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An enabling framework as a holistic intervention to address physical developmental constraints in the Johannesburg inner city

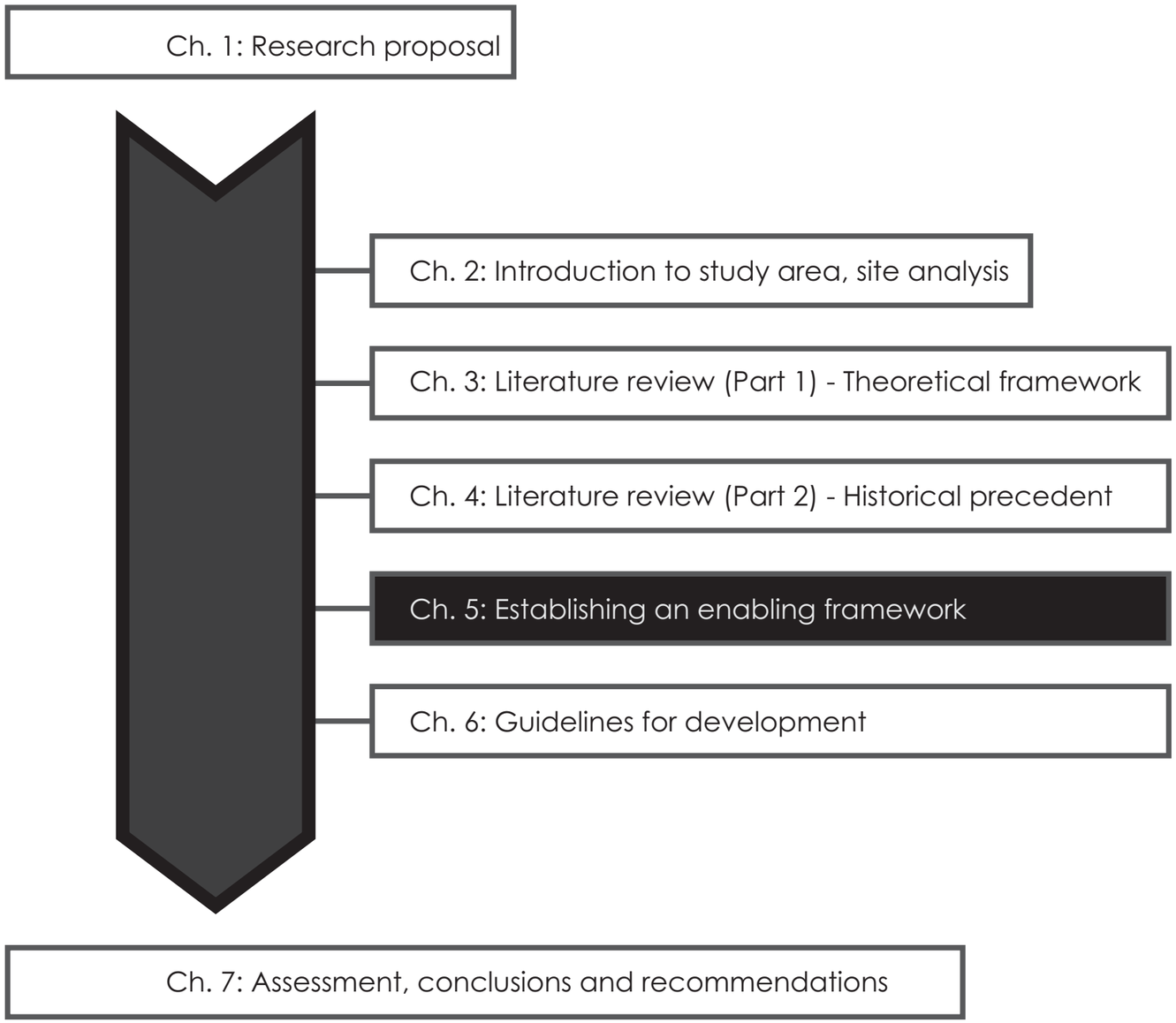
Msingaphantsi, Mawabo

2015

http://hdl.handle.net/10539/20607

Msingaphantsi, Mawabo (2015) An enabling framework as a holistic intervention to address physical developmental constraints in the Johannesburg inner city, University of the Witwatersrand, Johannesburg, <http://hdl.handle.net/10539/20607>

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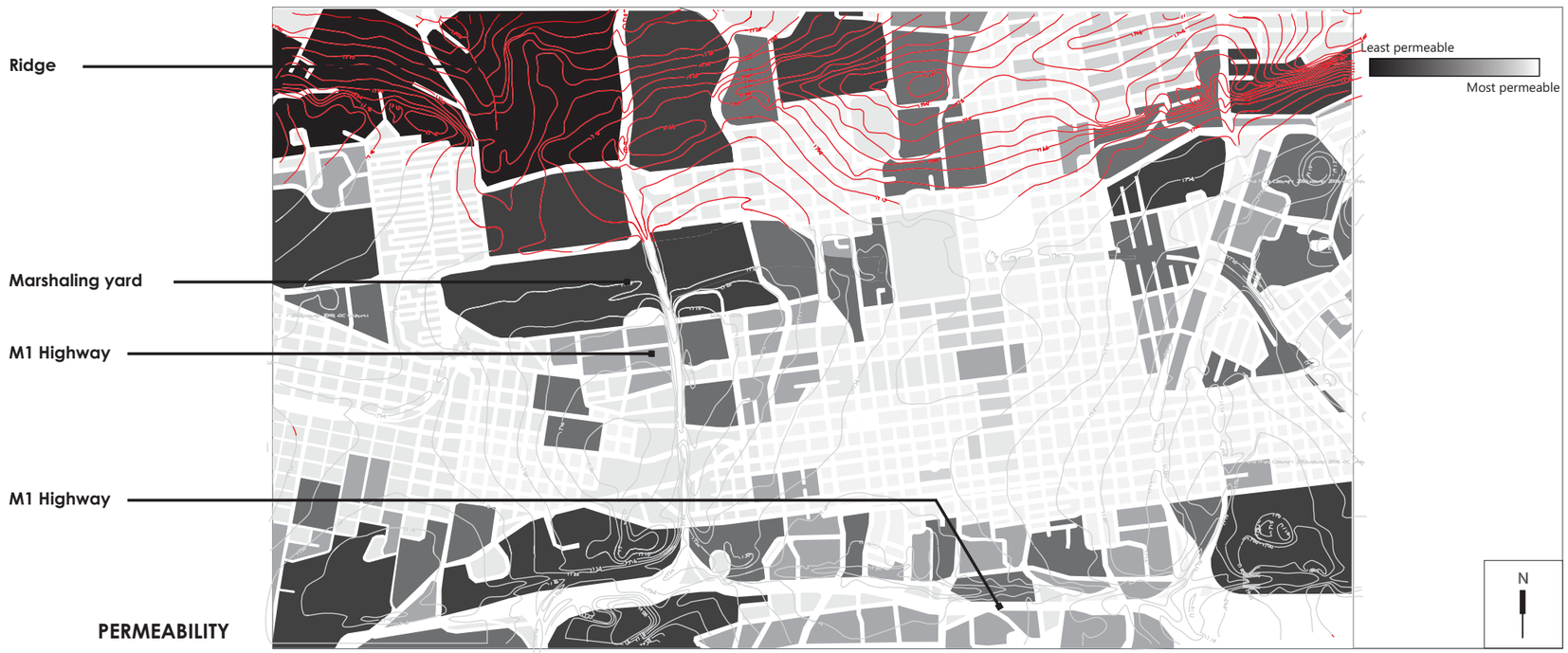

Ch. 1: Research proposal
Ch. 2: Introduction to study area, site analysis
Ch. 3: Literature review (Part 1) - Theoretical framework
Ch. 4: Literature review (Part 2) - Historical precedent
Ch. 5: Establishing an enabling framework
Ch. 6: Guidelines for development
Ch. 7: Assessment, conclusions and recommendations

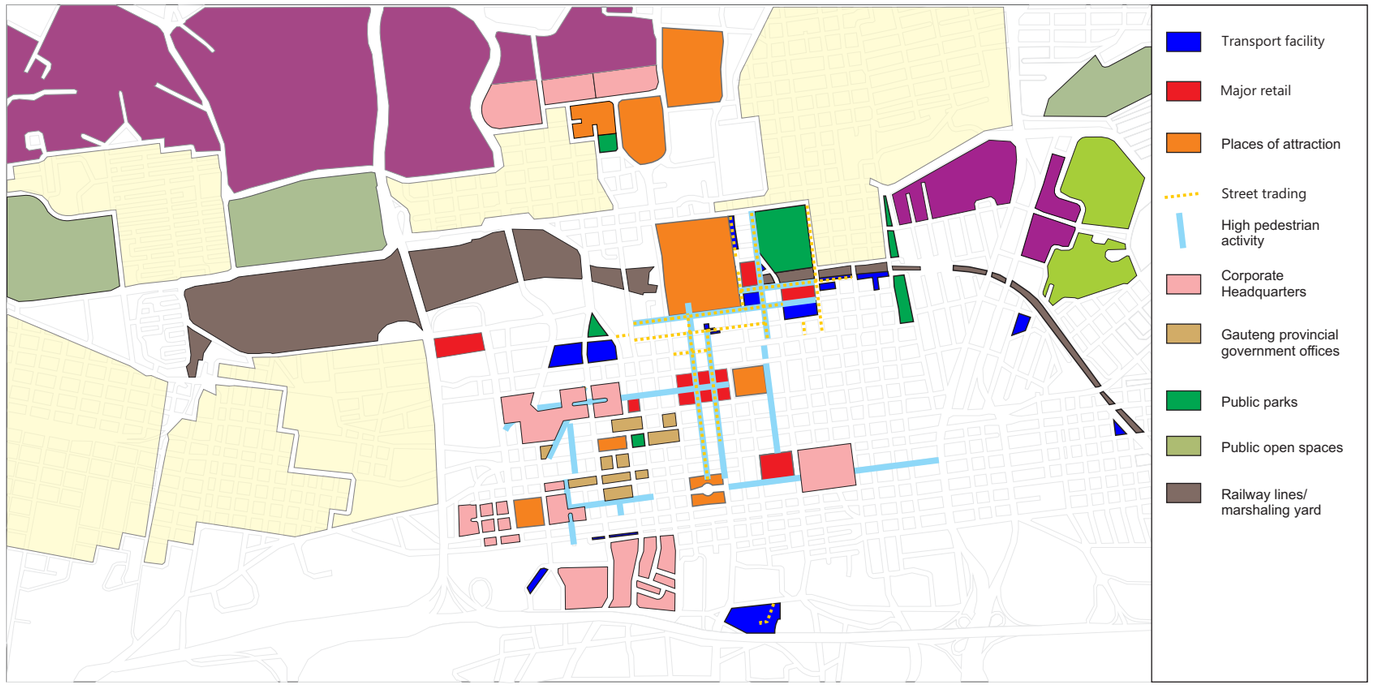
5.1. DETERMINING THE ESSENTIALS - analysis to find the informants of urban form

COMPOSITE INFORMANTS AND CONSTRAINTS

There are four notable edges in the inner city. The ridge running across Hillbrow, Braamfontein and Auckland Park; the railway lines, running between the CBD and Braamfontein; and the M2 highway. These first three run in an east-west direction. The M1 highway forms an edge on the western side of the CBD and it runs in a north-south direction.

These edges could be seen to separate the inner city into districts since they usually coincide with the end of a township and the beginning of another. However it can be seen on the adjacent map that these areas are often characterized by large strips of big impermeable blocks that are much larger than the inner city's average block size of 360 square metres. Such large blocks are usually occupied by a single land use or a handful of uses. As a result there are often limited frontages on the streets and there are fences around properties that reinforce the impact of such areas as barriers slashing through the urban tissue.

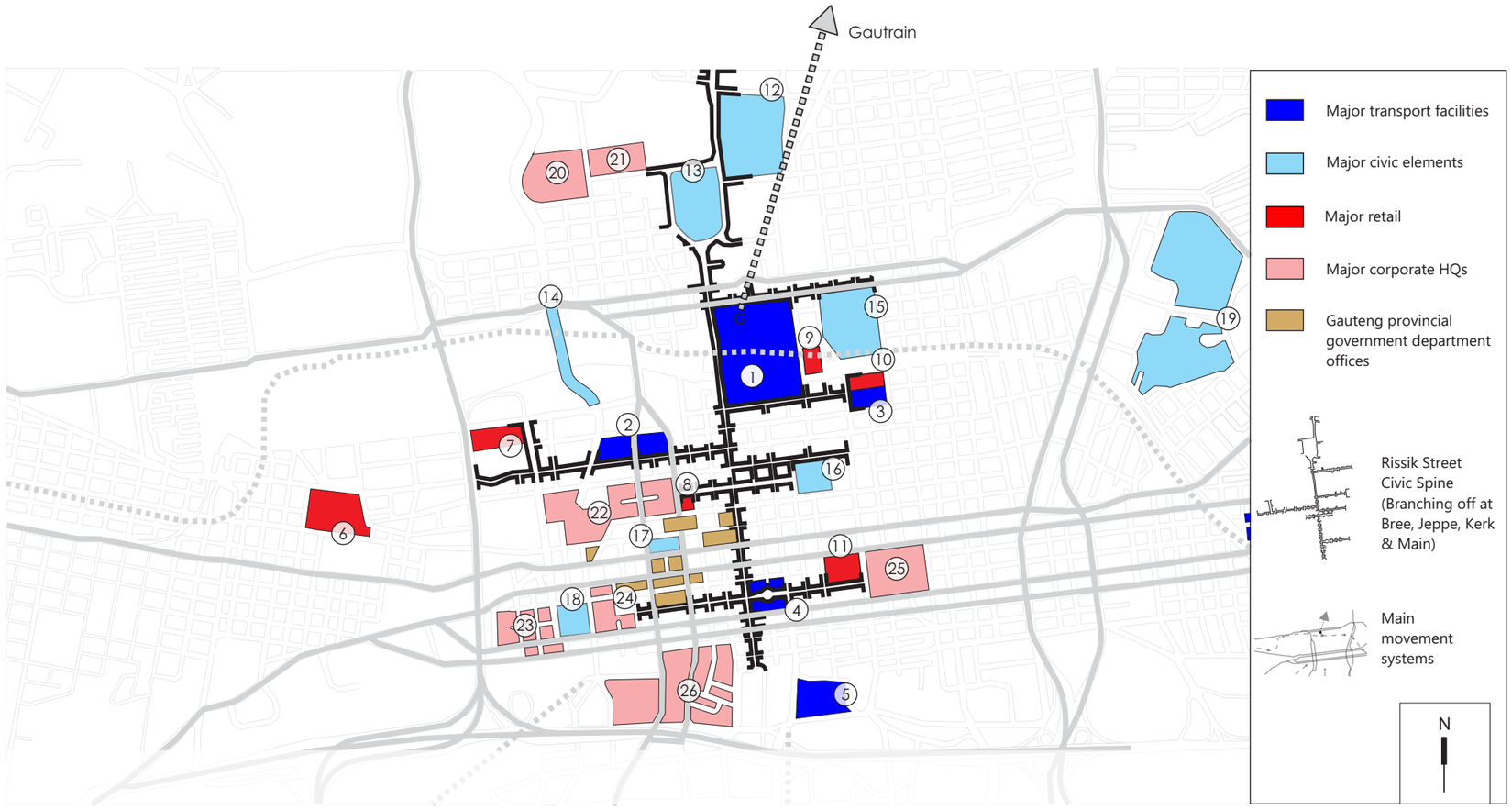




By Author

STRUCTURING ELEMENTS - points in space

1] Park Station oncourse (image by Author)
2] Metro Mall taxi rank (image by Tolamo, 2006)
3] Jack Mincer taxi rank (image by Author)
4] Gandhi Square (image by Author)
5] Faraday Taxi Rank
6] Oriental Plaza
7] Newtown Junction (ima e by McAuliffe, 2014)
8] Anstay's Woolworths
9] The Bridge Shopping Centre
10] Park Central shopping centre (image by Author)
11] Carlton Centre (image by Unknown, 2015)
12] Constitution Hill (im e by GTA, 2015)
13] Civic Centre (image by Heather M (2014)
14] Nelson Mandela Bridge (image by MIT, ud)
15] Joubert Park
16] South Gauteng High Court
17] Walter Sisulu Square
18] Johannesburg magistrate's court
19] Elis Park Precinct (image by Tourist, 2009)
20] SAB Miller
21] Liberty Life
22] First National Bank
23] Zurich Insurance
24] Anglo American
25] ABSA
26] Standard Bank



Transport termini **Retail** **Civic Elements**


1 2 5 6 13 12


3 4 10 11 14 19

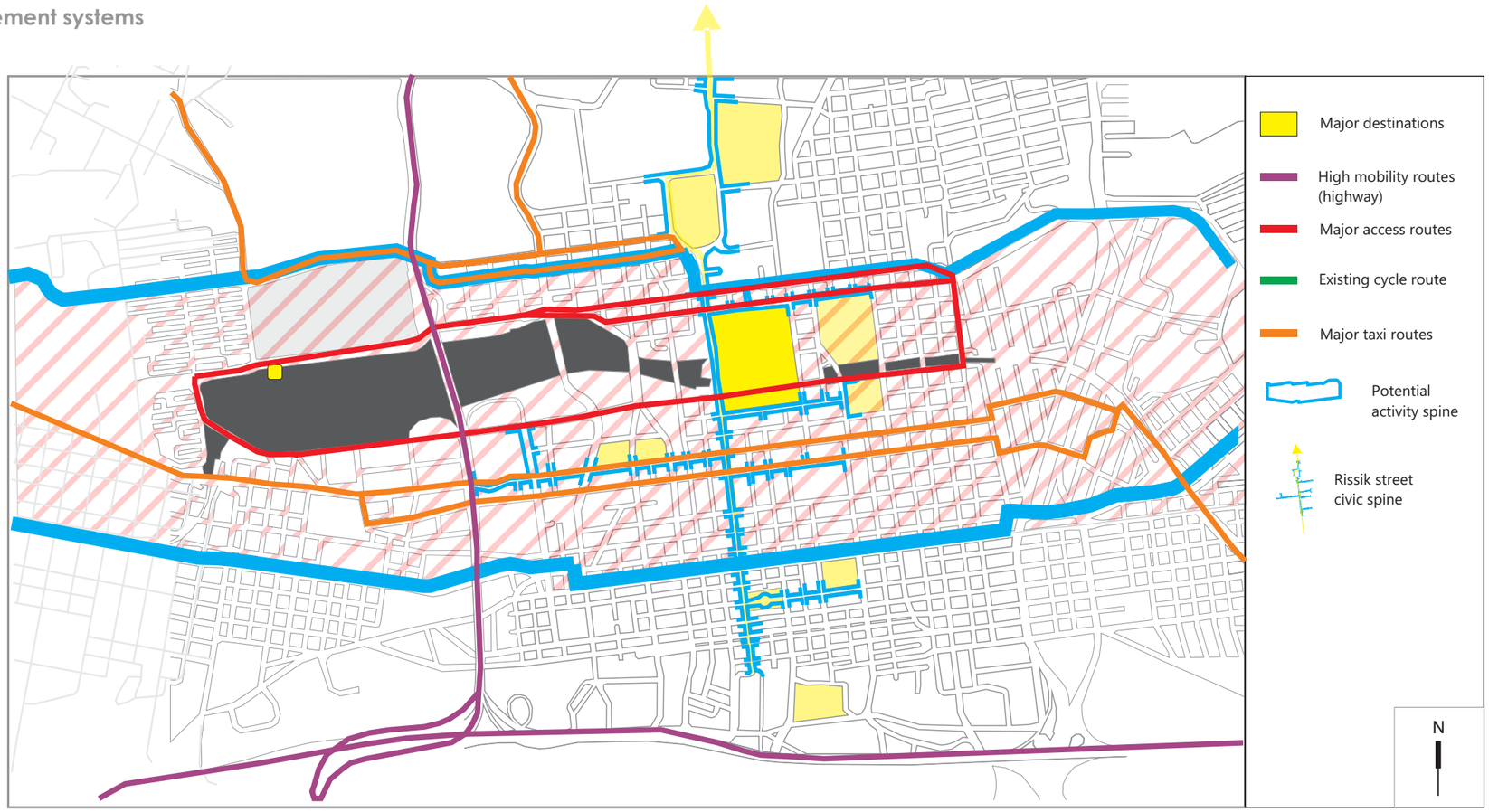
STRUCTURING ELEMENTS - simultaneous movement systems

- Loops of public transport are proposed:

1) The outer loop is based on existing BRT routes that will be extended to run westwards along the railway lines

2) The present taxi route along Bree and Jeppe Street in the CBD forms the second loop. It is 100m south of the core focus area and is complemented by a similar but smaller loop along Jorressen and De Korte Street in Braamfontein (100m north of focus area).

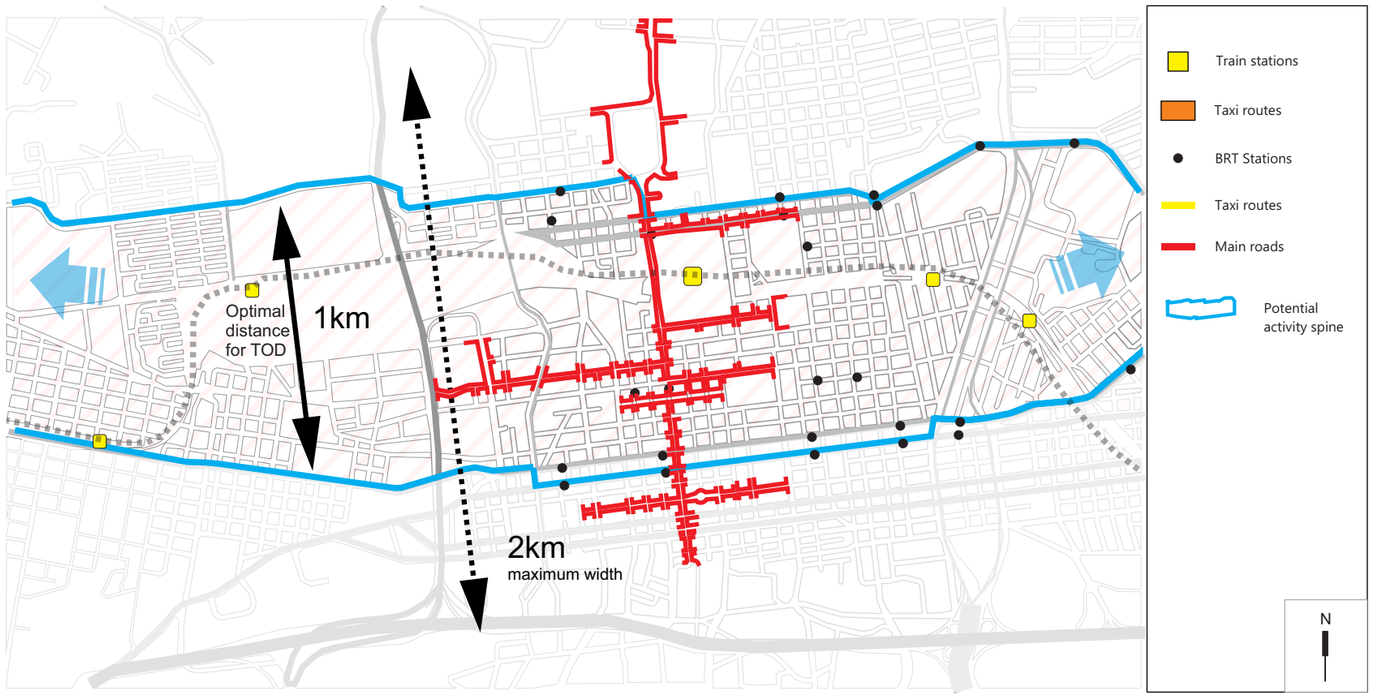
3) The last loop is formed by existing major access routes and is 400m wide and the area within it is the core focus area of the scheme. It will be serviced by BRT buses but the bicycle routes that are currently being implemented by the city in Braamfontein (along Jorressen and De Korte Street) will be extended into this loop

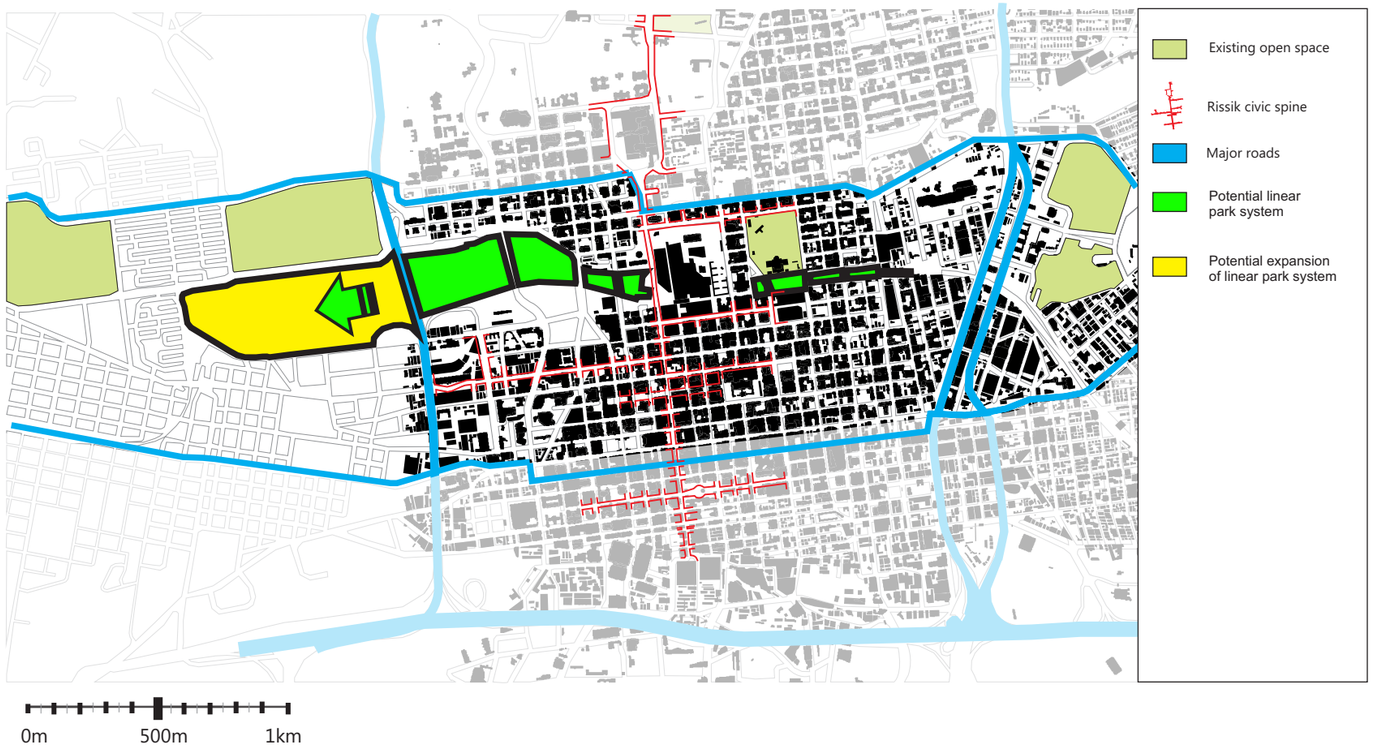


5.2. Establishing the organizing concept

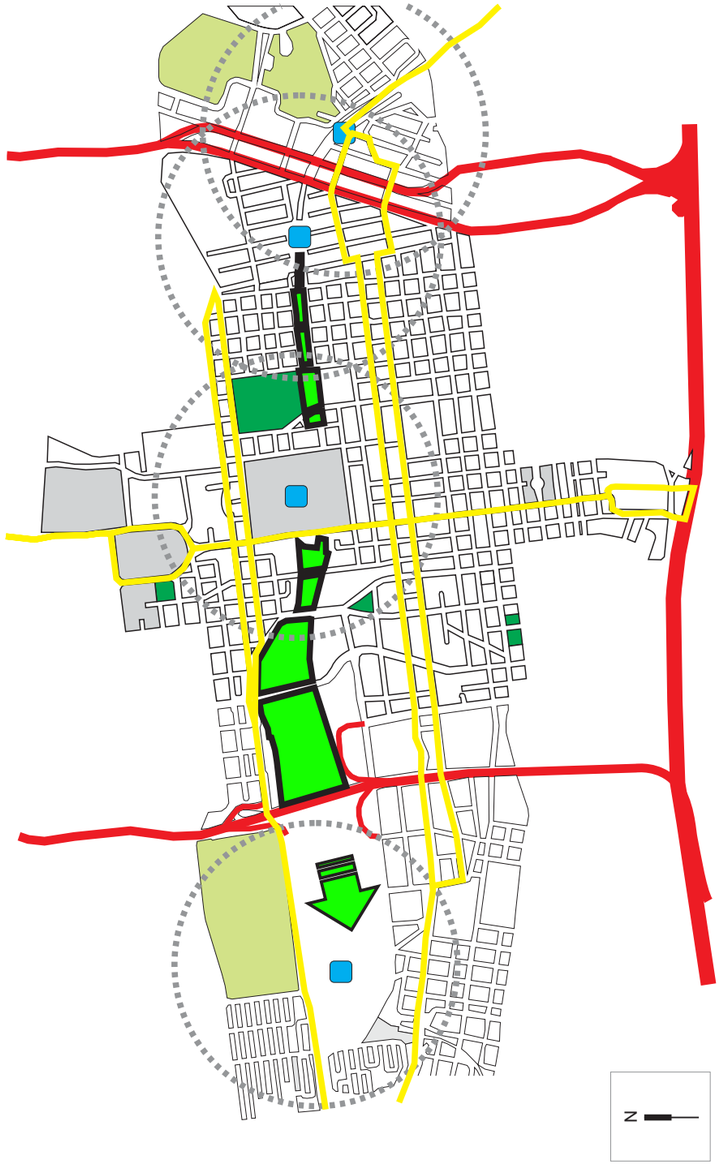
An east-west spine is proposed in this paper to intersect with the aforementioned existing north-south spine on Rissik. The new spine is to be created in part by decking over the railway lines but it is primarily premised on creating a loop of effective, highly accessible, public transport to encapsulate the proposed spine. The spine – with its encapsulating loop – is about a kilometre in width. The total width of the proposal, including the catchment area of the spine, is two kilometres. That area includes a distance of 500m from the outermost edge of the spine. This is an optimal distance transit oriented development along the encapsulating loop that forms the edge of the spine.

A driving principle within the scheme is to have several layers of movement systems within the area. In other words, there will be loops within the loop, creating a differentiated multi-modal accessibility surface that offers equitable access. The adjacent map shows that such a scheme is highly feasible as there are already three modes of public transport present in the study area and there is a fine network of movement channels and frequent stops

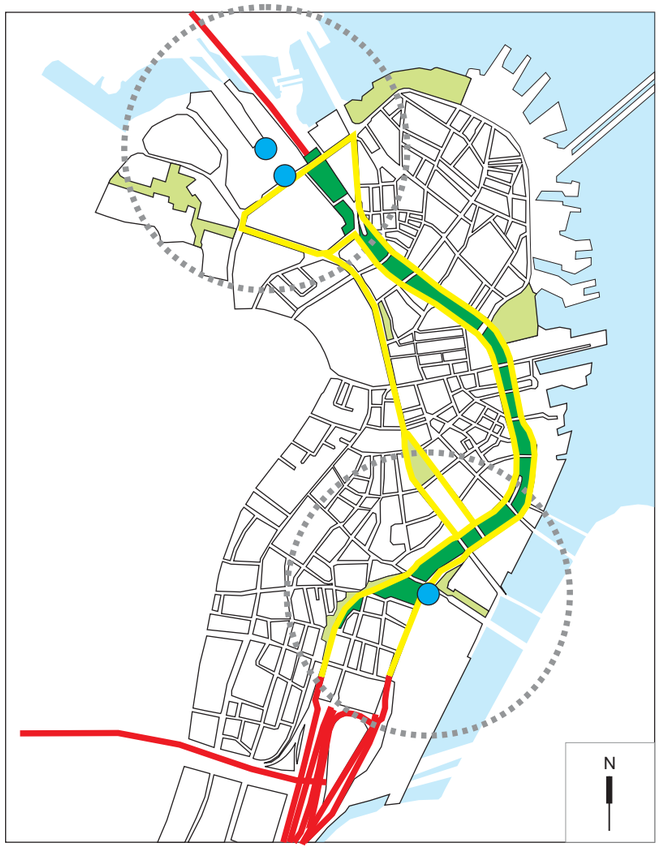




By Author



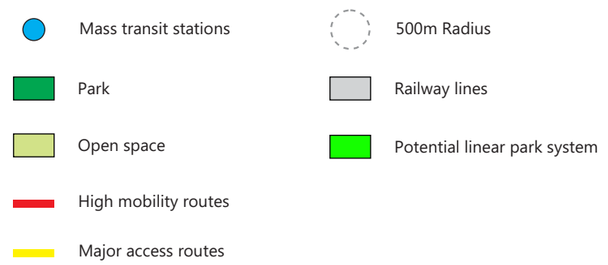
Potential Activity Spine, Johannesburg inner city

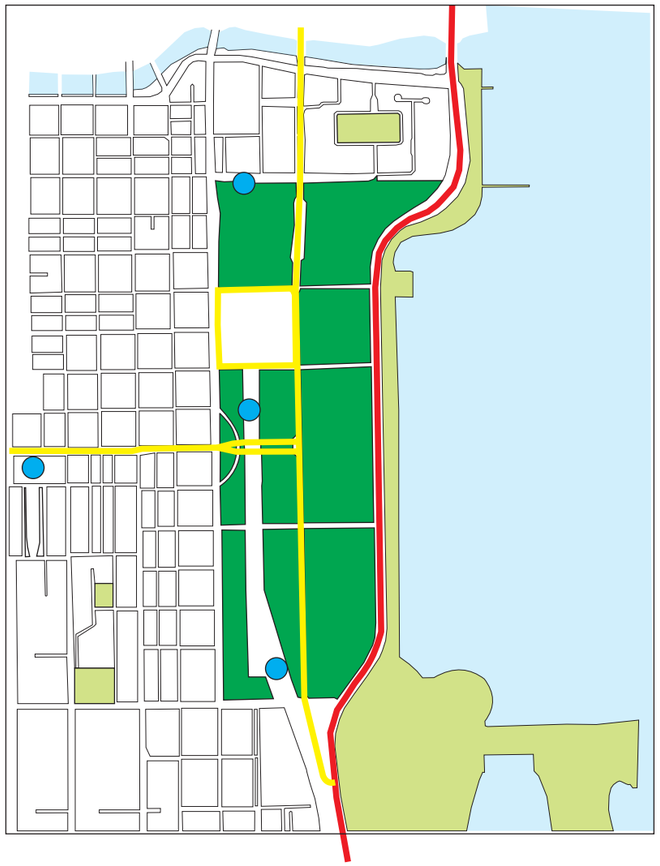


The “big dig”, Boston



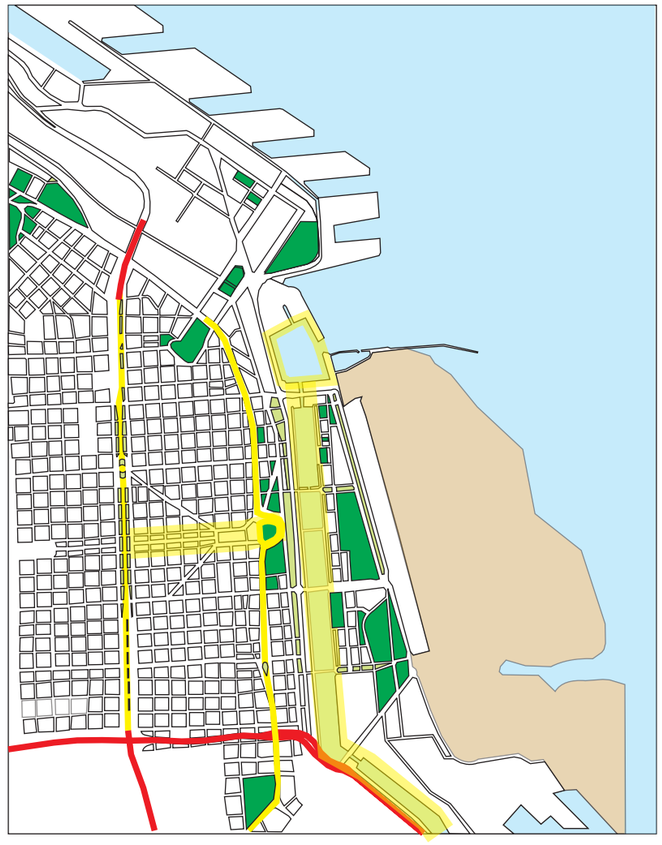
Main Street mall, Portland





0m 200m 400m

Millennium Park, Chicago



0m 200m 400m

Buenos Aires, Argentina



0m 200m 400m

El Virrey Park, Bogota, Colombia

Mass transit stations

Park

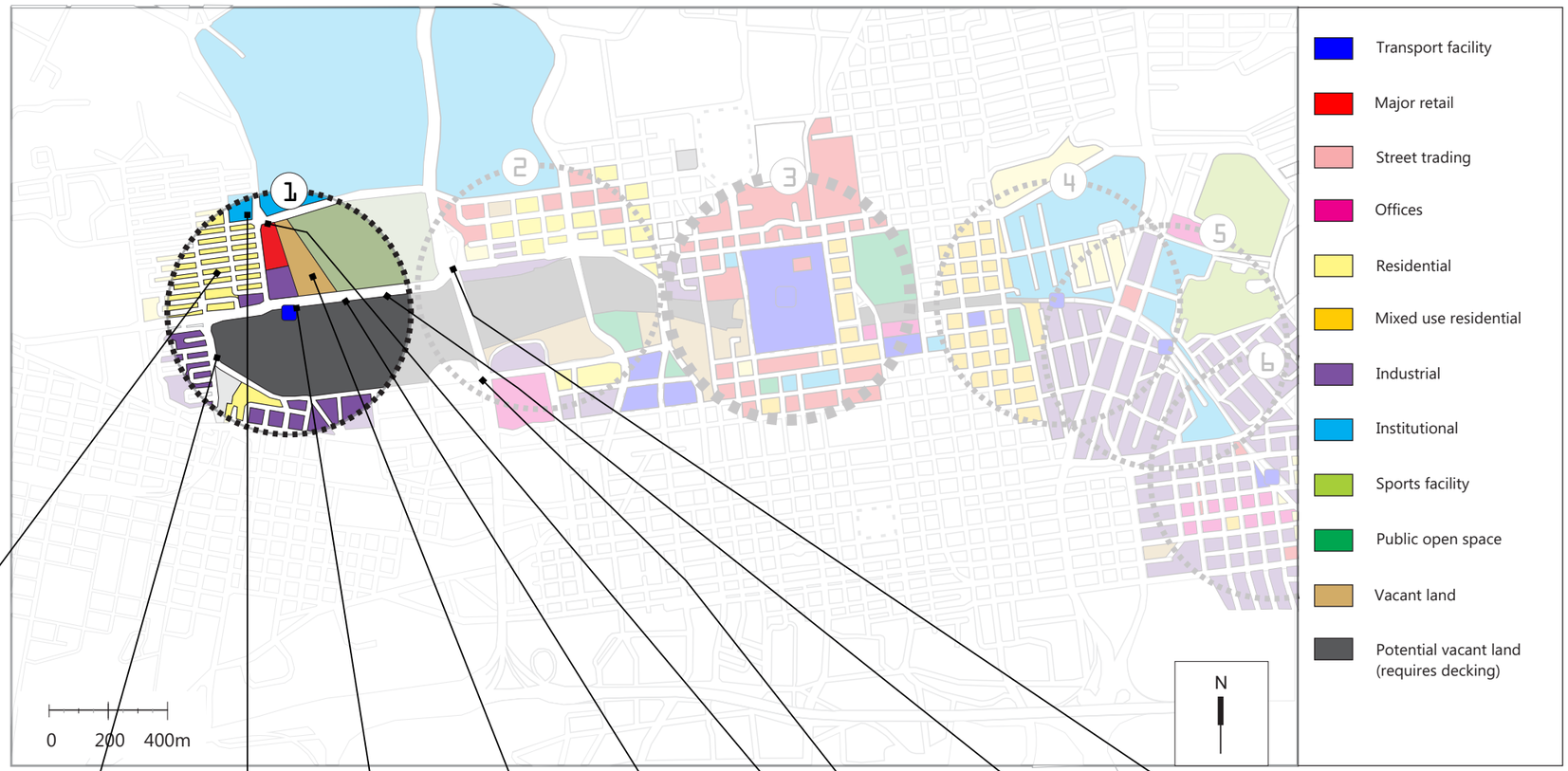
Lagoon

Open space

Major access routes

High mobility routes

LAND USE - Around Braamfontein Station, Vrederdorp and Fordsburg





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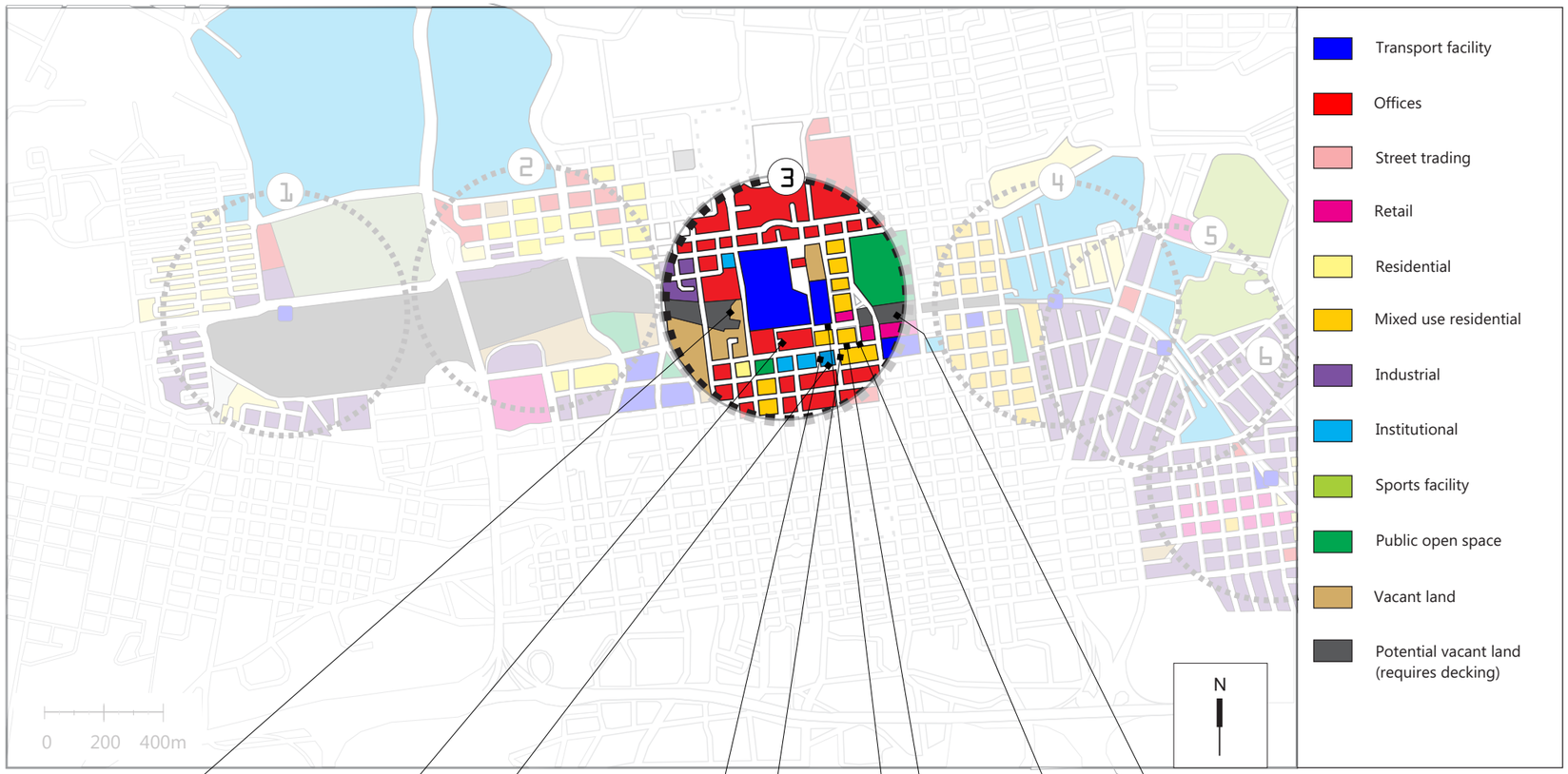
9



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Images by
Google, 2014

LAND USE - Around Park Station




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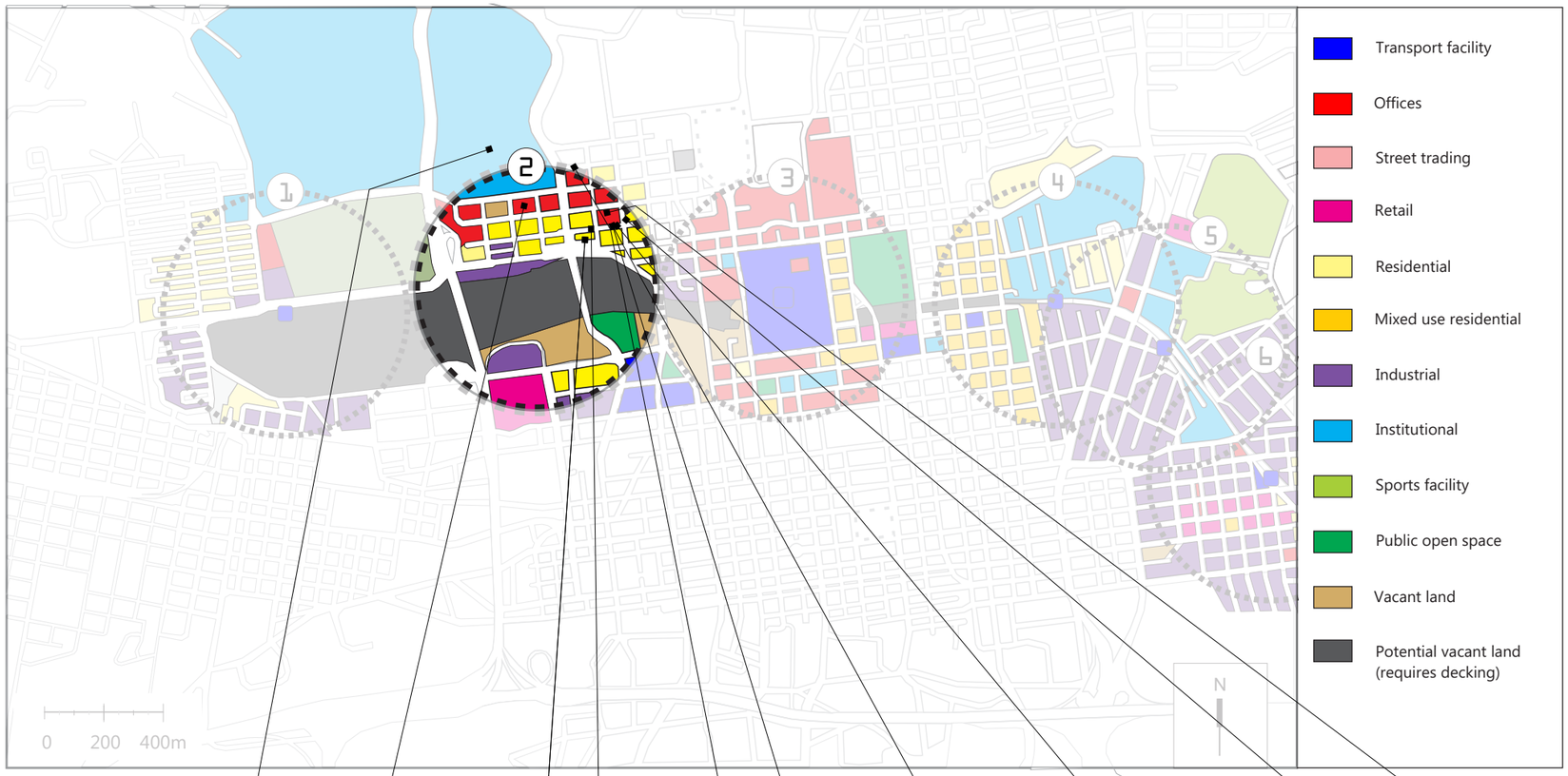

3


9


10

Images by author

LAND USE - Around Braamfontein and Newtown



Images by:

[1] Webb (2011)

[2] **Juta Street** (Braamfontein Management District, 2012)

[3] **Amishoff Street** (Bydawell, 2014)

[4] **People believe that Braamfontein is a walkable neighbourhood** (Bydawell, 2014)

[5] Braamfontein Management District (2012)

[6] South African Tourism (2013) (2)

[7] Leiman (2013)

[8] SA Commercial Prop News (2012)

[9] Heather (2014)

[10] Bydawell (2014)

[11] South African Tourism (2013)

[12] WITS University (2015)



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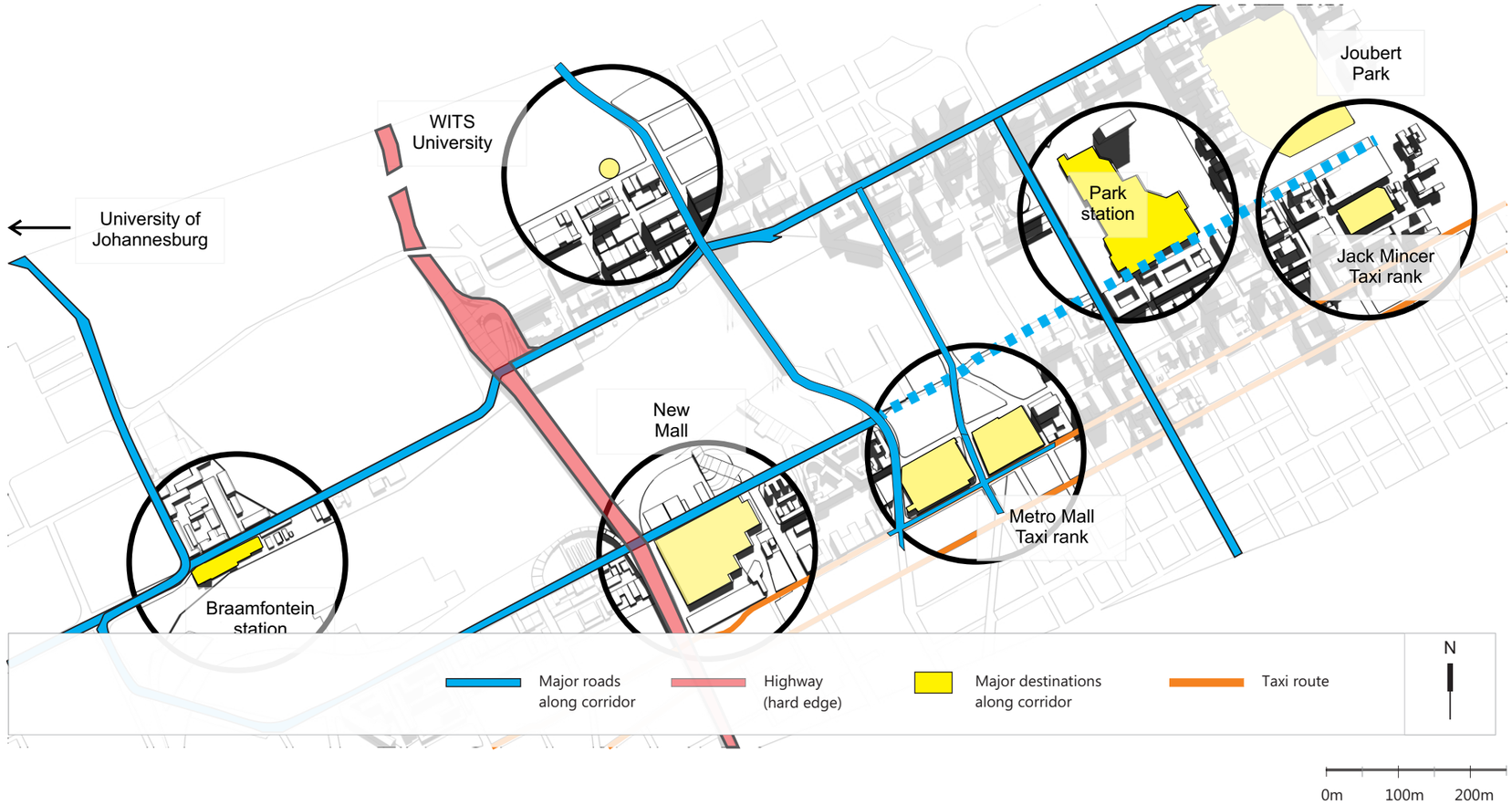


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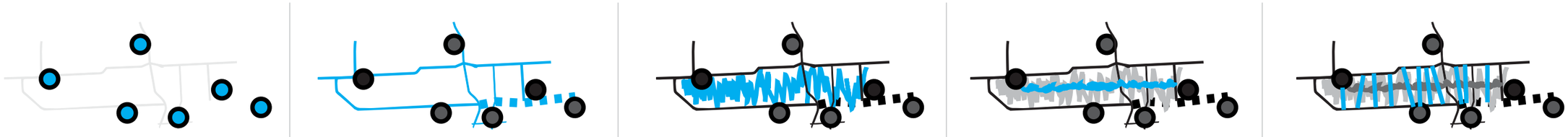
Points in space and simultaneous movement systems

Bacon (1967) asserts that order can be restored to a site by creating a point of focus. For Bacon order is a complex agreement between the many users of a site about how a place ought to be used. It is a matter of perception inasmuch as a user must be able to read and understand the clues given by the site to him (Jacobs, 1993). The most important elements within the site must be easily accessible to the user and it must be easy for the user to construct a cognitive image of their location, their hierarchy and the opportunities they offer him. When this is the case, such a site is said to be legible (Lynch, 1975).

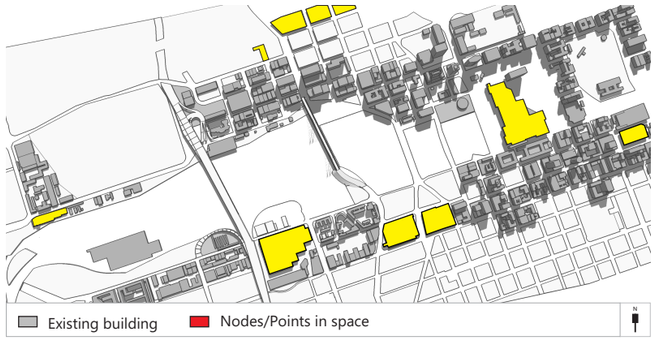
The most important points in the study area are to be the two train stations because they will offer the highest degree of access at the lowest cost per distance. Through the rail network they will connect the site to the regional economy. Once these two anchors have been established, a system of paths is proposed that oscillates between them.



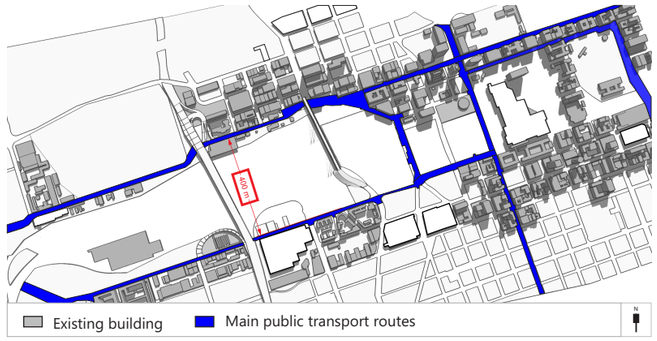
The presence of strong anchors on either side allows for other nodes to be located in between, intercepting the traffic. Even smaller nodes can also be placed between those other nodes. Such a distribution thus allows for an equitable sharing of access that will attract a variety of uses (Dewar and Todeschini (003)



The organizing concept is established - Summary



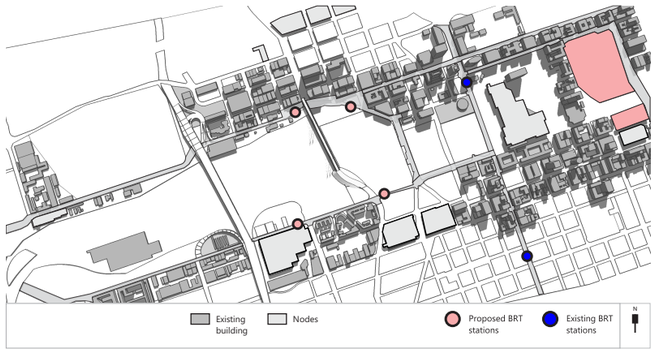
Establish the points in space: the anchors of activity, the nodes



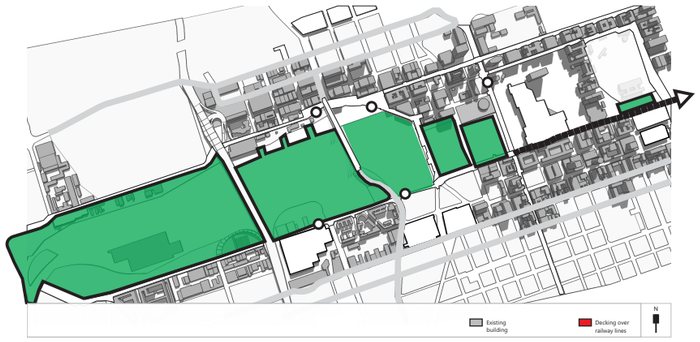
Establish the main movement channels: Highly accessible public transport



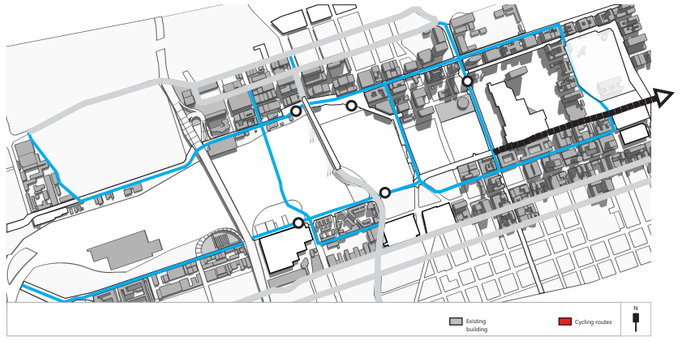
Relate proposal to existing movement conditions: the taxi routes and the main pedestrian walkways



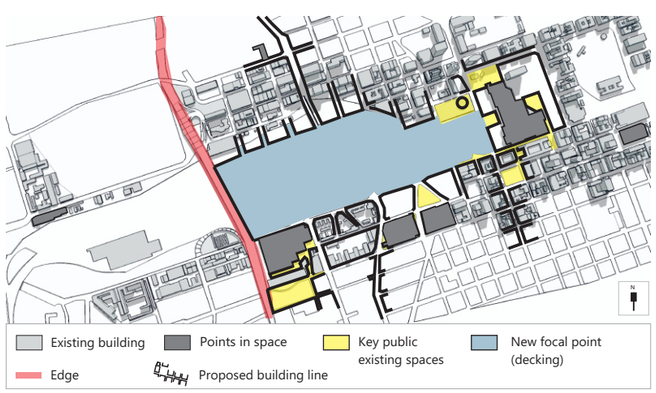
Aim for a differentiated accessibility surface: by establishing intermediate nodes in space between the main ones along the main public transport routs. Such an equitable accessibility surface encourages the mixing of uses by creating opportunities for either privacy or publicity.



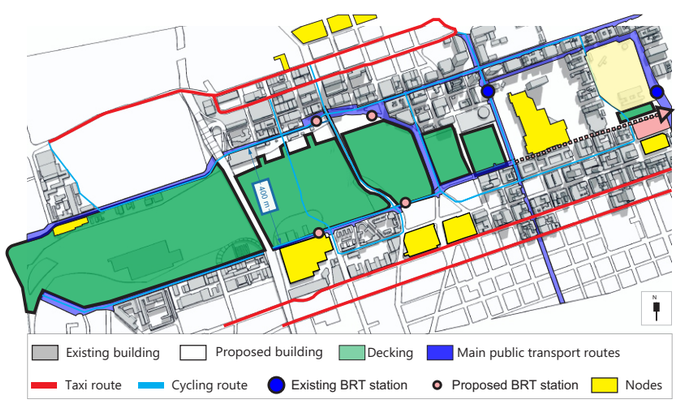
Deck over the railway lines: and thus bridge the edge between Braamfontein and the CBD and capture (through land rentals and sales) the value created by the investments in transport infrastructure



Establish cycling routes: as this will allow easy travel along the 3km extent of the proposed spine and that will make all the points in space easier to access



Spatial Structure:



An organising concept has been established: In accordance with linkage theory (Trancik, 1986) the structure of the proposed settlement is inherent in the movement system. Desire lines have been created along transport routes and around nodes