage 1		473	460	Due to growth over the system, the M1 and M2 capacity for the underground is limited
Stage 2	520	562	**548**	
Stage 3	284	469	440	
Average	402	502	483	

The parking facility size was calculated to be between 475 and 548 bays. Based on the stage mitigation measures and the practical capacity of the site due to the floor levels, a parking facility of 498 bays was used as the proposed parking facility.

Options Analysis

Nine sites were assessed from a suitability aspect. Based on the assessment, the most suitable location for the facility was the existing Eikestad open parking behind the Eikestad Mall.

Economic Analysis

The demand for parking services in the CBD amounted to 300 bays. Based on the needs analysis and based on the solutions analysis, the Eikestad Mall parking area was identified as the most feasible options for parking facilities.

Due to the conditions of the CBD and the nature and parking utilisation demand, the CBD Eikestad parking needs identified a need for a multi-story parking facility. As a result, the feasibility of this facility was assessed for the public sector, as well as a possible PPP project.

The value for money assessment of the Eikestad Parking garage resulted in the project having a feasibility assessment as favourable for a possible PPP BOOT contract. It is apparent that the private sector gives an initial favourable value for money on the following considerations:

- Technical Abilities;
- Risk Transfer abilities;
- Financial Returns and affordability;
- BEE target spend and upskill.

In addition, due to the cost and expertise required to fund and manage the facility, it creates a significant risk for the municipality to design-construct-operate and maintain the facility. The facility was assessed for both a 20- and 25-year forecast. The 20-year forecast deemed the minimum period, while the 25-year forecast deemed the longest. The analysis indicated that the 20-year forecast has scenarios 4, 5 and 6 that are acceptable, while the 25 year forecast allows for scenario 3, 4, 5 and 6 to be acceptable. As a result, the more favourable concession period was deemed for the 25-year period. As a result, it is recommended that the Eikestad Parking Garage be considered as a viable option as a PPP contract. Based on the analysis, it is recommended that treasury approval 1 is approved.

Financial Analysis

The initial value for money test was conducted for three criteria, namely a Financial and Technical capacity, Cost and BEE targets and finally based on the Net present values. The models have the exact same revenue incomes, discount rate and inflation, as per scenario 6 of the 20-year forecast. The 20-year analysis was selected as this is the minimum concession period. The Financial and Technical section indicate that the private sector would be able to secure funds, has industry experience is managing this type of project and has the technical capacity to operate and maintain such a facility. The public sector could fund the project, however this would detach funding from other capital projects that may be needed. In addition, the public sector does not have the capacity to manage and operate such a facility. The cost analysis indicated that the NPV of the private sector and the public sector is

similar excluding VAT and Tax, however, the private sector has a factor of 5 in its returns to BEE partners. In addition, due to Tax and VAT, the private sector returns an additional NPV of R66m to the public sector over 20 years and R122m over 25 years.

The NPV risk analysis indicated that the private sector could manage the risks far more efficiently and has the ability to reduce the total risk cost to the public sector by almost 60% in transferred risks as per the NPV value of the project. This is significant risk transfer.

In assessing the risk adjusted NPV total returns, the NPV of the private sector before Tax is greater than the risk adjusted public sector NPV. This is as a result of better risk management expected for the private sector. In addition, the facility will be transferred at no and or nominal consideration (as negotiated with private party) back to the municipality with a viable useful asset with an agreed to remaining life required.

Based on the analysis , it is apparent that the private sector gives an initial value for money on the:

- Technical Abilities;
- Risk Transfer abilities;
- Financial Returns and affordability; and
- BEE target spend and upskill.

Conclusion

The demand for parking services in the CBD amounted to 300 bays. Based on the needs analysis and based on the solutions analysis, the Eikestad Mall parking area was identified as the most feasible options for parking facilities.

Due to the conditions of the CBD and the nature and parking utilisation demand, the CBD Eikestad parking needs identified a need for a multi-story parking facility. As a result, the feasibility of this facility was assessed for the public sector, as well as a possible PPP project.

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