

ESTABLISHMENT OF TRUCK INN & PUBLIC TRANSPORT FACILITIES IN THE LIMPOPO PROVINCE

PHASE 1

VOLUME 4

POLOKWANE PUBLIC TRANSFER FACILITY



DEPARTMENT OF TRANSPORT

**FINAL REPORT
DECEMBER 2002**

VOLUME 4: ESTABLISHMENT OF TRUCK INN & PUBLIC TRANSPORT TRANSFER FACILITIES: POLOKWANE PUBLIC TRANSFER FACILITY
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VOLUME 4:
ESTABLISHMENT OF TRUCK INN & PUBLIC TRANSPORT TRANSFER FACILITIES: POLOKWANE PUBLIC TRANSFER FACILITY

1. INTRODUCTION

1.1 PURPOSE OF REPORT

This report focus on the potential for the development of the old bus terminus site situated to the northwest of the Polokwane CBD into a major holding area for buses and taxis with various loading areas spread over the CBD area.

The final product contains the following:

- A description of the main problem
- Visual perspectives and comments associated with that
- A conceptional perspective indicating how public transport operations for the future could operate
- A list of possible solutions
- Practical implications of the solutions
- Suggestions on which solution to explore further
- A business plan for further action.

1.2 BACKGROUND AND PROBLEM STATEMENT

The old bus terminus was originally developed as the main Pietersburg CBD transfer station for buses only. Systematically all other public transport operators including taxis used the facility to serve commuters travelling between the CBD and various township areas around Pietersburg, mainly Seshego residents and others from nearby places.

However, over time the terminus became ineffective. The reason for this is mainly associated with its location directly north of the railway line without proper access to the CBD. Commuters have to cross the railway line (illegally) as no formal passageway is available whilst buses and taxis have to detour via Nelson Mandela Drive (Seshego road) over the railway bridge to enter the CBD area.

Originally the terminus was more effective when buses were the main transport mode. They adhered to regulations to load passengers at the terminus only with selected other loading points situated in the adjacent CBD and other employment areas. This practice was, however, inconvenient to the commuters because of the problem with access over the railway line.

As taxis became a more dominant transport mode, the practice of loading at various places within the CBD along the streets and at the formal taxi ranks became a regular occurrence. Commuters became reluctant to use the buses and more and more transfers took place south of the railway line on the CBD side. As a result the terminus became systematically less used and less effective generally speaking and the facilities were exposed to vandalism and destruction of material for use elsewhere in squatter areas.

Other than the loss of capacity and a previously well-equipped and good facility, the problem was not such that it affects anything else in the earlier days. However, more recently the problem became more prominent and serious in view of the fact that the volume of taxi movements in the CBD has grown extensively and the municipality cannot cope by providing additional taxi rank capacity within the CBD area.

The problem calls for new solutions and possibly a review of the potential of the old terminus' capacity. Other alternative positions within the CBD are limited and perhaps not feasible from a financial point of view, whilst other positions adjacent to the CBD could be equally ineffective and out of position as the old terminus site.

1.3 STUDY AREA

The study area entails the CBD of Polokwane and in particular the old bus terminus site situated to the northwest of the CBD and directly southwest and adjacent to the Pietersburg Railway Station.

The study area is indicated in Figure 1.

Annexure 1 contains visual material (digital photos) of the old terminus and the business area directly south of the railway line opposite the terminus site.

1.4 APPROACH AND METHODOLOGY

The intent of this interim report is to explore the problem as identified from a conceptual point of view. The terms of reference and the intent are not to develop the final solution but rather to examine the problem, identify possible solutions, evaluate which of the alternative solutions could be suitable for further detailed investigation.

The intent is therefore also to explore possible operational practices and the requirements from a technical and physical facility point of view to make these possible operational practices work. The final product therefore contains the main elements as indicated above.

The approach and methodology is mainly exploratory at this stage by means of investigating the current practices and problems, visiting the site and surrounding areas and conceptualizing possible avenues that could offer solutions.

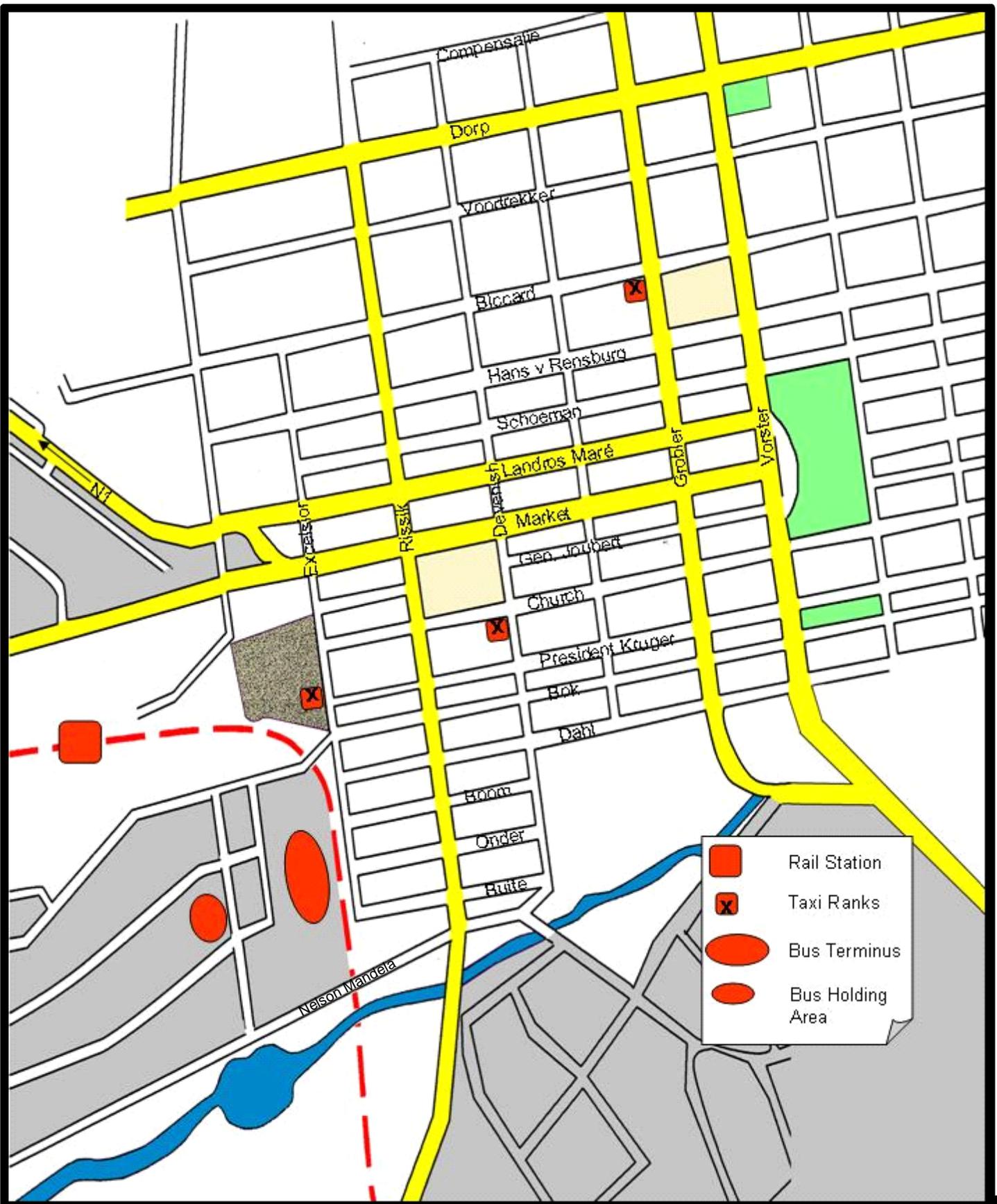
Ideally up-to-date detailed survey statistics of all public transport movements in the entire Polokwane and surrounding areas should be available. A comprehensive picture of the most recent extent of all movements is necessary because this facility and the entire need must be viewed within the context of all other facilities and operations.

Within the limited terms of reference and budget it is not possible to conduct such surveys and these details would have to be pursued at a later stage once the conceptualizing phase is completed. Therefore current information that is readily available must be used where appropriate.

1.5 CONSULTATION AND LIAISON

At this initial conceptualizing phase, the consultation is limited to consultation with and between the Department of Transport, the Polokwane Municipality, Trade and Investment Limpopo and ad hoc consultation with some operators.

Consultations and liaison, particularly with the transport industry and the community would have to be broadened during the detailed investigations.



**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
STUDY AREA: POLOKWANE PUBLIC TRANSFER FACILITY
FIGURE 1**

2. TRANSPORT OPERATIONAL PERSPECTIVES

2.1 TRANSPORT CORRIDORS IN REGIONAL CONTEXT

Polokwane is the capital city of Limpopo Province and as such it serves also as the main economic hub of the province from a governance, social, services, industrial, commercial and general business point of view.

Accordingly Polokwane is also a major employment area for people living not only within the town but also other residential areas such as Seshego and other rural villages situated in adjacent former Lebowa areas and along the main transport corridors.

The main transport corridors in all directions are:

- **Corridor 1:** Internal routes within the town itself between the CBD and the traditional residential areas that are situated directly around the CBD and its outskirts.
- **Corridor 2:** The Seshego corridor with movements to and from the township, the CBD and industrial areas.
- **Corridor 3:** The N1 south and Mashashane corridor to the west
- **Corridor 4:** The Dilokong corridor (R37) towards Lebowakgomo and various mine areas
- **Corridor 5:** The R71 corridor towards Tzaneen via Mankweng/Haenertsburg
- **Corridor 6:** The R81 corridor via Turfloop, Mooketsi towards Tzaneen
- **Corridor 7:** The N1 north corridor
- **Corridor 8:** The R521 corridor towards Dendron.

The Seshego corridor is by far the most important corridor from a public transport of view in view of the fact that the majority of people that are employed within Polokwane come from this township area that is situated 10 kms west of Polokwane.

Numerous small rural villages are situated along the main corridors mentioned above, for which Polokwane serves as the main employment, social, services and shopping destination.

2.2 TRANSPORT INFRASTRUCTURE AND OPERATIONS

2.2.1 Infrastructure

Apart from the main road network that are used by public transport vehicles along the major corridors referred to above, a railway line runs in a north–south direction through the town with a stop at the Pietersburg Railway Station that is situated directly adjacent to and north of the old bus terminus site.

The railway line connects Polokwane with Gauteng in the south and Zimbabwe in the north and operates only as an ad hoc, non-scheduled main line passenger service or as a goods railway line for export and import traffic with Zimbabwe and other countries to the north. Very little goods or passenger transfers take place at the Pietersburg Station.

In addition to the old bus terminus there are three other taxi ranks in Polokwane and a separate bus holding area situated in the town, as shown in Figure 1, of which two ranks are situated fairly close to the old bus terminus site.

Generally speaking the old bus terminus site is fairly strategically located given its proximity to the railway station and two of the taxi ranks.

2.2.2 Transport Modes and Services

Public transport services in the greater Polokwane district area are only provided by means of buses and taxis. No local rail commuter system is available.

The taxi services mainly concentrate on the short distance routes, particularly towards Seshego, but also in limited numbers along the other main corridors. The bus services in turn also serve all the identified corridors but are more prominent on the long distance routes where taxis cannot compete against the subsidized bus services.

The extent of the services is the highest on the Seshego corridor. As the most dominant corridor it will have the greatest influence on any decision that is made in terms of transfer facilities in the CBD.

In this respect it suffices to highlight the fact that the current position of the old bus terminus is not only well located in terms of the other transport facilities and for connection with other modes, but is also strategically located in terms of the position of Seshego in relation to Polokwane CBD. The site is situated next to the main road between the CBD and Seshego (Nelson Mandela Drive) at the entrance to the CBD as the road crosses over the railway bridge.

Given the advantage of the strategic location of the old bus terminus as described above, the problem with this position is the absence of direct, easy and quick access to the CBD because of the railway line. The railway line forms a strong physical barrier that is not only dangerous in the absence of safe pedestrian crossing facilities, but also causes a long walk by foot when transfer has to be done at the terminus.

The general practice for all or most public transport operations is that taxis and buses load passengers in the morning along the main collector streets in the township areas (Seshego etc.) and transport them to the end destinations in the Polokwane CBD and industrial areas. Some passengers are loaded at ranks and other transfer stations within the township areas but are in the minority.

Some off-loading takes place at official drop-off points, i.e. lay-byes and some unofficial points along the main routes within walking distance from the employment places. The minority of passengers is off-loaded at the main terminus or at formal taxi ranks.

The return trips back home operate differently. Most passengers are loaded at taxi ranks and the bus terminus situated in the CBD. Very little, if any, passengers are loaded in the same way in the evenings as they are loaded in the morning at the townships. The exception is at industrial areas where decentralized loading takes place at specified loading points in those industrial areas.

Return trip drop-offs then take place at various positions in the township with some at the taxi ranks.

The above description of the operating practices is important from the point of view of understanding the situation in order to design and provide transfer facilities within the CBD area.

2.3 PROSPECTS FOR A FUTURE TRANSPORT SYSTEM

The design of transfer facilities should take into account that the public transport system should serve for a long-term period and as such the new facility should be part of a long-term master plan for the future.

In the absence of such a plan, a generalized speculation of how the future system could look like would have to suffice. In this respect a number of issues are listed below of which some are facts and others are speculated potential developments for the future or are suggested as definite alternative considerations for the future:

- Firstly the relatively high population growth in Polokwane must be recognized against the background of the normal urbanization process that takes place as a general trend in all metropolitan and main urban areas of the country.
- Polokwane, as the capital city of Limpopo, also experiences this natural process and it is perhaps a fairly safe assumption to state that Polokwane would experience a population growth stronger than any other major town in the province. The extent of the sustained growth rate is the only issue that is not certain.
- To accommodate this urbanization process it is also fairly safe to assume that low cost housing developments would be more prominent towards Seshego including areas such as New Pietersburg and other areas along the Seshego corridor, without discounting other directions. In filling along this corridor is already happening and a densification of the corridor is imminent.
- Given the current commuter volumes along the Seshego corridor and the expected growth that would be experienced, it is an open question how long Polokwane can be satisfied with the status and practices of a typical low volume rural community in terms of commuter systems. The current pressure that is experienced to accommodate public transport road vehicles in the CBD is a clear indication that some alternative solutions in terms of mass transit modes such as rail must be considered. The exact extent of the growth rate is perhaps academic at this stage because any high growth figure would necessitate that sufficient capacity should be created at an early stage to accommodate the future high growth demand.
- Given the current location of the old terminus site, the position of the main railway station and the route of the main railway line towards the southwest of the town, provides an opportunity to introduce a rail commuter system between Seshego and the Polokwane CBD, via New Pietersburg and other new township areas along this corridor. A rail junction with the current line somewhere between Westernburg and Ladine suburbs is one likely alternative route of a possible commuter railway line. Reserves for a future railway line must be declared as a matter of urgency in view of the current residential developments in that area.
- Given the possibility of a rail service and the potential longer-term extension of the CBD to the northwest direction towards Seshego, the current position of the old bus terminus becomes more and more important from a strategic point of view.
- Nevertheless, with or without a rail commuter system, the movement of passengers along the northwest corridor can only expand and as such the position of the old terminus site remains important regardless of the commuter technologies that are applied. Therefore the solution that is chosen should at least make sufficient provision for longer-term growth.
- The position of the old terminus site is ideal for this purpose, but only if an answer can be found to provide proper access over the railway line.

3. ALTERNATIVE STRATEGIES

3.1 ALTERNATIVE TRANSFER OPERATING STRATEGIES

In addition to the potential of the future transport system and the associated spatial perspectives discussed in the previous section, the current and envisage future **transfer operational practices** must also be taken into account when alternative strategies for the development of facilities are considered.

The following are possibilities:

- **Alternative 1:** The first option is to provide a few additional taxi ranks or multi modal terminals in the CBD that are relatively small in size, similar to the facility on the corner of Devenish and Church Streets. These facilities should be strategically located all over the CBD area and passenger transfer would be similar to the current practices.
- **Alternative 2:** As an alternative to the above, a main macro size terminal facility can be provided serving as a high volume concentrated facility where most passenger loading - and off-loading take place, with supporting loading at other smaller terminals that already exist. The macro transfer terminal could be located at either the current old terminus site or at another suitable position. This potential strategy means that very little pick-up (load) activities take place along the streets in the CBD itself. However most morning peak drop-offs could still take place within the CBD and not at the terminals.
- **Alternative 3:** Thirdly as a variation to the second strategy, the main macro terminus facility should only serve as a holding area and most or all loading and off-loading take place at numerous decentralized points scattered over the full CBD area, literally within each second alternative block along identified public transport routes in the CBD. This option means that all taxis and buses are parked at the holding area and remain there on-call until they are dispatched to identified routes where passengers are then loaded at one or more points along the route.

An efficient communication system is a prerequisite for this proposed strategy. No parking and waiting is therefore allowed at the loading points other than when passengers are loaded. Any particular loading point should usually make provision for only one vehicle and at the most two vehicles that can load at the same time. Under no circumstances should more than two taxi vehicles or one bus be able to be parked at such decentralized loading points.

- **Alternative 4:** Finally as a fourth alternative, a combination of the second and third options can be followed. Initially the macro terminus is used mainly as a holding area with some minimum load and off-load activities taking place at the terminus. Systematically more and more direct loading will take place at the terminus and eventually the majority of services will operate directly out of the terminus and the minority of services will follow the routes through the CBD. The systematic development of more and more transfers to take place at the terminal will depend largely on the way in which the CBD expansion will develop in the future.

With the exception of the first alternative strategy mentioned above, the other strategies assume that the access problem over the railway line can be resolved or that an alternative site for the macro terminal can be found. The above alternative strategies are illustrated in Figures 2.1 – 2.4, which also indicate how the suggested transfer facilities would support the operational system along the routes:

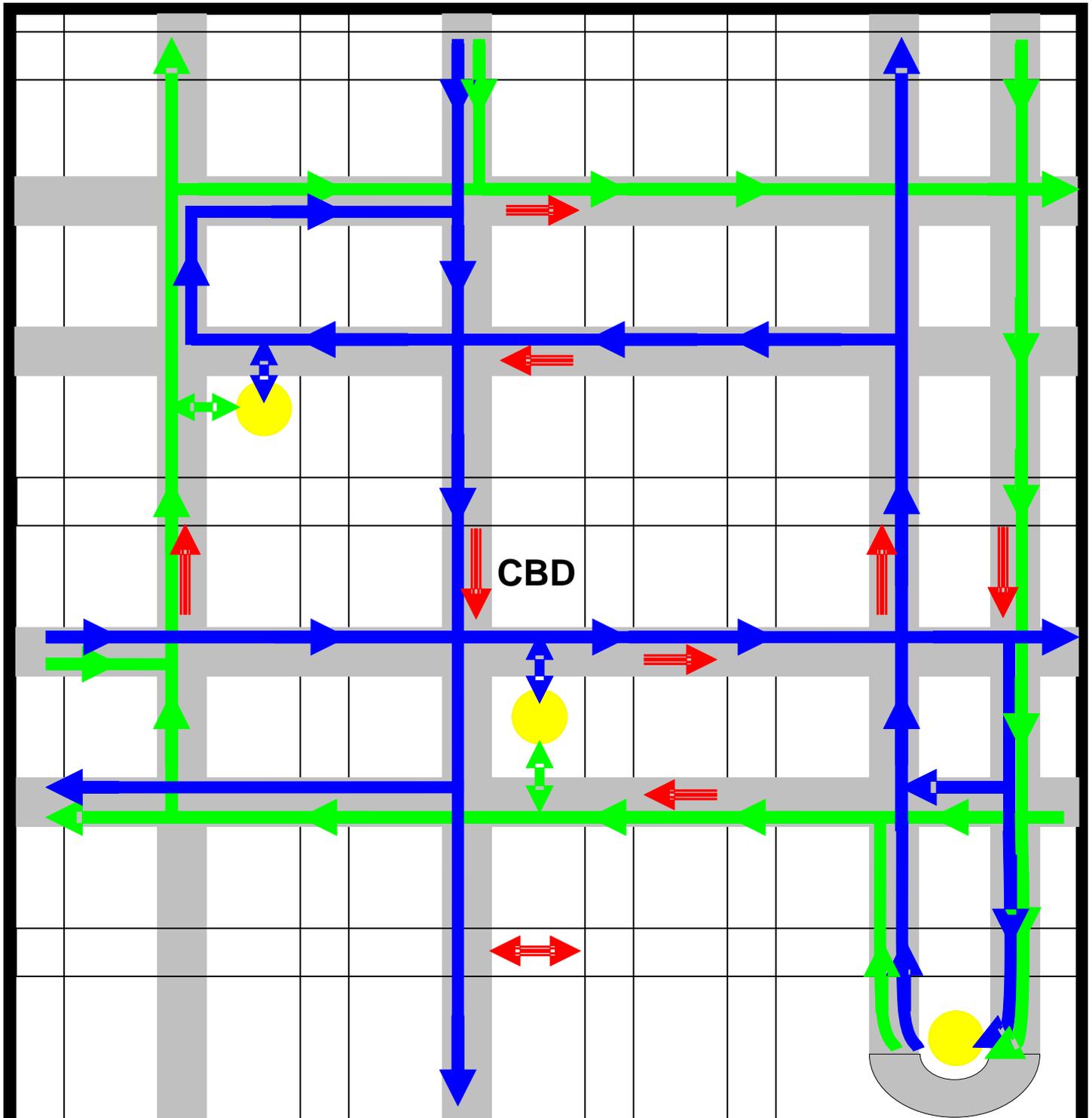
- **FIGURE 2.1** illustrates the public transport routes in the CBD with an inner ring route and an outer ring route that can be followed from each of the existing terminal facilities. The routes can be followed either from the terminals or directly to and from the external township areas. Each of the terminal development strategies listed underneath would follow the same CBD

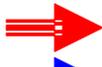
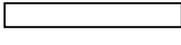
public transport routes. It means that from each rank or terminal a particular inner ring route and a particular outer ring route would be followed to and from each township along all identified corridors.

- **FIGURE 2.2:** This figure reflects the first alternative terminal development strategy, namely a few more new transfer facilities added to – and of the same size as the existing terminals/ranks, with no other loading points in the CBD.
- **FIGURE 2.3:** The second alternative terminal development strategy provides for only one new macro terminal that is added to the existing terminals/ranks and with no other loading points.
- **FIGURE 2.4:** The third alternative also provides for one macro terminal only to be added but it should serve as a holding facility only, with a number of scattered loading points that are located in the CBD along the public transport routes. This figure also applies to the fourth and ultimate last alternative strategy where the second and third strategies are combined. Passengers are loaded at the macro terminal, at the scattered loading points and from the existing ranks.

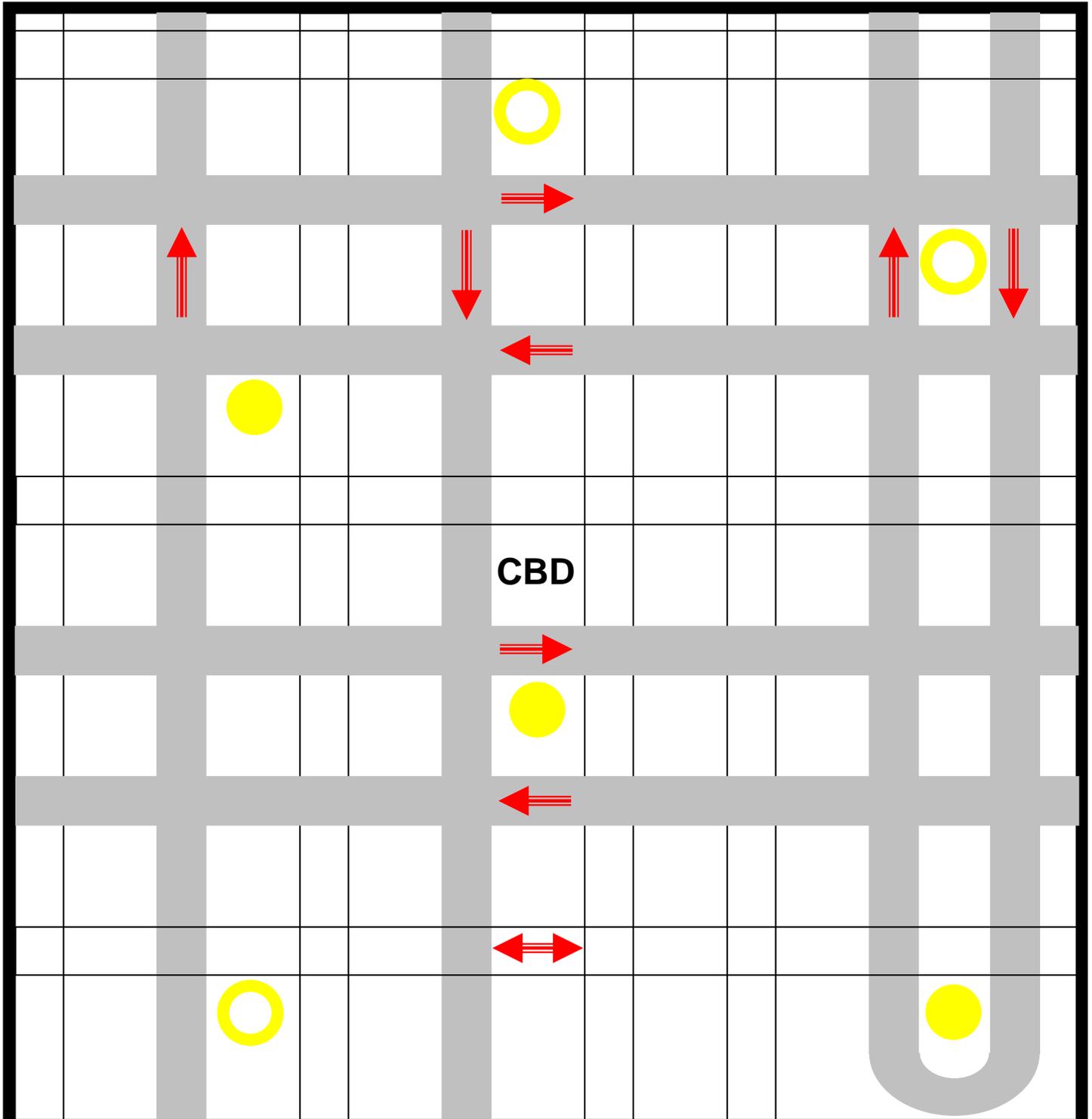
In essence the above alternative strategies provide for two main directions that can be followed: the first represents a few smaller new ranks added to the existing ranks as illustrated in Figure 2 indicating the Alternative Strategy 1. Secondly a macro terminal facility is provided with or without decentralized loading points, as illustrated in Figures 2.3 – 2.4, representing Alternative Strategies 2 – 4.

With the above conceptual approach in terms of the **future operational strategies** in mind, the conceptual approach towards the **development of the macro terminal facility** is dealt with in the section below.

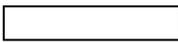


- | | | | | | |
|---|--------------------|---|-------------------------|---|---------------------|
|  | Existing Terminals |  | Public Transport Routes |  | Direction of Travel |
|  | Other Routes |  | |  | Outer Ring Routes |
| | | | |  | Inner Ring Routes |

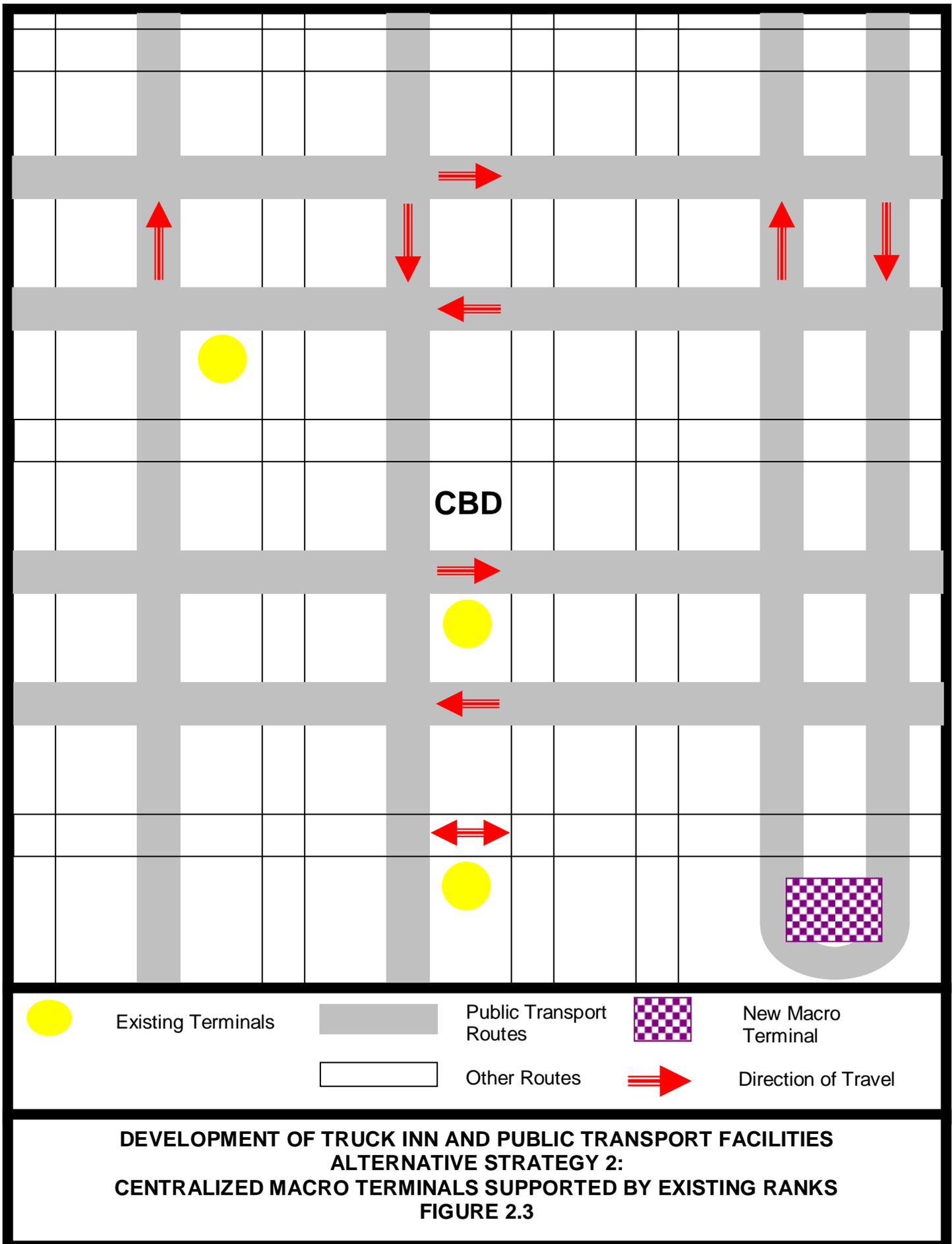
**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
 CONCEPTUAL PUBLIC TRANSPORT ROUTES IN THE POLOKWANE CBD
 FIGURE 2.1**

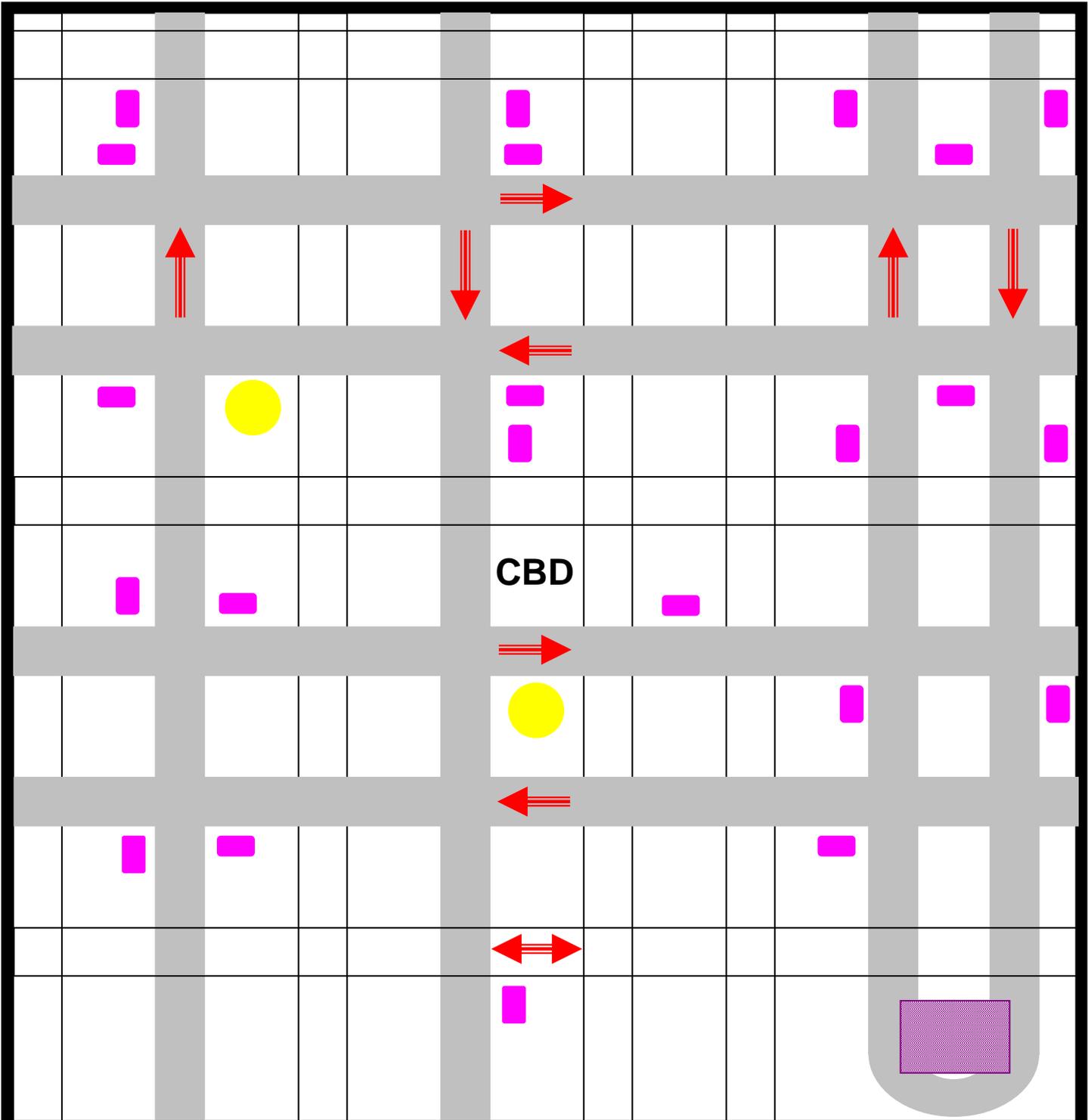


CBD

	Existing Terminals		Public Transport Routes		
	Additional/New Terminals		Other Routes		Direction of Travel

**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
 ALTERNATIVE STRATEGY 1:
 DECENTRALIZED SMALLER TRANSFER TERMINALS
 FIGURE 2.2**





	Existing Terminals		Public Transport Routes		New Macro Terminal
	Loading Points		Other Routes		Direction of Travel

**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
 ALTERNATIVE STRATEGY 3 & 4:
 CENTRALIZED MACRO TERMINALS WITH SCATTERED LOADING POINTS
 FIGURE 2.4**

3.2 ALTERNATIVE STRATEGIES: DEVELOPMENT OF THE MACRO TERMINAL

Based on the departure point stated above that a macro terminal facility must be provided as part of the adopted operational strategy, the options to locate and develop this facility must be investigated. In principle three main directions or approaches can be followed:

- Firstly, provide all facilities on the CBD side, i.e. south and east of the railway line close to the junction between Nelson Mandela Drive and Rissik Street, i.e. the entrance road to the CBD (**Alternative A**). Therefore no additional access over the railway line is necessary other than the existing bridge in Nelson Mandela Drive.
- Secondly, redevelop the old terminus area and provide another better located access way over the railway line. The location should be at a point along the rail section that runs directly parallel and adjacent to Excelsior Street (**Alternative B**).
- Thirdly, provide all facilities on the CBD side of the railway line but directly adjacent to the rail line's bend, i.e. between the railway station and Excelsior Street, i.e. south and east of the railway line (**Alternative C**).

The positions of the above alternative approaches are illustrated in Figure 3 and details with possible alternative variations to each are discussed underneath.

3.2.1 ALTERNATIVE A: Terminal on CBD side

Alternative A means that a new site must be developed at a point indicated as "A" in Figure 3.

The facility would be used both as a ranking, holding and as a passenger loading area.

Based on the operational practices discussed in the previous section, the macro terminal facility would be the main transfer area for the CBD, supported by the other existing ranks as follows:

- In the morning peak the operators would load passengers in the township and other distant residential areas and transport them to the CBD and other employment areas.
- The passengers would be off-loaded at the macro terminal, other taxi ranks and at loading areas at other employment areas and in the CBD as it is done currently. Note that some drop-offs in the mornings can be done directly along CBD streets.
- During the day and during the afternoon peak period, buses and taxis would be using the macro terminal, other ranks and decentralized loading areas for the return trips where passengers would be loaded. No pick-ups would be done in the afternoon in the streets. All pick-ups would be from terminals/ranks.

The operation of the system as it is envisaged is illustrated in Figure 4.1.

The factors that would influence the choice of this position include the following:

- Technical considerations in terms of land use rights, environmental factors and any other technical construction factors that would generally apply.
- Linkage with the local road network and the distance to the CBD.
- The cost involved securing land at this position for the large macro terminal.
- Room for future expansions if necessary
- The acceptability of the position to the community (neighbors) and the passengers.
- Whether or not the old terminal facility can be redeveloped.

3.2.2 ALTERNATIVE B: Old Terminal Site

Alternative B means that the current terminus facility would be used as the macro terminal facility, but in a revitalized and upgraded format. The same operational practices as discussed in the previous section would apply. The only difference is the positioning of the facility, namely to a position indicated as “B” in Figure 3. This alternative is illustrated in Figure 4.2.

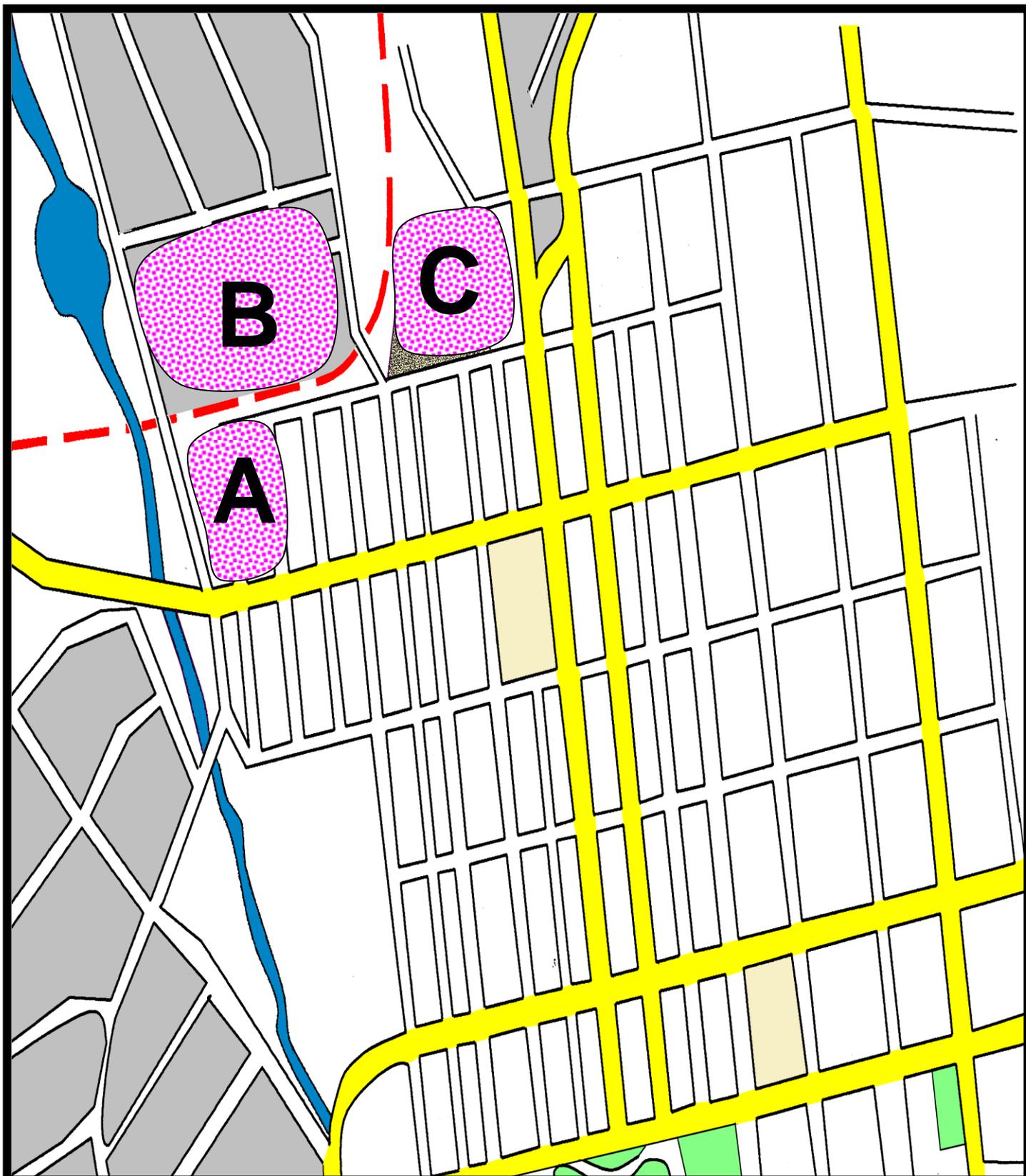
However, as a variation in operational practices to both Alternatives A and B, some scattered loading areas can be provided in the CBD (as suggested in Figure 2.4) and the load and off-load practices can change to some extent as follows:

- In the morning passengers would be off-loaded at the macro terminal, other taxi ranks and also directly at scattered off-loading areas in the CBD (formal lay-byes, marked and unmarked points). The direct off-loading along the public transport routes would be the more dominant drop-off practice but the extent to which terminal drop-offs would be necessitated would depend on the future congestion situation in the CBD.
- During the return trips in the afternoon passengers will mainly use the terminals to embark for their return trips. However buses and taxis could also be dispatched to the CBD loading points and adjacent employment areas to load passengers.
- The extent to which terminal loading will take place will depend mainly on the ease in which passengers can reach the terminal, i.e. the degree of accessibility; and secondly the congestion situation in the CBD. It is nevertheless suggested that both options be kept open although the authorities and everybody else not using public transport will obviously prefer terminal loading. Commuters would generally prefer to embark a vehicle as close as possible to their place of work.

The above operational strategy, coupled with the strategy indicating the scattered loading points, is illustrated in Figure 4.3.

The same factors listed for Alternative A that would influence the preference for this choice, would also apply to Alternative B although the degree of importance to each item would be different:

- Technical considerations and land use rights would not be a major problem as the site served as terminal facility in the past.
- Linkage with the local road network is a much more important factor, particularly in terms of access across the railway line at the southeastern corner of the site.
- The cost to secure the position (expropriation) is not a factor except in so far as the current business properties south of the railway line where the cross over bridge links with the current road network are affected by the construction of the bridge.
- The cost of the bridge and the cost of redevelopment of the old terminus site would be a factor as such capital developments would also be a factor at any other position.
- Room for expansion, particularly to the north parallel to the railway line and to the west towards the current Nelson Mandela Drive is also not a problem and offers the best potential room for expansion compare to the other options.
- The acceptability of the site location to the community (neighbors) and the passengers is also an important factor as for the other alternative. However, the extent of accessibility and distance would be major determining factors.
- The most important factor is however whether or not access over the railway line is possible from a technical and a cost point of view. It is a prerequisite for this alternative to succeed because of the direct linkage that is required to the CBD to minimize walking distance and time.



**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
ALTERNATIVE POSITIONS: POLOKWANE MACRO TERMINAL
FIGURE 3**

The last issue is the most critical factor and a number of technical and financial considerations must be taken into account:

- (i) Firstly, the closest possible access point between the CBD and the terminal site is in the southeast corner of the old terminus site. From a time and distance point of view this point would be the most suitable.
- (ii) Some properties on the CBD side would be affected in one way or another to allow for the cross over bridge, either by means of expropriation and/or any other form of discomfort in terms of more vehicle traffic at the front door, less pedestrian traffic, noise etc. High cost implications are obvious.
- (iii) The railway line is elevated with about 2m for most of the distance from the existing railway cross over bridge (Nelson Mandela Drive) in the west to the potential cross over point. As such a fairly long distance is required to allow for the elevation of the cross over bridge, i.e. possibly about 400 meters on either side of the rail crossing point. The lowest point of rail elevation is in fact at the southeast corner.
- (iv) The southeast position is unfortunately also the point where development on the CBD side is most advanced and capital intensive and as such the cost of expropriation and demolition, if necessary, would be the highest at this point.
- (v) The width of the road reserves on the CBD side is also important. Should a cross over be possible these roads should accommodate all bus and taxi movements linking with the CBD. Preferably a one-way system should be implemented using two of the existing north-south roads, most likely Dahl Street for the incoming north movements (into the terminal area) and Bok Street for the outgoing south movements. Using Bok Street for both north and south movements is not excluded and should be evaluated as a possibility based on the traffic volumes of bus and taxi movements. Other normal traffic vehicles should be prohibited to use this access bridge.
- (vi) All current structures and activities (hawkers) that are currently located at the north side of Excelsior Street would also be affected.

3.2.3 ALTERNATIVE C: Railway Station Site

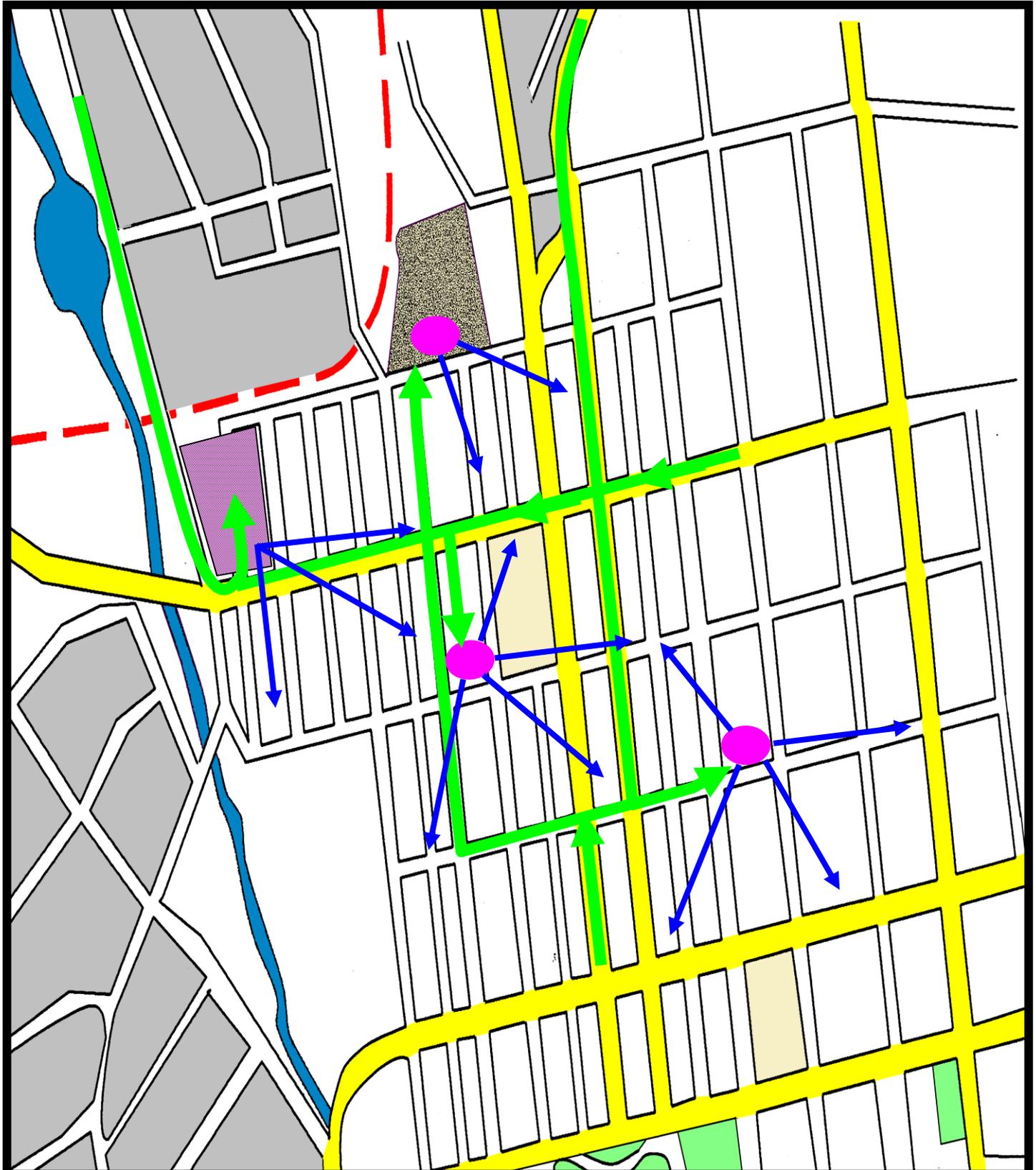
The third alternative is to situate the Macro terminal at position C as indicated in Figure 3. This position currently accommodates an Asian Bazaar with Telkom structures at the back and the Mimosa club facilities, with the Technikon on the east side towards Market Street.

This option is only possible if all the current structures, excluding the Technikon facilities, are demolished and is illustrated in Figure 4.4. The same operational practices for loading and off-loading would apply for this alternative, with the variations in terms of scattered loading points as shown in Figure 4.3.

This option offers some other possibilities that are not available to the previous alternatives:

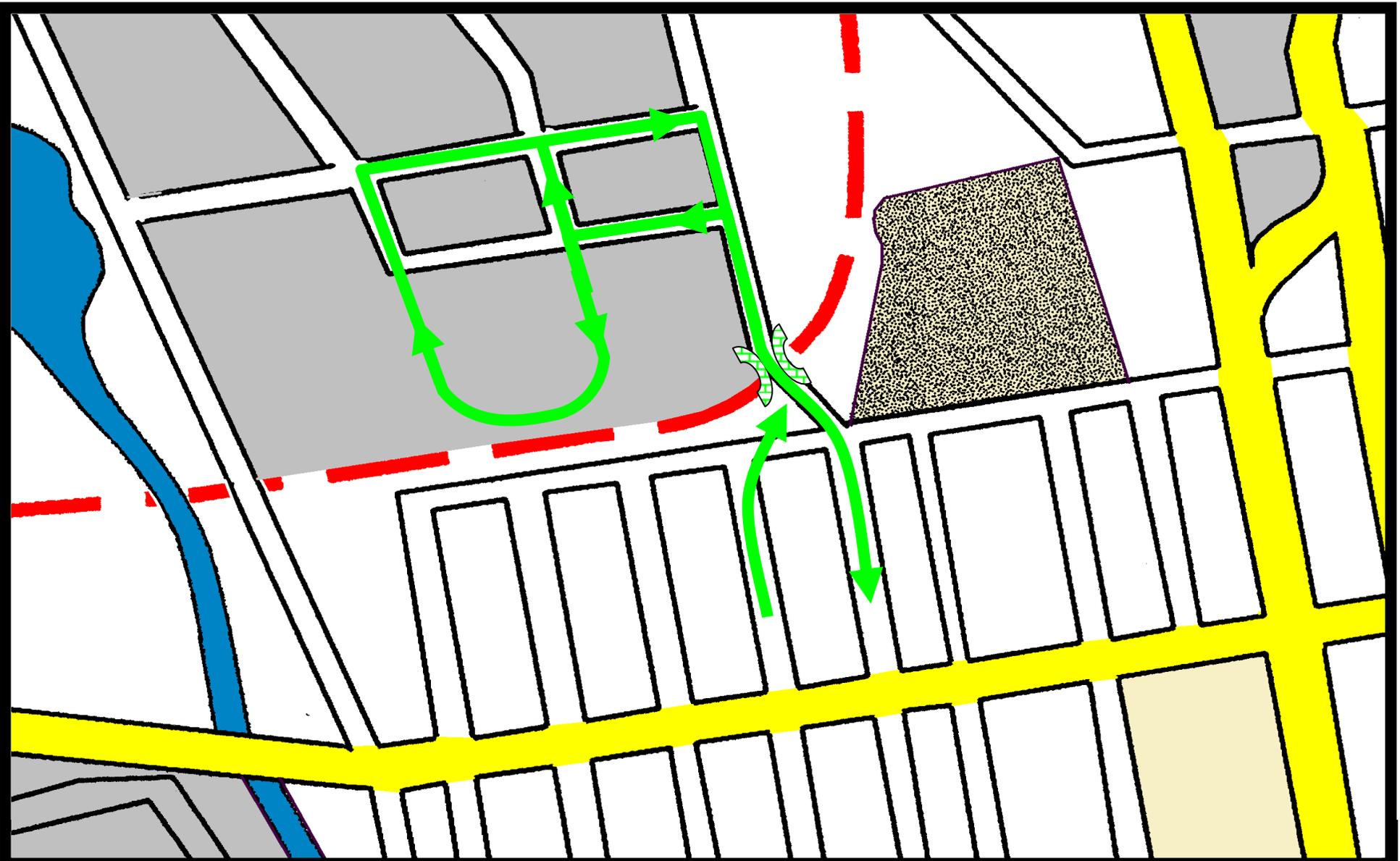
- Firstly, the problem to find an additional access over the railway line is avoided, whilst the positioning of the terminal is still strategically well placed next to the railway station. As such the land use pattern to create a public transport zone where all modes of transport can be integrated is still available with this alternative.
- Secondly, the entire current land where the old terminus is situated can be redeveloped as a major shopping complex with proper pedestrian crossing facilities linking the transfer area with the shopping complex.
- Various options to create this linkage can be considered which can range from less costly pedestrian bridges (covered or not covered) to more expensive structures where part of the shopping complex is extended as a crossover structure with the railway line underneath.

Recognizing the disadvantage of extensive structures that have to be demolished to make this option possible, these costs should be evaluated against the advantages of this alternative: It is closer and more central to the CBD, but still on the periphery of the CBD. It is clear that a more detailed costing exercise and feasibility study is required to enable a proper and accurate comparison between the alternatives.

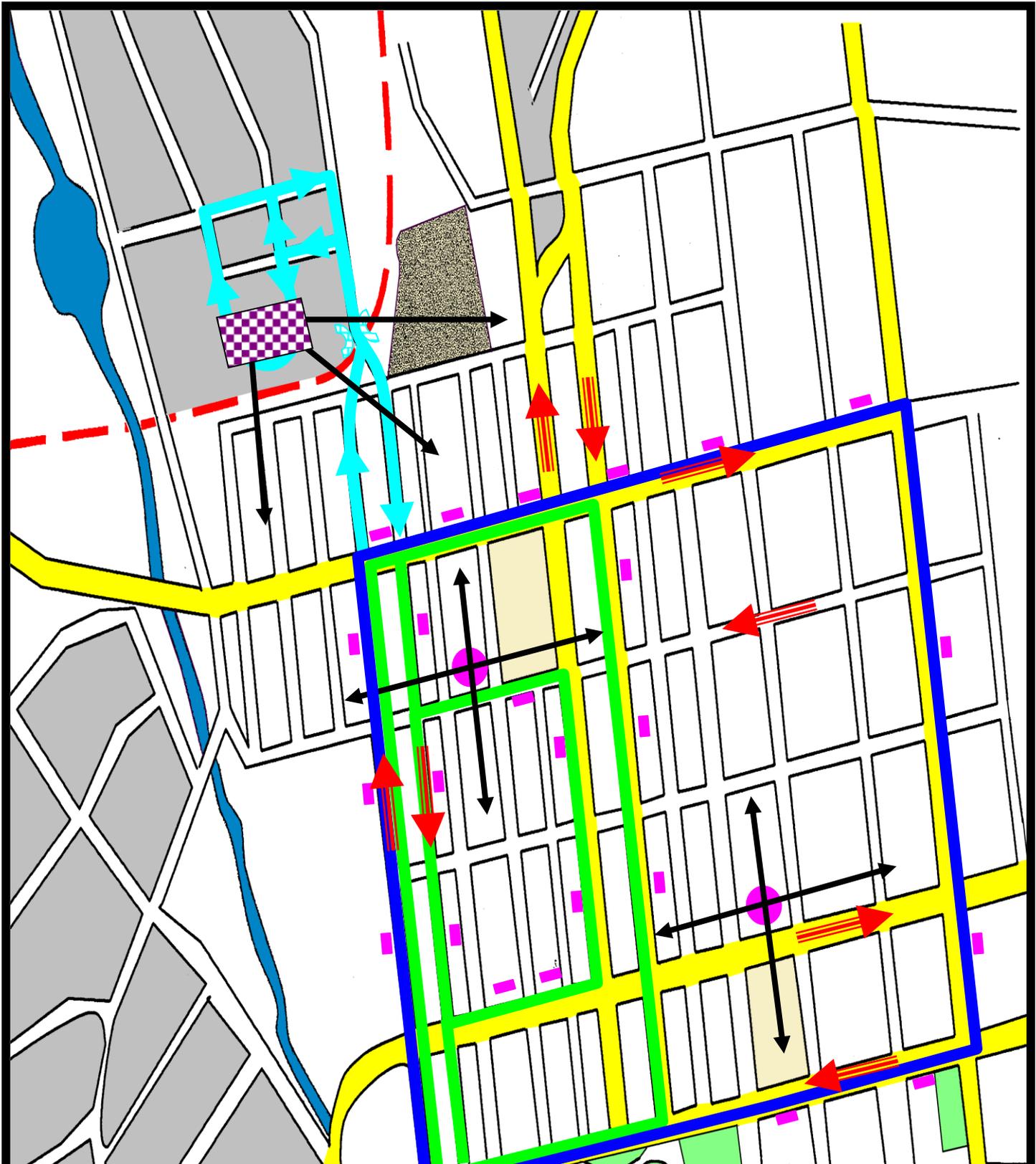


-  Existing Taxi Ranks
-  New Macro Terminal
-  Bus & Taxi Routes to and from Terminals/Ranks
-  Commuters distribution to and from Ranks

**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
ALTERNATIVE A: POLOKWANE PUBLIC TRANSPORT OPERATIONS & FACILITIES
FIGURE 4.1**



**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
ALTERNATIVE B: NEW ACCESS BRIDGE TO OLD TERMINAL SITE (DAHL & BOK STREETS)
FIGURE 4.2**



	Existing Taxi Ranks		Access Bridge		Commuters distribution to and from Ranks
	Loading Points		Outer Ring Routes		One Way Streets
	Macro Terminal		Inner Ring Routes		

**DEVELOPMENT OF TRUCK INN AND PUBLIC TRANSPORT FACILITIES
 ALTERNATIVE B: PUBLIC TRANSPORT SYSTEM
 MACRO TERMINAL AT OLD BUS TERMINAL
 FIGURE 4.3**

4. ACTION PLAN AND RECOMMENDATIONS

Given the nature of the project and particularly the principle decisions that must be taken first, it is not appropriate to formulate a business plan for the project at this stage, but rather to suggest some recommendations in terms of those principle decisions to be made and then to suggest a plan of detailed actions to be taken.

4.1 RECOMMENDATIONS

The following principle recommendations are made:

- (i) A macro terminal facility should be developed at the old bus terminus site in Polokwane, with a public transport operating system that is based on Alternative Strategy 4 as contained in section 3.1 (illustrated in Figures 4.2 and 4.3) of the main report (Volume 4).
- (ii) The choice of this option is also affected by other structural developments within Polokwane and it should not be contradicting other policy decisions in terms of the structural development of the city. A detailed investigation that would take these issues into account and all other detailed technical and financial considerations is a prerequisite.
- (iii) With regards to the positioning of the site, the old bus terminus site is considered as the most optimum position but subject to a new access bridge over the railway on the southeast corner of the site at reasonable cost relative to other options.
- (iv) Linked to the choice and position of the macro terminal, it is also recommended that a system of scattered loading points distributed through the CBD be implemented, supported by the current taxi ranks situated in the CBD.
- (v) A phased approach must be adopted for the development of the entire system including the suggested infrastructure. Refer to the action plan below.
- (vi) It is suggested that the above recommendations be taken as principle decision but subject to further detailed investigation as indicated in the action plan below.

4.2 ACTION PLAN

- (vii) Firstly, principle decisions in terms of the above recommendations must be taken first, subject to the confirmation by the detailed further investigation.
- (viii) Secondly, identify which roads within the CBD will serve permanently as the recognized public transport routes (instituted through by-laws). Refer to the suggested routes indicated in Figure 4.3. Public transport vehicles will not be allowed to use any other roads in the CBD area as part of their normal service delivery process.
- (ix) Identify where scattered loading points (Figure 4.3) will be provided along these roads, based on the principle of one loading point for each second alternative block along all identified public transport routes.
- (x) As a preliminary measure to release the immediate capacity pressure, implement the loading point development program by means of budgeting, designing and implementing the scattered loading points program. Note that the choice of the position of the future macro terminal might affect the positioning of the loading points. Technical specifications would have to be designed that are tailor-made for Polokwane.

- (xi) At the same time when the above steps are implemented, a program must be launched to develop the macro terminal. A budget for this process must be provided and a steering committee must be appointed consisting of all relevant role players. The detailed investigation must be initiated based on the principle recommendations of this conceptual report, should it be adopted. An evaluation and feasibility analysis of the identified potential sites must be performed.
- (xii) Based on the approved recommendations of the detailed investigation, the design and implementation steps must be taken.

ANNEXURE A VISUAL MATERIAL

- Photo 1: Office block with ablutions and other facilities
- Photo 2: A section used by taxis
- Photo 3,4 and 5: The south eastern corner of the site with the railway line in the background
- Photo 6: The south western corner
- Photo 7: The west eastern loading area
- Photo 8: Vandalized waiting area
- Photo 9: The west southern loading area next to the railway line
- Photo10: The reserve between the railway line and the terminus
- Photo 11: Buite Street, south of the railway line (south to north)
- Photo12: Excelsior Street (west to east)
- Photo 13 and 14: Excelsior Street (from the railway line, north to south)
- Photo 15,16 and 17: Business centres in Excelsior Street
- Photo 18,19 and 20: Corner Bok and Excelsior Street (south to north) showing the cross-over over to the south east corner of the terminus
- Photo 21: Corner Dahl and Excelsior Street indicating the rail siding that leads to the business centre
- Photo 22: Hawkers in Excelsior Street next to the railway line (south – north)
- Photo 23: Business centres in Bok Street
- Photo 24: Open site next to the silo's between Dahl and Bok Street

POLOKWANE

PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



PHOTO 5



PHOTO 6



PHOTO 7

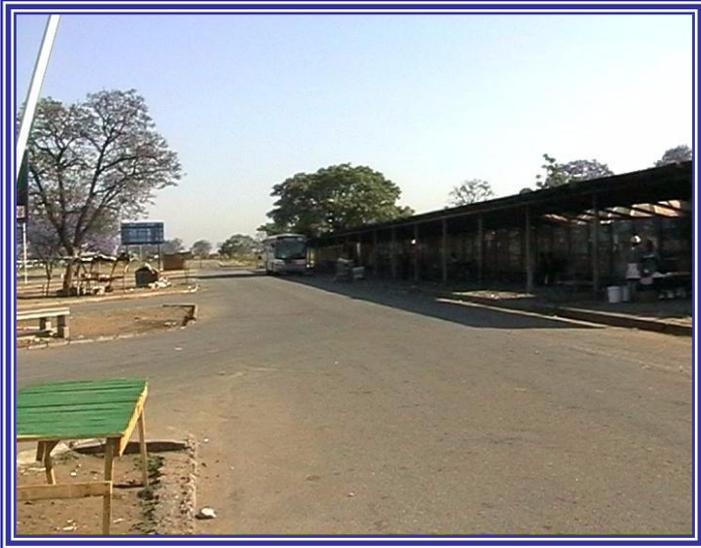


PHOTO 8



PHOTO 9



PHOTO 10



PHOTO 11



PHOTO 12

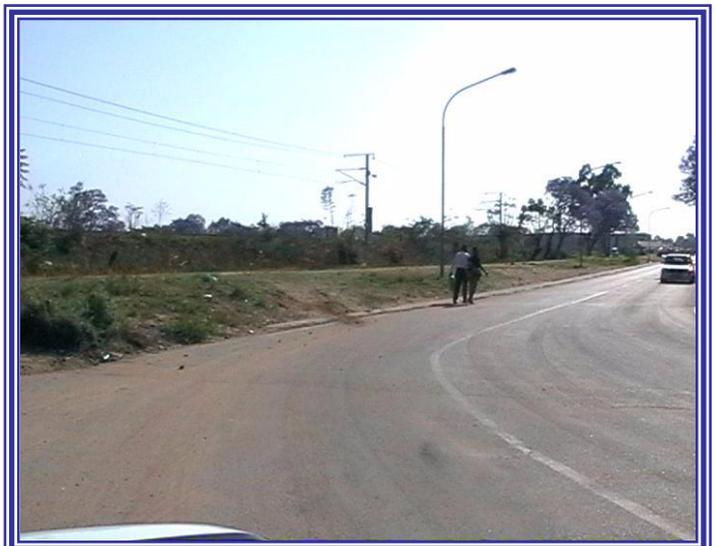


PHOTO 13



PHOTO 14



PHOTO 15



PHOTO 16



PHOTO 17



PHOTO 18



PHOTO 19

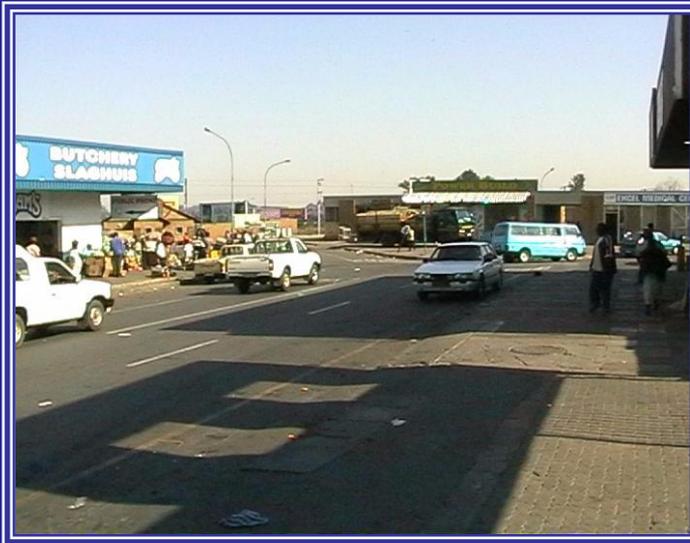


PHOTO 20



PHOTO 21

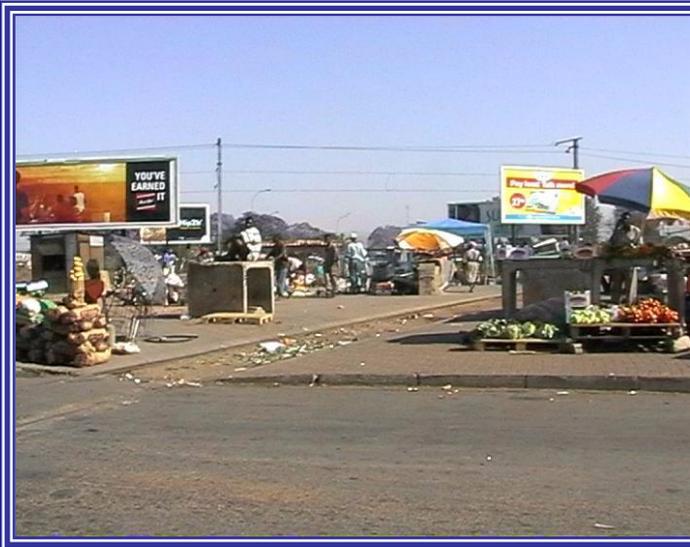


PHOTO 22



PHOTO 23



PHOTO 24

