Connection of the axes to the surrounding fabric.

The aim of establishing the southwest to northeast connection axis is to connect public transport interchanges and work/trade/study/live opportunities across the railway. This connector extends northwards beyond the site, rising up by 10 meters in order to allow trains passage below. It crosses the Queen Elizabeth Bridge, warranting an intersection regulating vehicle and pedestrian traffic by traffic light. Since this link does not link directly to the Park Station precinct, directional symbols will need to be used, an example of this are colored street poles. The building at this terminus of this connector is clad in full height billboard, serving as a landmark for navigation purposes.

The transverse connector is extended on the eastern boundary over Harrison Street/Queen Elizabeth Bridge. This intersection could be regulated by push button traffic lights that are synchronized with the rest of the traffic lights along Harrison Street.

Sketch: Connection to the surrounding urban fabric
Locating the main PAP spaces

It is at the point of intersection of axes that the most important space of the PAP (parliamentary chamber) should be located since it is exposed to the maximum number of people. Considering the spatial requirements of the PAP (see appendix), the footprint would be larger than the width of the axis. Chapter 6 recommended that this space should be conceived as a void as opposed to a monumental icon in order to extend the theoretical position into built form. As such this building would need to be subterranean, with a highly visible and accessible element located at the point of axes intersection. This element should be smaller than the intersection region allowing pedestrian traffic to flow past. This object can be conceptualized as a glass box allowing vies and access into the chamber below. The entrance to the subterranean parliamentary spaces could be on the proposed civic square, since this is the most accessible point for the three main groups of user.

Movement and development along the axes

Lines projected from the edges of the glass box along both axes determine the zones of movement and zones of development along the respective corridor. On the southwest to northeast corridor the edges would be movement zones allowing for a central civic space. This is alternated on the transverse corridor where larger central staircases carry the rush of pedestrians either descending to the ground and taxi level or ascending to
the higher level connector and market. Trade in the form of small to medium scale informal and semiformal could occur along the edges of this pedestrian bridge connector.

Buildings on the northern edges of the site

As previously identified buildings that are to be build on the northern edge of the site should not necessarily be reliant on active street frontages. These have been zoned for the sectional title office blocks and intercontinental hotel. The hotel would be located on the eastern most edge bordering the southwest to northeast corridor. The total zoned area is split equally between the hotel and office functions. The offices are in turn divided to form two office blocks. Their location towards the west of the sight allows for these buildings to be higher since in would necessarily block out northern light to the other active buildings and spaces in the precinct. These can be up to 7 stories high with the upper 2 floors being used for apartments. The centers of these blocks are hollowed out creating light well courtyards that allow the building maximum access to northern light. The hotel twice as large as one office block has two such courtyards. The height of this building should not exceed 6 floors since exceeding this would block out northern light to the rest of the central zone of the precinct.
Buildings that flank the civic square

As seen in the zoning exercise two buildings flank the square. These are the all Africa consulate building and the parliamentary offices. These buildings should not exceed 5 stories, due to the proportion of built form to open space, giving the civic square and flanking buildings a more humane scale. The upper floor of these buildings should accommodate residential apartments.

Road circulation and parking

The existing site has only three points of vehicular access. These are located centrally along the western boundary, towards the south western corner on the southern boundary and towards the south eastern corner on the eastern boundary.

The number of vehicular points of access have been limited due to the topographical constraints that resulted by constructing the Queen Elizabeth and Nelson Mandela bridges. The retaining earth slopes and height difference make approximately 50% of the site inaccessible from the eastern and western boundary roads. The additional constraint is that the two southern access points are currently used to service the taxi rank. This pattern is likely to continue since the taxi rank is retained. This leaves the remaining precinct with a singular vehicular access point on the western boundary.
Introducing additional vehicular entrance points along the western boundary would come at a great expense and slow down traffic along the relatively narrow Nelson Mandela Bridge. Introducing points of entry on the southern or eastern boundary would be 'blocked' by the taxi rank and this would be more than likely avoided by motorist, yet alone members of the political elite or visiting dignitaries. As such the only feasible solution is to extend the width of the western entrance point to the maximum, allowing private vehicles using functions other than the taxi rank to slip pass. Internally two turning circles are proposed on either side of the parliamentary offices. The northern turning circle would be more prominent as it would be the arrival point for dignitaries and MP’s and should cater for stretch limousines.

The parking requirements of the proposed precinct would be large. Surface parking might be able to accommodate a fraction of the parking requirements, as such a 'super basement' is proposed that would cater for the entire precinct. This could be located under the buildings on the northwest of the site, in an area bound by the northern and western site boundaries, civic square in the east and pedestrian bridge connector in the south. Given the recommended building heights, area and the average parking ratio of 4 cars per 100 m², 5 to six levels of basement parking would be required.

Lifts, escalators and circulatory stairs would not be directly into each of the buildings but at strategic points in order to promote pedestrian activity externally at ground floor level.
Auxiliary functions and services

This active ground floor plane would stimulate retail or service functions at ground floor level of the buildings. The ground floor spaces facing onto internal streets could be used to accommodate auxiliary functions and services that respond to the three main user groups, thus creating active street edges. Stepping the building back at ground floor level and introducing colonnades and sheltered walkways would help in this regard.

Urban Design: Phasing Strategy

The proposed urban design proves to create a vibrant mixed use environment, however from a financial perspective, constructing the envisaged design at once could be a daunting task. As such the following phasing strategy has been developed in order to implement the urban design over the longer term. This uses a phased development approach. This approach allows different design and construction teams to be used. This adds variety to the precinct (within an urban and architectural design framework), making it read architecturally as an extension of the surrounding urban fabric.

Improvement works: Taxi rank resurfacing and lighting

In this phase the existing taxi rank’s physical infrastructure is improved. The rank is not redesigned in order to maintain the vibrant informal character. During this phase the taxi rank could be temporarily relocated to the north of the site or alternatively across the road to the vacant site housing the Victorian era train structure.

Phase 1: Bulk Infrastructural development

This phase encompasses the initial bulk infrastructural investment in which the following are constructed to completion:

- The super basement, and related service and circulation shafts
- The southwest to northeast corridor including the pedestrian bridge over the railway and related road works on Queen Elizabeth Bridge.
- The completion of the civic square including surfacing, light wells, urban furniture and landscaping.
- All internal roads and related works are completed
- The Braamfontein works including cladding the building at the terminus of the southeast to northwest corridor with a full height billboard, and all related urban signage and furniture.
The following are also partially completed:
- All structural work to the subterranean parliament including circulation and service ducts

**Phase 2: Pedestrian bridge connector**

The pedestrian bridge connector is constructed including all physical and mechanical pedestrian circulation systems. At the end of this phase all systems are in place to allow informal to semi formal trading to occur on the bridge.

**Phase 3: Construction of All Africa Consulate Building and Parliamentary Office Block**

In this phase the above two buildings are constructed and brought to completion. Also the subterranean work on the parliament continues and is brought to completion.

**Phase 4: Hotel, Office blocks and Retail Stores**

In this phase the remaining buildings are constructed and brought to completion. The infill retail development beneath the pedestrian link bridge is also constructed and brought to completion. All remaining landscaping is completed and urban furniture, lighting and signage is in place completing the construction of the precinct.
Conclusion

The urban design was arrived at by considering the theoretical position of this thesis, the resolved program, theoretical recommendations and by addressing the constraints and potentialities of the site within its context.

The resultant urban environment is a vibrant mixed use precinct that extends itself into the surrounding fabric drawing pedestrian activity to and through the site. By its mix of functions it draws various user groups to and through the site, including the local elite and the visiting dignitary. In this way the PAP is connected to the everyday life of ordinary Africans, giving it the best possible exposure, and creating the environment where achieving its core inclusive mandate is highly possible.

Urban design: Resolved urban design proposal

The final urban design is presented on the following pages.

Area Schedule

<table>
<thead>
<tr>
<th>Description</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 floors of sectional title offices</td>
<td>12 347.65</td>
</tr>
<tr>
<td>2 floors of residential apartments</td>
<td>15 536.05</td>
</tr>
<tr>
<td>4 floors of parliamentary offices</td>
<td>6 447.15</td>
</tr>
<tr>
<td>1 floor of residential apartments</td>
<td></td>
</tr>
<tr>
<td>4 floors of consulatory offices</td>
<td>16 832.40</td>
</tr>
<tr>
<td>1 floor of residential apartments</td>
<td></td>
</tr>
<tr>
<td>3 floors of parliamentary related</td>
<td>26 587.84</td>
</tr>
<tr>
<td>1.5 floors of retail</td>
<td>3 683.99</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>81 435.08</strong></td>
</tr>
</tbody>
</table>

Parking Schedule

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total floor area</td>
<td>81 435.08 m²</td>
</tr>
<tr>
<td>Parking ratio</td>
<td>4 cars / 100 m²</td>
</tr>
<tr>
<td>Number of cars</td>
<td>3 258 cars</td>
</tr>
<tr>
<td>Convenience parking</td>
<td>115 cars</td>
</tr>
<tr>
<td>Area of single level of basement</td>
<td>9 986.64 m²</td>
</tr>
<tr>
<td>Average no of cars per level</td>
<td>581 cars</td>
</tr>
<tr>
<td>Number of basement levels required</td>
<td>6 floors</td>
</tr>
</tbody>
</table>
The existing site prior to the urban design intervention.