information node: converting Pretoria’s Old Fire Station into public space
SUBMITTED IN FULFILLMENT OF PART OF THE REQUIREMENTS FOR THE
DEGREE OF MASTERS OF INTERIOR ARCHITECTURE
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MENTOR: NICO BOTES

2007
in·for·ma·tion

n.
1. Knowledge derived from study, experience, or instruction.
2. Knowledge of specific events or situations that has been gathered or received by communication – intelligence or news.
3. A collection of facts or data
4. The act of informing or the condition of being informed
5. Computer Science: Processed, stored, or transmitted data.

node

n.
1. Physics: A point or region of virtually zero amplitude in a periodic system.
2. Mathematics: The point at which a continuous curve crosses itself.
3. Computer Science: A terminal in a computer network.
4. Architecture: Points in the city where paths meet or cross, experienced as points to which the observer can enter, the node as a place that creates a space of activity.

2 Lynch (1960:72)
6. PRECEDENT STUDIES ................................................................. 59
   6.1 DAVID ADJAYE : Nobel Peace Centre, 2002-2005
       City Hall Square, Oslo, Norway ........................................ 60
   6.2 DAVID ADJAYE: Idea Store Chrisp Street, 2001-2004
       1 Vesey Path, East India Dock Road, London ..................... 63
   6.3 DAVID ADJAYE: Thyssen-Bornemisza Limited Edition
       Art Pavilion, 2005. Islands of San Lazzaro degli Armeni,
       Venice, Italy ....................................................................... 64
   6.4 PUGH + SCARPA: Jigsaw Studios, 2001-2004
       Los Angeles, CA, USA ....................................................... 65
   6.5 SAUCIER + PERROTTI: Theatre Sans Fil Montreal,
       Canada ............................................................................ 66
   6.6 JFAK ARCHITECTS: L.A. Design Centre, Los Angeles,
       CA, USA ......................................................................... 67
   6.7 MEYER, SCHEIRER AND ROCKCASTLE: Mill City
       Museum, Minneapolis, MN, USA ........................................... 68

7. DESIGN DEVELOPMENT ............................................................. 69
   7.1 Schedule of accommodation .............................................. 69
   7.2 The conceptual layout of the building ............................... 70
   7.3 Design strategies ............................................................. 75
   7.4 Portion A ......................................................................... 78
   7.5 Portion B ......................................................................... 83

8. TECHNICAL REPORT ............................................................... 87
   8.1 Contained spaces ............................................................ 87
   8.2 Construction method ....................................................... 89
   8.3 Materials ......................................................................... 91

9. TECHNICAL DOCUMENTATION ............................................ 97

BIBLIOGRAPHY ........................................................................ 130
<table>
<thead>
<tr>
<th>FIG</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Wireframe image of the Old Fire Station Building</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Wireframe image of the Old Fire Station Building</td>
<td>2</td>
</tr>
<tr>
<td>2.1</td>
<td>Old Nederlandsche Bank building on Church Square</td>
<td>3</td>
</tr>
<tr>
<td>2.2</td>
<td>Information signage in front of Old Nederlandsche Bank building</td>
<td>3</td>
</tr>
<tr>
<td>2.3</td>
<td>The Information Centre in the Old Nederlandsche Bank building on Church Square</td>
<td>4</td>
</tr>
<tr>
<td>2.4</td>
<td>Entrance in to Old Nederlandsche Bank building waiting area for information</td>
<td>4</td>
</tr>
<tr>
<td>2.5</td>
<td>Brochure display stands</td>
<td>4</td>
</tr>
<tr>
<td>2.6</td>
<td>Museums Park Information Centre’s entrance from Minnaar Street</td>
<td>4</td>
</tr>
<tr>
<td>2.7</td>
<td>Waiting area</td>
<td>4</td>
</tr>
<tr>
<td>2.8</td>
<td>Brochure display stands</td>
<td>4</td>
</tr>
<tr>
<td>2.9</td>
<td>Bosman Street view of the Old Fire Station building</td>
<td>5</td>
</tr>
<tr>
<td>2.10</td>
<td>Bosman Street: Original entrance of the Old Fire Station building is not in use today</td>
<td>7</td>
</tr>
<tr>
<td>2.11</td>
<td>Minnaar Street: entrance of the Tourist Centre in the Old Fire Station building, Museum Park</td>
<td>8</td>
</tr>
<tr>
<td>2.12</td>
<td>Entrance of the African Window and Amphitheatre</td>
<td>9</td>
</tr>
<tr>
<td>3.1</td>
<td>Wildlife experience</td>
<td>11</td>
</tr>
<tr>
<td>3.2</td>
<td>View from Table Mountain</td>
<td>11</td>
</tr>
<tr>
<td>3.3</td>
<td>Coast of South Africa</td>
<td>11</td>
</tr>
<tr>
<td>3.4</td>
<td>Welcome Campaign’s Logo</td>
<td>11</td>
</tr>
<tr>
<td>3.5</td>
<td>Sho’t LeT Campaign’s Logo</td>
<td>11</td>
</tr>
<tr>
<td>3.6</td>
<td>Children in front of a graffiti wall in Cape Town</td>
<td>12</td>
</tr>
<tr>
<td>3.7</td>
<td>Pretoria, Gauteng: night view with the Union Buildings</td>
<td>12</td>
</tr>
<tr>
<td>3.8</td>
<td>Pretoria, Gauteng: jacaranda season</td>
<td>12</td>
</tr>
<tr>
<td>3.9</td>
<td>Images from Department of Environmental Affairs and Tourism</td>
<td>13</td>
</tr>
<tr>
<td>3.10</td>
<td>Domestic Tourism Objectives</td>
<td>13</td>
</tr>
<tr>
<td>3.11</td>
<td>Geographic spread of domestic tourism (The Department of Environmental Affairs and Tourism and SA Tourism 2007:4)</td>
<td>14</td>
</tr>
<tr>
<td>3.12</td>
<td>Loftus Versveld Stadium in Pretoria. Image: South Africa 2010 Local Organising Committee (International Marketing Council of South Africa 2007)</td>
<td>15</td>
</tr>
</tbody>
</table>

FIG 3.14: Streets of Pretoria with jacaranda trees (Go24 Online cc. 2006) .................. 17
FIG 3.15: View from Pretoria Square (Go24 Online cc. 2006) .................................. 17
FIG 3.16: Melrose House (Go24 Online cc. 2006) .................................................. 18
FIG 3.17: Union Buildings (Go24 Online cc. 2006) ............................................... 18
FIG 3.18: Image of Pretoria (Go24 Online cc. 2006) ............................................. 19
FIG 3.19: Silhouette image of Pretoria (Go24 Online cc. 2006) ................................. 19
FIG 3.20: City Hall of Pretoria (Go24 Online cc. 2006) ......................................... 19
FIG 3.21: Touk Bird, logo and mascot of the Tourism Forum. (Museum Park 2006) .. 20

FIG 4.1: Pretoria region with the City Centre as main development area
(City of Tshwane Metropolitan Municipality 2007:22) ........................................ 21
FIG 4.2: Gautrain Logo (Gauteng, Provincial Government 2007) .............................. 22
FIG 4.3: Route of the Gautrain with stations
(Gauteng, Provincial Government 2007) ............................................................ 22
FIG 4.4: Images from the Gautrain gallery
(Gauteng, Provincial Government 2007) .............................................................. 23
FIG 4.5: Map of Pretoria Central: Context and site allocation ................................. 24
FIG 4.6: Arial photograph of Pretoria Central with route of network ...................... 25
FIG 4.7: Model of site and surrounding context ...................................................... 26
FIG 4.8: Arial Photograph of site ........................................................................... 27
FIG 4.9: Logo of Museum Park (Museum Park 2006) ........................................... 29
FIG 4.10: Location of Museum Park with main attractions .................................... 29
FIG 4.11: Bosman Street, view of Old Fire Station building (Museum Park 2006) .... 31
FIG 4.12: Views of Minnaar Street from the Old Fire Station buildings .................. 32
FIG 4.13: Arial Photo of site with original buildings
(City of Tshwane Metropolitan Municipality 2007) ............................................ 34
FIG 4.14: Training Tower of the Old Fire Station .................................................... 34
FIG 4.15: Old fire station 1912, Bosman Street view (Museum Park 2006) ............. 35
FIG 4.16: Floor plans of Old Fire Station building .................................................. 37
FIG 4.17: To explain the Old Fire Station building, the photographs viewpoints are given .......................................................... 38
FIG 4.18: Eastern façade (Bosman Street) ............................................................... 38
FIG 4.19: Detail of entrances at eastern façade (Bosman Street) ............................... 38
FIG 4.20: Original ambulance sign (1912) ............................................................. 38
FIG 4.21: Balconies at south wing, facing towards Minnaar Street ......................... 39
FIG 4.22: Corner of Minnaar and Bosman Street .................................................... 39
FIG 4.23: Minnaar Street: View to Bosman Street .................................................. 39
FIG 4.24: View from Information Centre’s entrance towards Minnaar Street House .... 39
FIG 4.25: Staircase and entrance into square from Minnaar Street (unused) .......... 39
FIG 4.26: Signage and entrance of Tourist Centre .................................................... 39
FIG 4.27: Training Tower (6 storeys high) ............................................................. 40
**List of Figures**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Caption</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIG 4.28</td>
<td>Balcony of Conference hall facing into square</td>
<td>40</td>
</tr>
<tr>
<td>FIG 4.29</td>
<td>View of garages and conference hall form square</td>
<td>40</td>
</tr>
<tr>
<td>FIG 4.30</td>
<td>View of garages and conference hall with balcony facing into the square</td>
<td>40</td>
</tr>
<tr>
<td>FIG 4.31</td>
<td>Northern wing and garages viewed from inside the square</td>
<td>41</td>
</tr>
<tr>
<td>FIG 4.32</td>
<td>Northern wing viewed form inside the square</td>
<td>41</td>
</tr>
<tr>
<td>FIG 4.33</td>
<td>Information Centre entrance form square</td>
<td>41</td>
</tr>
<tr>
<td>FIG 4.34</td>
<td>Additional staircase to upper floor</td>
<td>41</td>
</tr>
<tr>
<td>FIG 4.35</td>
<td>Northern façade balconies facing towards Visagie Street House</td>
<td>42</td>
</tr>
<tr>
<td>FIG 4.36</td>
<td>Entrance of apartment in Northern façade</td>
<td>42</td>
</tr>
<tr>
<td>FIG 4.37</td>
<td>View towards Minnaar Street House if add-on buildings is demolished</td>
<td>42</td>
</tr>
<tr>
<td>FIG 4.38</td>
<td>Minnaar Street House (standing empty at the moment)</td>
<td>42</td>
</tr>
<tr>
<td>FIG 4.39</td>
<td>Minnaar Street House (view towards square and Training Tower)</td>
<td>42</td>
</tr>
<tr>
<td>FIG 4.40</td>
<td>Two original fire trucks still on site</td>
<td>43</td>
</tr>
<tr>
<td>FIG 4.41</td>
<td>View to original entrance of the Old Fire Station building</td>
<td>43</td>
</tr>
<tr>
<td>FIG 4.42</td>
<td>Original staircase with face brick walls (some painted white) and window detail</td>
<td>43</td>
</tr>
<tr>
<td>FIG 4.43</td>
<td>Conference hall with original timber roof and floor</td>
<td>43</td>
</tr>
<tr>
<td>FIG 4.44</td>
<td>Original timber floors and fireplaces in some offices and rooms</td>
<td>43</td>
</tr>
<tr>
<td>FIG 4.45</td>
<td>Diagram of site indicating barriers and accessibility</td>
<td>44</td>
</tr>
<tr>
<td>FIG 4.46</td>
<td>Diagram of site</td>
<td>45</td>
</tr>
<tr>
<td>FIG 4.47</td>
<td>Vehicle movement and parking</td>
<td>46</td>
</tr>
<tr>
<td>FIG 4.48</td>
<td>Pedestrian movement through site</td>
<td>46</td>
</tr>
<tr>
<td>FIG 4.49</td>
<td>Diagram of site indicating nodes in context</td>
<td>47</td>
</tr>
<tr>
<td>FIG 4.50</td>
<td>Diagram of site indicating landmarks in the context</td>
<td>48</td>
</tr>
<tr>
<td>FIG 4.51</td>
<td>Diagram of site indicating edges in the context</td>
<td>49</td>
</tr>
<tr>
<td>FIG 4.52</td>
<td>Diagram showing add-on buildings to be removed</td>
<td>50</td>
</tr>
<tr>
<td>FIG 4.53</td>
<td>Wireframe model of site</td>
<td>51</td>
</tr>
<tr>
<td>FIG 6.1</td>
<td>Diagram showing add-on buildings to be removed</td>
<td>59</td>
</tr>
<tr>
<td>FIG 6.2</td>
<td>Diagram showing add-on buildings to be removed</td>
<td>60</td>
</tr>
<tr>
<td>FIG 6.3</td>
<td>View of site (Allison 2006:20)</td>
<td>61</td>
</tr>
<tr>
<td>FIG 6.4</td>
<td>Exhibition space (Allison 2006:39)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.5</td>
<td>Small cinema (Allison 2006:39)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.6</td>
<td>Entrance hall (Allison 2006:39)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.7</td>
<td>Register (Allison 2006:39)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.8</td>
<td>Nobel Field (Allison 2006:34)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.9</td>
<td>Café de la Paix (Allison 2006:39)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.10</td>
<td>View of entrance (Allison 2006:22)</td>
<td>62</td>
</tr>
<tr>
<td>FIG 6.11</td>
<td>South façade with entrance at right (Allison 2006:172)</td>
<td>63</td>
</tr>
<tr>
<td>FIG 6.12</td>
<td>Study position on eats wall (Allison 2006:: 178)</td>
<td>63</td>
</tr>
<tr>
<td>FIG 6.13</td>
<td>View across entrance space (Allison 2006:172)</td>
<td>63</td>
</tr>
</tbody>
</table>
FIG 6.15: End wall of logia (Allison 2006:101) ............................................. 64
FIG 6.16: Entrance ramp (Allison 2006:99) .................................................. 64
FIG 6.17: View of internal ramp (Allison 2006:102) ...................................... 64
FIG 6.18: View from timber screen (Allison 2006:100) .................................. 64
FIG 6.19: Industrial Warehouse before and after design implementation, Photo: Marvin Rand, Pugh and Scarpa (Carta 2006:38) ............. 65
FIG 6.20: View of reception (Carta 2006:39) ................................................. 65
FIG 6.21: Screen detail (Carta 2006:39) ....................................................... 65
FIG 6.22: Fireman station before and after renovation, Photo: Marc Cramer (Carta 2006:59) ................................................................. 66
FIG 6.23: New street façade (Carta 2006:65) ................................................. 66
FIG 6.24: Bridge in tower that connects to the floor above, Photo: Marc Cramer (Carta 2006:65) ................................................................. 66
FIG 6.25: Before and after design implementations of the street facade (Carta 2006:166) ................................................................. 67
FIG 6.26: Layered facade and sunscreens in parking area (Carta 2006:167) ......... 67
FIG 6.27: Parking space (Carta 2006:167) ..................................................... 67
FIG 6.28: Views of the interior (Carta 2006:167) .......................................... 67
FIG 6.29: Before and after design implementation (Carta 2006:223) ............... 68
FIG 6.30: New section of building (Carta 2006:224) ..................................... 68
FIG 6.31: Detail of the connection between old and new structure (Carta 2006:224) ........................................................................... 68
FIG 7.1: Diagram of accommodation network ................................................. 69
FIG 7.2: Floor plans of Old Fire Station building indicating function zones ....... 70
FIG 7.3: Concept model and photograph of the existing site ............................ 71
FIG 7.4: Concept model of the display corridors .......................................... 71
FIG 7.5: Concept model of the Information .................................................. 72
FIG 7.6: Concept model of the café, internet, bookshop, toilets and lockers ... 72
FIG 7.7: Concept model of the retail and entertainment .................................. 73
FIG 7.8: Concept model of the conference facilities and offices ..................... 73
FIG 7.9: Concept model of the accommodation .......................................... 74
FIG 7.10: Concept model of the new buildings ............................................. 74
FIG 7.11: Concept model of the site ............................................................. 76
FIG 7.12: Site plan ....................................................................................... 77
FIG 7.13: 3D model of Portion A .................................................................. 78
FIG 7.14: Reception counter and staircase .................................................... 79
FIG 7.15: View of the Information when entering form the Minnaar Street entrance ........................................................................... 80
FIG 7.16: Reception counter with views of the Coffee Café and the Training Tower ........................................................................... 81
FIG 7.17: Walkway with a view of the Training Tower ........................................ 81
FIG 7.18: Walkway with a view of the Conference hall ................................... 81
FIG 7.19: Walkway with a view of the Minnaar Street entrance ...................... 82
FIG 7.20: Interactive workstations ................................................................... 82
FIG 7.21: View from inside the reception .......................................................... 82
FIG 7.22: Information corridors with Minnaar Street House in the background ... 82
FIG 7.23: 3D model of Portion B ground floor ................................................ 83
FIG 7.24: 3D model of Portion B first floor ...................................................... 84
FIG 7.25: Entrance to the Coffee Café and Bookshop .................................... 85
FIG 7.26: View toward the Coffee Café’s outside seating ............................... 85
FIG 7.27: Toilets and Bookshop ...................................................................... 85
FIG 7.28: Internet workstations and Toilets .................................................... 86
FIG 7.29: Original fireplace with Internet workstations ................................. 86
FIG 7.30: Coffee Café with counter seating ..................................................... 86
FIG 7.31: Coffee Café with a view toward the Information .............................. 86

FIG 8.1: 3D model the reception counter .......................................................... 87
FIG 8.2: 3D model of the Interactive workstation concept ............................. 88
FIG 8.3: 3D model of the Toilet cubicle ............................................................ 88
FIG 8.4: 3D model of Reception’s main structure ........................................... 89
FIG 8.5: 3D model of Reception’s sub-structure .............................................. 89
FIG 8.6: 3D model of Reception’s treads and light fittings .............................. 90
FIG 8.7: 3D model of Reception’s cladding and staircase screen .................. 90
FIG 8.8: 3D model of Reception’s structure cladding .................................... 91
FIG 8.9: 3Form Chroma cast polymethyl methacrylate resin: Cranberry ....... 91
FIG 8.10: Original oregon pine flooring .......................................................... 92
FIG 8.11: B.A.S.F – Mastertop 1362 Polyurethane-based floor ...................... 92
FIG 8.12: 3Form Struttura Collection Stage 40mm ....................................... 92
FIG 8.13: Magnetic track with halogen spot light .......................................... 93
FIG 8.14: Magnetic track spot light ................................................................. 93
FIG 8.15: Strip or counter light ...................................................................... 93
FIG 8.16: OW Acoustic paneling: Perforated aluminium plate with square holes .......................... 94
FIG 8.17: Acoustic Paneling .......................................................................... 94
FIG 8.18: Timber boarding .......................................................................... 94
FIG 8.19: Alyos ceiling and wall system ......................................................... 95
FIG 8.20: 3Form Chroma cast polymethyl methacrylate resin: Vitamin C .... 96
FIG 8.21: 3Form Struttura Collection Pep Topaz ........................................... 96
FIG 8.22: 3Form Varia Collection Organic Ting Ting ....................................... 96
FIG 8.23: 3Form Struttura Collection Pure Crystals ....................................... 96
FIG 8.24: Iron Paint ....................................................................................... 96
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIG 9.1</td>
<td>Site plan</td>
<td>1:1000</td>
</tr>
<tr>
<td>FIG 9.2</td>
<td>Demolished ground floor plan</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.3</td>
<td>Demolished first floor plan</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.4</td>
<td>Ground floor plan</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.5</td>
<td>First floor plan</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.6</td>
<td>North elevation</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.7</td>
<td>South elevation</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.8</td>
<td>East elevation</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.9</td>
<td>West elevation</td>
<td>1:200</td>
</tr>
<tr>
<td>FIG 9.10</td>
<td>PORTION A Ground floor plan</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.11</td>
<td>PORTION A First floor plan</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.12</td>
<td>PORTION A Section A</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.13</td>
<td>PORTION A Section B</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.14</td>
<td>PORTION A Section C</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.15</td>
<td>PORTION A Section D</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.16</td>
<td>PORTION B Ground floor plan</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.17</td>
<td>PORTION B First floor plan</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.18</td>
<td>PORTION B Section A</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.19</td>
<td>PORTION B Section B</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.20</td>
<td>PORTION B Section C</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.21</td>
<td>PORTION B Section D</td>
<td>1:100</td>
</tr>
<tr>
<td>FIG 9.22</td>
<td>Detail Reception Ground floor plan</td>
<td>1:20</td>
</tr>
<tr>
<td>FIG 9.23</td>
<td>Detail Reception First floor plan</td>
<td>1:20</td>
</tr>
<tr>
<td>FIG 9.24</td>
<td>Detail Reception box - Section A</td>
<td>1:20</td>
</tr>
<tr>
<td>FIG 9.25</td>
<td>Detail Reception box - Section B</td>
<td>1:20</td>
</tr>
<tr>
<td>FIG 9.26</td>
<td>Detail Reception box - floor and ceiling connection</td>
<td>1:5</td>
</tr>
<tr>
<td>FIG 9.27</td>
<td>Detail Reception box - floor connection</td>
<td>1:5</td>
</tr>
<tr>
<td>FIG 9.28</td>
<td>Detail Reception box - staircase 3d model</td>
<td>1:10</td>
</tr>
<tr>
<td>FIG 9.29</td>
<td>Detail Reception box - staircase plan and section</td>
<td>1:10</td>
</tr>
<tr>
<td>FIG 9.30</td>
<td>Detail Reception box - staircase section</td>
<td>1:10</td>
</tr>
<tr>
<td>FIG 9.31</td>
<td>Detail Reception box - floor connection</td>
<td>1:5</td>
</tr>
</tbody>
</table>
introduction
In an urban context, architecture and landscape architecture co-exist as part of the structure of the city. In the same manner, interior architecture exists as part of an architectural envelope, and product design as an integral part of the interior. This study explores the relationship between these design disciplines and their interdependence; none of them can be practiced optimally in isolation. As this thesis deals with interior architecture, the influence of and the response to other fields of design are considered and investigated, setting the parameters for the resolution of the design framework.

The objective of the thesis is to design a tourism and information centre for Tshwane. The shortcomings of the tourism industry in the city are identified in Chapter Two, and the tourism field studied in depth in Chapter Three. The conclusions from these chapters serve as generators for the functional design process.

The site of the Old Fire Station Building was chosen for both its potential and its inadequacies. Its physical attributes, historical importance and its critical role in the urban context of the CBD and the Museum Park District are discussed in Chapter Four. Chapter Five deals with the design philosophy and approach to creating a successful public space. Precedents are analytically examined in Chapter Six and alternatives are explored, setting up requirements and guidelines for the design intervention.
In Chapter Seven, design strategies are defined and consequently employed. The progression of the design from general concept to specific end product is illustrated visually. Attention is focused on two parts of the building: the information area (Portion A) and the café (Portion B). In Chapter Eight, Portion A is further developed on a technical and tectonic level, zooming in on the construction of the information reception box. The study concludes with the technical documentation contained in Chapter Nine.

The study relies throughout on the application of the concepts of placemaking through the layering, defining and containing of space, and contrast the existing with the proposed intervention.

“Pretoria is currently in a position of reformulation and rediscovery. Tourism wise Pretoria has the product, the people and the ideal location. Pretoria has what it takes to be an outstanding tourist destination. All that needs to be done now is to bring it all together.”

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FIG 1.1: Wire frame image of the Old Fire Station Building

Nhlumayu (1998)
the problem
Lonely Planet’s\(^1\) response to the tourist information centres in Pretoria:

“The Tourist Information centres are pretty useless and, astonishingly for a city this size, closed on weekends. You can still get maps and brochures when it is closed, but you’re better off asking your hotel or locals for advice.”

There are two main information centres in the inner city of Pretoria:

**Church Square Tourist Information Centre**

The main tourist information centre of the city is situated in the historic Old Nederlandsche Bank building on Church Square. Entry is gained via a dark and obscure reception hall. Brochure stands with local information and advertisements occupy most of the waiting area. Smaller partitioned cubicles where personal assistance is given are lined up against a wall. At maximum capacity only four people can be helped simultaneously. There are no other supporting tourist functions (travel agents, tour operators, exchange facilities or accommodation).

**Museum Park Tourist Centre**

The entrance to this tourist centre, situated on the south east corner of the rundown Old Fire Station Building, is uninviting and poorly defined. It merely consists of a single room occupied by displays of free flyers and pamphlets. A maximum of two people can be helped at the same time. City tours can be booked here. Accommodation is also available on the premises, but facilities are extremely poor.

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1 Fitzpatrick, et al. (2006:431)
The problem

FIG 2.3: The Information Centre in the Old Nederlandsche Bank Building on Church Square

FIG 2.4: Entrance into Old Nederlandsche Bank Building; waiting area for information

FIG 2.5: Brochure display stands

FIG 2.6: Museums Park Information Centre’s entrance from Minnaar Street

FIG 2.7: Waiting area

FIG 2.8: Brochure display stands
The supplementary volume two of the addendum to the draft environmental impact assessment\(^1\) states the following:

“Provision should be made for the development of a museum and related information centre in the area under consideration to accommodate all heritage-related aspects with regard to the development of the Gautrain Rapid Rail Link. Such a facility would need to illustrate how heritage issues came to be addressed within the context of the new development. It is also suggested that funding should be allocated for the development of a suitable railway heritage tourism node catalysed by the new station. This clearly meets current thinking in the development of guidelines with regard to the functional area around the Pretoria Station.”

In response to these facts the main objective of this thesis is to address the shortcomings of the current situation and create an environment that will provide diverse facilities to its users. This Information Node can be considered a fusion of activities, an anchor for the tourism and transport industry in the Museum Park context. The facility will enhance the user’s overall experience of his or her destination.

1 Gauteng Provincial Government (2007: 24)
2 Bennett (2000:55)

Bennett\(^2\) explains that:

“Today travellers are looking for greater freedom, more adventure and less formality. Travellers are also becoming more demanding when it comes to accommodation. They do not see accommodation as merely a ‘room to sleep in’ but as a total leisure experience, composing a wide range of services and emotional experience which together make up the holiday or business stay.”
The proposed project must act as a node to accommodate public city spaces that connect with the urban realm, as well as internal semi-private and private spaces. By opening up the street edge of the building on Minnaar and Bosman Streets, commercial activities can be accommodated to allow interaction with pedestrians at street level. In this way, access to and the visibility of the building will also be improved. Accommodation on the first floor amplifies the function of the node. The additional 24-hour activity thus created will also improve security in the surrounding area.

The interaction of the building with its surrounding landscape and other existing facilities on the site will reinforce the Museum Park concept and boost the tourism industry in the area. The building must be clearly visible to tourists and its function and facilities easily recognizable.

The idea of a ‘tourist friendly city’ can be implemented all over Tshwane and not just in one building. Smaller information stands (temporary or permanent structures) can be placed at strategic points to stimulate the tourism market as a whole and make the community more aware of available activities.

This thesis promotes the concept of a mixed-use community interacting in public space, by creating social gathering places, developing a sense of guardianship and providing places for community events. This can build in a strong sense of community for residents and workers in the area. Where public space goals and management strategies are concerned, the Node must reflect harmony between the development itself, the existing community and the public sector. A sense of place and a variety of destinations must be created, offering a wide-range of uses and activities so that the facilities are vibrant and well-used during all seasons and serve a variety of people of all ages, races and economic levels. The goal of such an information node must be well-integrated with the existing communities and its context.
According to Whole Building Design Guide\(^1\) the following points can be seen as guidelines for a project’s design objective:

1. **Accessible:**
   - Pertains to building elements, heights and clearances implemented to address the specific needs of disabled people.
   - Provide equal access.
   - Plan for flexibility.
   - Be proactive.

2. **Productive:**
   - Pertains to occupants’ well-being, physical and psychological comfort, including building elements such as air distribution, lighting, workspaces, systems, and technology.
   - Integrate technological tools.
   - Assure reliable systems and spaces.
   - Design for the changing workplace.
   - Promote health and well-being.
   - Provide comfortable environments.

3. **Aesthetics:**
   - Pertains to the physical appearance and image of building elements and spaces as well as the integrated design process.
   - Engage the appropriate language and elements of design.
   - Engage the integrated design process.

4. **Functional and operational:**
   - Pertains to functional programming, spatial needs and requirements, system performance as well as durability and efficient maintenance of building elements.
   - Account for functional needs.
   - Ensure appropriate product or systems integration.
   - Meet performance objectives.

\(^1\) National Institute of Building Science (2007)
5. **Secure and safe:**
Pertains to the physical protection of occupants and assets from man-made and natural hazards.

- Plan for fire protection.
- Ensure occupant safety and health.
- Resist natural hazards.
- Provide security for building occupants and assets.

6. **Sustainable:**
Pertains to environmental performance of building elements and strategies.

- Optimize site potential.
- Optimize energy use.
- Protect and conserve water.
- Use environmentally preferable products.
- Enhance indoor environmental quality.
- Optimize operational and maintenance practices.

7. **Historic preservation:**
Pertains to specific actions within a historic district or affecting a historic building whereby building elements and strategies are classifiable into one of the four approaches: preservation, rehabilitation, restoration or reconstruction.

- Apply the preservation process successfully.
- Update building systems appropriately.
- Accommodate life safety and security needs.
- Comply with accessibility requirements.
Successful public spaces make business sense if they are creatively used and properly managed. A vibrant square or active, pedestrian-friendly street contributes directly to the satisfaction of the client and improves the competitiveness and economic return of a building or mixed-use development, and of its tenants. A successful public space can push the rents of surrounding buildings upwards and reduce vacancy rates. Income can also be generated directly by the spaces themselves, by providing rental facilities for catering and events. To collaborate with tenants and the community on the use and management of the spaces will build strong ties with potential sponsors and investors, and will also help to offset operational costs.

Successful, active public spaces have been shown to increase the value of surrounding properties, and can have substantial positive long-term effects on the community and its context. Investment in new developments and the conversion of existing buildings around Pretoria Station and the CBD of Tshwane is an investment in preserving and enhancing the value of historical properties far into the future. Developers, private investors and municipalities can work together to ensure that all public spaces in a new development are integrated into the fabric of the community, bringing life to all aspects of the development. The user group is the public. The proposed project must be a public space that can provide information to anyone, including tourists, travelers, local citizens and the disabled.

The processes and outcomes of urban design involve and affect users and their interests in different ways: as individuals; as members of local groups, communities, and society as a whole; as occupiers and users; and as members of present and future generations.
building accommodation

1. Information Centre
2. Exhibition space
3. Tour operators and travel agents
4. Office space
5. Internet facilities
6. Coffee bar / Take-away deli
7. Restaurant and kitchen
8. Retail
9. Transportation
10. Accommodation facilities (small hotel)
11. Conference facilities / lounge / function venue
12. Theatre / cinema
13. ATM / foreign exchange
14. Dry cleaners
15. Medical and police facilities
16. Toilets
17. Lockers
18. Beauty spa
19. Luggage storage
20. Rental facilities: cars, laptops, phones.

It can be said that …

cities are like fragments of culture, social and historic fabric. They represent the history of a place, the society, and the culture of people. Cities are the interplay of spaces, places, cultures and people that have accumulated over time to become points of elaborate expression of urban form.

On arrival in a new, unfamiliar city, tourists normally want to obtain information to enable them to see as much as possible in a short time. Information centres give the first impression of a city’s character. This thesis focuses on the information required by people and the supportive facilities that can enhance the experience of visitors or local residents of the city. The conversion of the old fire station can accommodate some of these proposals.
tourism
3.1 THE SOUTH AFRICAN TOURISM INDUSTRY

South Africa’s scenic landscapes, climate, cultural diversity and reputation for delivering value for money have made it one of the world’s fastest growing holiday destinations. The number of foreign tourists visiting South Africa has more than doubled since 1994, from less than three million to a record 6.7 million in 2004.1

Tourism is one of the fastest-growing industries in the country, contributing R93.6 billion to South Africa’s gross domestic product in 20041 and receiving an increasing number of international accolades. Due to its unique historical past, South Africa generally has first-world infrastructure at third-world costs. The country is highly diverse1 in terms of its climate, culture, tourist activities and infrastructure, catering for virtually every tourism niche from eco- and cultural tourism through to adventure and sport tourism.

South Africa is one of the world’s most affordable holiday destinations.1

The number of foreign tourists visiting SA has more than doubled in 10 years.1

Tourists contribute almost R1-billion to South Africa’s economy each month.1

Campaigns involving tourism in South Africa:

Poverty-relief funding
The Department of Environmental Affairs and Tourism’s poverty-relief projects2 promote the following:

“The development of community-owned tourism products and the establishment of tourism infrastructure, including roads, information centres and tourism signage. They are categorised into product development, infrastructure development, capacity-building and training, the establishment of small, medium and micro enterprises and business-development projects.”

Welcome Campaign
The Welcome Campaign2 encourages all South Africans to embrace tourism and share South Africa’s rich natural and cultural heritage.

Sho’t Left Campaign
This domestic marketing campaign2 aims to increase the number of domestic tourists nationally. The campaign showcases accessible holiday opportunities in the provinces. In alignment with the Tourism Black Economic Empowerment Charter, this project also addresses unemployment and skills transfer.
The South African Cabinet has approved the International Tourism Growth Strategy. The strategy not only aims to increase arrivals, but also to:

_increase the duration of the time tourists spend in South Africa;
_ensure that tourists travel throughout the country and not just to a few provinces;
_facilitate transformation and B.E.E. in the local tourism industry.

South Africa has made its mark as a world meeting, incentive, conference and exhibition destination. The New Partnership for Africa’s Development (N.E.P.A.D.) identified tourism as an important sector to address the development challenges facing Africa. The N.E.P.A.D. Tourism Action Plan has been developed to provide a detailed framework that includes the following interventions in its focus areas:

_the creation of an enabling policy and a regulatory environment;
_institution building aimed at promoting the marketing of tourism;
_research and development;
_investment in tourism infrastructure and products;
_human resource development and quality assurance.

Department of Environmental Affairs and Tourism state that:

“South Africa hosted the 2004 Hotel and Tourism World Africa Conference in Sandton, Johannesburg, in June 2004. The Conference focused on a global and regional overviews of development in the hotel and tourism industry, the involvement and responsibility of the government regarding the industry, as well as the importance of a good transport infrastructure. South Africa Tourism spent R468 million in 2004 to market the country as the most preferred destination in the world, to retain existing markets, and to grow the country’s share of the global tourism market to 2%.”
Domestic tourism is particularly valuable\(^1\) to the country because unlike foreign tourism, it is not seasonally based. It contributes R47 billion to South Africa’s economy\(^1\) and there is huge potential for growth. Some 49.3 million trips are made annually by South Africans within their own country. This comprises 46% of the country’s total income from travel expenditure.\(^1\)

A study conducted by the department and South African Tourism, as part of developing the strategy\(^1\), found that:

“Nearly two-thirds of trips were conducted to visit friends and relatives. Although holiday travel accounts for only 16% of trips, it accounts for 44% of all expenditure. Therefore, by focusing on holiday travel, the overall value of the domestic tourism market will be increased.”

Some 64% of local people who travel reside in KwaZulu-Natal, Gauteng and the Eastern Cape. These three provinces, in turn, receive 60% of the domestic tourist trade. Some 60% of domestic travel is undertaken in the province in which people live (intra provincial travel), while only 40% of trips taken are to another province (inter provincial travel).

To continuously support the growth of the domestic industry, the following have been implemented:

- greater promotion of the domestic tourism brand;
- promotion of a set of experiences that relate to South African consumers;
- distribution of appropriate information in specific places;
- facilitation of the development of co-operative product packages;
- development of marketing and distribution channels;
- promotion of repeat visitation.
The domestic market currently provides the following value to the South African economy:

“The Domestic tourism market is comparable with the International tourism Market in terms of size and value – even with only a small proportion of the domestic population currently taking trips for holiday purposes. This domestic market is currently valued at some R47 Billion, and research indicates there is definitely opportunity for growth.”

The domestic market has untapped value and potential for growth. The opportunity exists to grow the domestic market, increase the value of the market and combat issues of seasonality, geographic spread and limited trip expenditure.

The domestic tourist provides the base load for the International Market. Support of the local industry by South Africans can realise improved quality in product and services, maintenance of occupancy levels and ultimately the confidence of international visitors. This reduces the exposure of the tourism industry to fluctuations in international demand, which is extremely sensitive to global, political and economic issues.

It is established by the Department of Environmental Affairs and Tourism and South African Tourism that 64% of people who are travelling reside in KZN, Gauteng and the Eastern Cape. These three provinces similarly receive 60% of the domestic tourist trade.

The 60% of domestic travelling is within the province in which people live (or INTRA provincial travel). Only 40% of trips taken are to other provinces (INTER provincial travel). The need to improve geographical spread of domestic tourism is obvious.

1. **INCREASE EXPENDITURE**
   (more trips, length of stay, average trip expenditure)

2. **REDUCE SEASONALITY**
   (encourage year round travel)

3. **IMPROVE THE GEOGRAPHIC SPREAD OF TOURISM**
   (more destinations and activities)

4. **INCREASE VOLUMES**
   (convert, exploit, grow and develop)

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**FIG 3.10:**
Domestic Tourism Objectives

**FIG 3.11:**
Geographic spread of domestic tourism

2 Department of Environmental Affairs and Tourism and SA Tourism (2007:3)
Tourism Organizing Plan

Based on research into opportunities and challenges,1 SA Tourism has developed a Tourism Organizing Plan to maximize tourism value in 2010. This includes measures to increase the number of graded establishments, develop a database of tourism products in the country and address poor service levels and skills shortages.

The Tourism Organization Plan1 is concerned with ensuring tourism-friendly transport at focal points. South Africa is to invest R170-million into its Tourism Enterprise Programme, an initiative designed to stimulate small, medium and micro enterprise development in the tourism sector.

For the first time in its history, F.I.F.A. will be contracting non-hotel accommodation such as national park accommodation, bed and breakfasts, lodges and guesthouses during the 2010 World Cup. It is stated that this will help to achieve the dual objectives of spreading tourism benefits beyond cities where matches are taking place and of providing spectators with an even wider range of accommodation options. Business people are cautioned against focusing only on accommodation when looking for opportunities ahead of the World Cup.1

South Africa’s Hospitality sector moving confidently towards 2010. The boost in the country’s tourism levels, as well as its knock-on effect on hotel accommodation, shows that the hospitality industry is moving confidently towards the 2010 F.I.F.A. World Cup South Africa.1 Overall growth of tourism’s contribution to the South African economy has had a predictable knock on effect on hotel performance.1

The South African World Cup in 2010 will provide a huge opportunity for tourism in Africa as a whole, experts have argued. The 2010 World Cup boasts the slogan “Win in Africa with Africa” and officials are hopeful it will help to build a lasting legacy for South African football. The world is still awaiting the first African winner of the World Cup but many pundits see the 2010 tournament as a great chance to banish this statistic.2
The boost in the country’s tourism levels

According to BauNews\(^3\), the hospitality industry is moving confidently towards the 2010 F.I.F.A. World Cup South Africa. “We are moving confidently towards 2010 and beyond and will be focusing on skills development and our staff to ensure a consistent world class delivery” said Helder Pereira, Managing Director of the Southern Sun\(^3\), Tuesday.

The ‘BnB Sure Team’ responds to F.I.F.A. 2010 directive

All accommodation will need to be graded by the Tourism Grading Council of South Africa (TGCSA)\(^4\) to meet the requirements of Match, the F.I.F.A. mandated company responsible for accommodation and information technology for the 2010 World Cup.

It was also decided that Match\(^4\) will consider non-hotels as an accommodation option for the first time in F.I.F.A. history. This will include guesthouses and B&Bs. Following this decision, BnB SURE has decided to assist its policyholders, both new and existing, with an additional 5% premium discount if they are graded by TGCSA\(^4\). This will in some way assist establishments insured by BnB SURE to meet the cost of grading.

2010 not disabled friendly.

“I think it's highly unlikely unless the industry, government and 2010 planners catch a big wake-up,” said Fadila Lagadien,\(^5\) trustee of the Disability Empowerment Concerns Trust, and disability representative on the SABC board. She estimated that about one million of the aimed-for 10 million 2010 visitors would be disabled.\(^5\) They would need access to hotels, public buildings and stadiums, suitably trained hospitality staff and guides, space for their helpers and access to transport. It was estimated that about seven million people (15%)\(^5\) of South Africa’s population of 47 million were disabled.

Many of Johannesburg’s top hotels are already fully booked for the 2010 World Cup.\(^6\)

According to the 2010 organising committee’s latest progress report released last week, 18 584 hotel rooms\(^6\) have already been contracted for the event. Match Event Services, the company contracted by F.I.F.A. to look at the World Cup’s accommodation requirements, is working towards a target of 55 000 contracted rooms.\(^6\) In addition to hotels, Match is also looking to contract non-hotel accommodation such as lodges, guesthouses, national park accommodation and bed-and-breakfasts.\(^6\)

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4 The BnB Sure Team (2006)
6 Gifford, Malwedi, Craig (2006)
The Jacaranda City\(^1\) (so nicknamed after its blossoming jacaranda trees) offers an ideal location for tourist experiences. Pretoria boasts a strategic location, within easy reach of Johannesburg International Airport, and is a gateway to many tourist destinations, from the Kruger National Park and other game lodges to the beaches of Kwa-Zulu Natal.

The city enjoys a warm climate, with an average of nine hours\(^1\) of sunshine per day for 300 days a year. Pretoria offers many options for entertainment and recreation. The city hosts both local and international sporting events. World-class stadiums cater for a variety of sports, health clubs, gyms, swimming pools and golf courses. The city is renowned, both locally and internationally, for having some award-winning restaurants.\(^1\)

It is home to a variety of nature reserves, including the National Botanical Gardens and the National Zoological Gardens. Hiking trails are within easy reach, and several game lodges are located within a short distance from Pretoria, offering opportunities to view the big five in their natural habitat.

As the seat of executive power in South Africa\(^1\), Pretoria also displays examples of the country’s cultural heritage. The culturally minded visitor has a choice of 35 museums.\(^1\) Art routes, galleries and art museums feature a selection of both local and international works of art.

Pretoria has some 200 conference facilities\(^1\) that range from formal auditoriums to intimate venues. A variety of accommodation options is available to the overnight visitor, from quality hotels to guest houses and lodges, furnished apartments, resorts and youth hostels.
G024 Online describes Pretoria as the following:

“Pretoria offers all the attractions of a main city. Burgers Park is Pretoria’s first park, established in 1882. The Fountains Nature Reserve was proclaimed in 1895, claimed to be the first in Africa. Around Church Square are several buildings built in the late 1800s style: Raadsaal (Council Hall of the Zuid-Afrikaansche Republiek), Palace of Justice, now home of the Supreme Court, Post Office, old Reserve Bank, Sammy Marks Museum is a Victorian period house of a sumptuous lifestyle. Paul Kruger museum is in the house of President Paul Kruger of the Zuid-Afrikaansche Republiek. Melrose House, built in 1886, is an example of Victorian lifestyle. Pretoria Art Museum hosts paintings of South African artists. The Pierneef Museum has an exhibit of the artist Pierneef. Van Wouw House was the home of sculptor Anton van Wouw, and exhibits some of his work. The Museum of Science and Technology has exhibits in which visitors can participate. Pretoria Zoo (the National Zoological Gardens) is the largest zoo in South Africa and with an aquarium. At the State Theatre, consisting of several theatres, productions range from opera and jazz to ballet, drama and cabaret. In the Wonderboom Nature Reserve, just north of the Pretoria Zoo, is a giant fig tree of about 1000 years old, and which grows over an area of 0.5Ha.”

LIST OF MAIN ATTRACTION OF TSHWANE ACCORDING TO THE LONELEY PLANET:

- UNION BUILDINGS
- PRETORIA ART MUSEUM
- STATE THEATRE
- CHURCH SQUARE
- PIERNEEF MUSEUM
- PALACE OF JUSTICE
- OLD RAADSAAL
- KRUGER HOUSE MUSEUM
- AQUARIUM AND REPTILE PARK
- NATIONAL ZOOLOGICAL GARDENS
- MUSEUM OF SCIENCE AND TECHNOLOGY
- MELROSE HOUSE MUSEUM
- TRANSVAAL MUSEUM
- CITY HALL
- AFRICAN WINDOW
- VOORTREKKER MONUMENT

FIG 3.16: Melrose House
FIG 3.17: Union Buildings

1. G024 Online
2. Fitzpatrick et al. (2006:432)
1. **Natural Heritage Tourism in Tshwane:**
The natural features of Tshwane range from 2 000 million year-old granite rocks to grassy highveld plains and the shrub lands of the African savannah.

2. **Tshwane welcomes the Physically Impaired Traveler:**
The City of Tshwane makes provision for the physically impaired traveler who wants to experience the capital city’s tourism treasures.¹

3. **Business Tourism and MICE industry in Tshwane:**
Conferences present the platform for learning and information exchange. The City of Tshwane is perfectly geared to be in the best position to do South Africa proud.¹

4. **Sport Tourism:**
The City of Tshwane plays host to numerous local, national and international sporting events. Major sporting facilities in the city.¹

5. **Heritage, Arts and Culture Tourism in Tshwane:**
The City of Tshwane is a progressive city whose charm lies in its harmonious blend of African roots and European traditions. The city is a cultural city with a variety of museums, monuments, historic buildings and art centers.¹

¹A City of Tshwane Metropolitan Municipality (2007)
The Tourism Forum is an informal grouping of people in the tourism industry, meeting on a regular basis to share strategic information and ideas, focus on local tourism products, support viable tourism initiatives and in general, to develop and promote tourism business in the capital city.

The Tourism Forum: Vision and Aims

It is the aim of the Tourism Forum to strive towards a common vision for tourism in Pretoria and for Tshwane Metropolitan area to become a preferential tourism destination. The development of shared tourism products and/or a family brand of products will have common benefits for all participants.

The whole region has to work together in promoting the city as a whole. In order to minimize duplication, co-ordination needs to be addressed in marketing efforts, products and activities. The development of a common slogan and identification of common target markets. Cross marketing techniques and strategies would optimize the sustainable and economical use of facilities and resources.

MUSEUM PARK’S MISSION:

“To passionately and in a sustainable way develop and promote the unique experience in our capital city, thereby becoming a preferential tourism destination to the benefit of all.”

TOURISM DEVELOPMENT PROJECTS AND IDEALS:

- Promotion of heritage routes
- Tourism training to staff in industry
- Development of information centres or services
- Development of the tourism potential of areas
- Rejuvenation of inner city
- Trauma support
- Tourism expo
- Networking
- Sharing of information and development
- Support Wednesday Parades at Church Square
- Development of a year programme of tourism events
- Introduction of local tourism products
- Busking in the inner city.”

4.1 INTRODUCTION

The Spatial Development Strategy 2010 and Beyond of Tshwane\(^1\) state the following:

“The Inner City is strategically placed as the most important ‘place’ in Tshwane for the 2010 World Cup. This is in all probability the area where most of the tourists will be staying, going out, eating out and attending fan parks during the broadcast of the games.”

The inner city is the area that can derive the most economic and social benefit from any investment that the municipality makes.\(^1\) From an environmental, economic and social point of view, it is generally acknowledged that the inner city is currently not functioning as it should if it is to fulfill its role as the functional and symbolic heart of the capital city of the Republic of South Africa.

In identifying the first round of Priority Areas\(^1\), certain criteria were used to determine the most suitable locations in the city for these areas. The criteria include the Gautrain Station precincts.\(^1\)
The new Gautrain Station\(^1\) in Pretoria will be located south-east of the existing Pretoria Station with its historic Herbert Baker building. It is an important landmark in the City and is located near the proposed Information Node site. The new station will be situated underneath the existing railway lines and platforms.\(^2\)

**VISION OF THE PRETORIA STATION:**

“Being one of the anchor stations of the project, the Gautrain Pretoria Station provides access to and from the Pretoria CBD. It will further also have an important tourism role and stimulate urban renewal in Pretoria’s CBD. The Gautrain Station would be a tourism starting point for the CBD from where tourist attraction within and beyond the city can be visited and from where connections to regional tourist destinations can be made. Accordingly, the station should accommodate all relevant tourism information.”\(^2\)

In addition to the above, the station would be a catalyst for the upgrading and renewal of the Pretoria CBD area, which will in turn provide improved living and working environments for local users. The latter objective is integrated with the need to create proper linkages, provide pedestrian pathways, clean the environment and counter-act urban decay.

**ACCESS TO THE PRETORIA STATION:**
It is anticipated that more than 55 000 people\(^1\) will use the Gautrain Station on a daily basis. A significant number of passengers arriving at this station will walk to their end destinations. Relevant pedestrian links will thus have to be established to ensure easy access to and from the station. Over and above the Gautrain feeder and distribution services, Metrorail services, bus services provided by Pretoria City Transport and taxi services operating between the Tshwane suburbs and the CBD are expected to feed and distribute passengers to and from the Pretoria Station.\(^2\)

The Gautrain is a state-of-the-art rapid rail network\(^1\) planned for Gauteng. The rail connection comprises two links, namely a link between Tshwane (Pretoria) and Johannesburg and a link between O.R. Tambo International Airport and Sandton.\(^1\) Apart from the three anchor stations on these two links, seven other stations will be linked by approximately 80 kilometers of rail along the proposed route.\(^2\)

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LAND USE IN THE PRETORIA STATION AREA

Like the Johannesburg Park Station, the Pretoria Station is situated in a city which is already formally established and forms the economic core of the metropolitan area. As with the former, the Gautrain Pretoria Station\(^1\) is deemed to generate urban upliftment and revitalization, encouraging growth in the areas of business, housing and tourism. Progress regarding the renewal of the Pretoria CBD has already been made with the construction of the Department of Trade and Industry (DTI) building and the planning of the Nelson Mandela Development corridor along the Apies River and Nelson Mandela Drive.\(^1\)

ATTRactions IN THE PRETORIA STATION AREA

The following attractions and destinations\(^1\) are important places in and around Pretoria Station:

- _the proposed Salvokop Village and Freedom Park_
- _Voortrekker Monument_
- _UNISA_
- _museum precinct, which includes City Hall, Transvaal Museum and other museums in Visagie and Minnaar Street_
- _Church Square_
- _National Zoological Gardens and the National Cultural History Museum_
- _Union Buildings_
- _Nelson Mandela Development Corridor and the Department of Trade and Industry development._

\(^1\) Gauteng, Provincial Government (2007)
4.3 THE LOCATION OF THE SITE

The site lies to the south-west of the city centre of Pretoria, in Museum Park near the Pretoria Station. It is conveniently located on major movement routes. It forms part of the rich historical heritage of Pretoria. Minnaar Street runs parallel to Church Street and forms the main axis of Museum Park.

FIG 4.5: Map of Pretoria Central: Context and site allocation.
4.4 CONTEXT NETWORKING

Museum Park is situated in close proximity to nodes which form part of important transport networks into and out of the city. A reasonable amount of pedestrian traffic flows from the Pretoria and Bosman Street Stations through Minnaar Street into the centre of town and vice versa. The location of the Pretoria City Hall and Transvaal Museum as part of Museum Park makes this an important location for tourists and tourist transit networks. More travellers will be using the station with the implementation of the Gautrain, which will require an underlying support system for transportation. With the concept of marketing the city, a network of specific routes will be created. This network will provide the option of going on a tour through the city and back to the Node or Station. There will be regular pick-up intervals at certain main points of attraction that are mainly situated in Museum Park. These points can become waiting-areas defined by a structure that serves as a marketing tool.

1. Station
2. Information Node
3. Pretorius Square
4. Church square
5. Science Museum
6. Burgers Park
7. Melrose House

FIG 4.6: Arial photograph of Pretoria Central with route of network.
The proposed site for the Information Node is Erven 913 & 914, on the corner of Bosman and Minnaar Streets. It is located between the African Window Museum and the City Hall.

A number of factors were taken into consideration when the site for the proposed building was chosen. Together, the existing buildings should share the resources provided by people and the dynamics of human activity. If this could be achieved it would strengthen the credibility of the project and create an environment for different buildings to interact with one another.
This particular location is suited to the project for the reason that the area has the potential of becoming an important node of cultural activity – a place frequented by tourists and the local community. It is, however, important to ensure that the development of such a node is financially and functionally viable. Placing an information node and other related facilities in this area would not only concentrate these functions around an ‘appropriate node’, but would also ensure that the area is used seven days a week by people having a personal interest in the area. Currently, the existing buildings on the site include the African Window Museum, Mint House, Minnaar Street House and the Old Fire Station. The site is not used to its full potential and there is no interaction between the neighbouring structures. The African Window forms the main function and point of activity of the site. The Mint House is used as office space, while Minnaar Street House is vacant. The original Old Fire Station building is isolated from the rest of the site by insensitive subsequent additions.
The development of the Information Node would incorporate Minnaar and Visagie Street Houses. The development of the entire site would complete the block as one unifying design, with facilities that are integrated with each other. The African Window is purely functional in museum terms and makes little allowance for public use of the site. The design proposal will incorporate public spaces.

THE AFRICAN WINDOW MUSEUM. The African Window Museum was previously the Old Royal Mint, which was built in 1921. The Mint was originally built on a site which was already of historical importance. A bronze plaque of the Council for National Monuments (now SAHRA) fixed to the fence along Visagie Street explains that the site was previously known as the “Convent Redoubt”. The training tower has historical value and acts as a landmark on the site.

MINT HOUSE AND MINNAAR STREET HOUSE. The Mint House was occupied by the Mint Director, and Minnaar Street House by the Director of Works. The Mint House is a traditional style building and was renovated when the African Window was being developed. It was renovated with the aim of turning it into a restaurant. At present the house is occupied by an Environmental Centre Office. Minnaar Street House is currently standing empty and is in need of renovation before it can be occupied. The house could be utilized by the Information Node and its related activities. The Fifty Year Act focuses on the protection of buildings older than fifty years that have not yet been declared monuments. These buildings provide historical character and richness to the site and should be incorporated into its proposed development.

OTHER SURROUNDING BUILDINGS FORMING PART OF THE CONTEXT:

LORETO CONVENT. A convent school for girls is located in Visagie Street to the north of the site. Its sports grounds can supply overflow parking for large events at the African Window.

THE CITY HALL, PRETORIUS SQUARE AND THE TRANSVAAL MUSEUM. These are places of great historical importance and main tourist attractions in the area. Pretorius Square is not utilised to its full potential.

The Transvaal Museum is built on a civic scale and creates a landmark. The west façade is of sandstone and is beautifully detailed, while the extended side wings are of face brick. It forms a grand edge to Pretorius Square.

The City Hall is only on a civic scale where the clock tower stands. The wings and the east façade are of lesser proportions, being only three storeys high. The west façade of the City Hall does not define the edge of Bosman Street, nor does it respond in any way to the street section on which the Old Fire Station is located. By defining this particular street edge, the entire space will be defined.
The site forms part of the Museum Park redevelopment program (RDP) in Pretoria. Museum Park currently stretches from Schubart Street in the west to Van der Walt Street in the east, and from Skinner Street in the north to Scheiding Street in the south. The development is concentrated around Minnaar Street and is modelled on the Smithsonian in Washington DC.

The idea is to develop a park that offers the largest focus of cultural resources in Africa with the following attempts:¹

- To visually and structurally group a number of diverse museums, buildings, spaces and activities all related to conservation and education into a unified whole. There would also be facilities for functions and conferences, as well as restaurants and museum shops. The Museum Park is well supplied with safe parking and focuses and promoting pedestrian links.”

¹ Museum Park (2006)
The vision for the Museum Park Development was initiated with the relocation if the National Cultural History and Open-Air Museum. In 1989 and 1991, when the temporary buildings in Boom Street were flooded, the museum had to be evacuated. After investigating various options, the premises of the old South African Mint in Minnaar Street were chosen as the most appropriate and most economic option.

A contextual study of the area to which the new museum was allocated revealed an unusual concentration of cultural attractions. There are the Melrose House Museum, Burgers Park, the Transvaal Museum, the City Hall, the Old Fire Brigade building and the new African Window Museum in the converted Old Mint Building. Apart from Melrose House, these attractions form an aligned ‘cultural belt’ between Visagie and Minnaar Streets.

In 1985 the Museum Park Company commenced the upgrading of Minnaar Street into a pedestrian-friendly spine that links the cultural attractions. Holm Jordaan Holm Architects were appointed in 1991 to upgrade Minnaar Street. The design of markers to define and identify the Museum Park precinct was included in the development. Minnaar Street is currently a well utilized pedestrian spine and has been transformed into a street with a recognizable identity.

The following institutions are core members of Museum Park and have direct representation on the Board of Directors of Museum Park:

**National museums and institutions**
- National Cultural History Museum
- Transvaal Museum
- Geoscience Museum.

**Other local museums and institutions**
- Melrose House
- Enviro Centre
- Museum Park Discovery Centre
- Kruger Museum
- Pretoria Art Museum
- Fort Klapperkop Museum
- Tswaing Meteorite Crater
- Pioneer Museum
- Willem Prinsloo Agricultural Museum
- Sammy Marks Museum.

**Historical sites and buildings**
- Burgers Park
- City Hall of Pretoria
- Pretorius Square.

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1 Museum Park (2006)
**mission and vision of museum park**

The vision of Museum Park is to create a cultural experience for the visitor and to share our country’s heritage with the rest of the world in the capital city, Pretoria.

Museum Park is an organization that develops and markets the heritage activities of several museums and historical sites in a prominent precinct in Pretoria as a tourism destination. This precinct is regarded as possibly the largest focus point of cultural resources in Africa.

The overall objective of Museum Park is to:

> “Promote public awareness, understanding and appreciation of cultural, scientific, artistic and natural heritage, science, engineering and technology and to enhance the knowledge and expertise of the people of South Africa in these fields. In order to achieve this, the objectives are to generate own income by way of trading, sponsorships and other means to offset expenditure. Furthermore, the task of Museum Park is to attract people to the Museum Park precinct by marketing, facilitating and co-coordinating heritage, tourism, recreational and educational related activities linked to the mandates of participating institutions.”

**the character of the built environment**

A variety of building styles are found in Museum Park. Styles vary from modern office blocks to Neo-Classical sandstone buildings. Building uses vary between recreational facilities and maintenance workshops for the Public Works Department. There are, however, certain buildings which play key roles in the Museum Park development. The two most important ones, both in scale and symbolic meaning, are the Pretoria City Hall and the Transvaal Museum. Both these buildings are on a civic scale in terms of spatial arrangement and architectural style, with the open area between them being an important space within the area as a whole. The Transvaal Museum is fully operational, but the City Hall building is very much under-utilized. Another important venue is the African Window Museum. This museum, bordered by Visagie, Schubart, Bosman and Minnaar Streets, offers the largest collection of artefacts of all the cultural history museums in South Africa.
Minnaar Street forms the backbone of the Museum Park Development. The closing off of the western end of Minnaar Street and the lack of public facilities provide little incentive for pedestrians to move down the street to and from Burgers Park. This fact has the advantage that Minnaar Street will not become a high speed traffic thoroughfare. At present, the African Window opens onto Visagie Street, and is situated on the corner of Visagie and Schubart Streets. There are pedestrian entrances to the African Window on both Minnaar and Bosman Streets. The site is easily accessible. The train and bus stations are in close proximity to the site, which is situated between the station and the CBD. High levels of pedestrian activity take place around the site, and these will increase with the development of Museum Park. A diversity of cultures move through this area on a daily basis. As Minnaar Street is intended to be a cultural spine, the site is well suited as a location for the Information Node.

The first phase of the Museum Park development provided street furniture along its spine, visually connecting the related functions and broadening the sidewalk on one side in order to emphasize the flow of pedestrian traffic. A row of parallel parking spaces was also provided along the northern edge of the street. The approach involved the incorporation of important buildings and elements along the street into the development. The project was initially envisioned by Louis Cloete, who was involved with the City Council. Up to this point the design had been done by Holm Jordaan Architects and Urban Designers.

Minnaar Street has been upgraded to a pedestrian-friendly street, using landscaping as well as changes in paving. Although it functions well as a pedestrian walk, there are certain areas of the Museum Park development that need to be addressed:

- Although it is based on the Smithsonian model, only the northern side of Minnaar Street has been activated.
- The entrance to the African Window is on Visagie Street, resulting in the reduction of pedestrian activity on Minnaar Street.
- Activities do not extend beyond the dead-end of Minnaar Street, resulting in a lack of pedestrian activity beyond Bosman Street.
- The tourist infrastructure needs to be addressed. A lack of information undermines plans to increase tourism in the area.
- The transportation of tourists between attraction points and the station also needs to be addressed.

1 Museum Park (2006)
The height of buildings in Museum Park vary, with most of the buildings towards the west being three to four storeys high, and the housing blocks to the east having an average height of seven storeys. This is due to the residential zoning requirements of the area around Burgers Park. Few offices in Minnaar Street are exceptionally tall in relation to other buildings, the highest of these being fourteen storeys.

The building mass density in the area is much lower than that of the CBD, but increases rapidly north of Visagie Street towards Skinner Street, forming a strong barrier between the museum district and the CBD. Museum Park has provided very good opportunities for the development of small-scale open spaces with the potential to become urban ‘pockets’ used for parking as well as informal public activities.

Unfortunately, these spaces are poorly utilized, and there are only two public open spaces, both on a very large scale. All the other ‘open spaces’ are either vacant lots or on-site parking areas. The process of enhancing Minnaar Street through the use of identifiable landmarks and street furniture has made some progress. Simultaneously, development of the sidewalk has shifted the emphasis to pedestrian traffic. However, the street still does not relate properly to the scale of pedestrian activities and movement patterns. It lacks edge continuity and multi-functional smaller open spaces.

Buildings are set back from the street at various distances, with vast open areas in some cases, such as the space in front of the City Hall. However, much potential exists for the creation of better street edges and pedestrian street spaces. Rows of trees line both sides of the street, and parking is also provided. This fact relieves the amount of parking required on the site of the new design scheme that will be incorporated into this development. The area is generally under-utilized because of a lack of residential and commercial activities.
The Old Fire Station was replaced by the new Fire Station built on the south side of Minnaar Street, directly across from the old one. The Old Fire Station building was subsequently utilised to house ambulance services. At the time of the conversion of the Old Mint Building into the African Window, the ambulance services still occupied the premises and they refused any proposal by the City Council to develop the building. The Old Fire Station was therefore not included in the development of the block. For this reason, there are a number of links to the Old Fire Station, incorporated in the landscape design of the African Window, that terminate in dead ends. These already supply perfect opportunities to link the landscape design with the Old Fire Station.

The original building is highlighted in FIG 4.13. It included the Tower and Minnaar Street House.
As mentioned before, the old ambulance building was originally designed as a fire station complex. After the new fire station was erected on the opposite (south-western) corner, the ambulance services moved into the complex. The complex was designed by Cowin & Powers Architects¹ and completed in 1912. It is situated on the corner and is one of the few buildings in the precinct that defines the street edge. The complex is two storeys high and interacts well with the topography of the surrounding buildings.

ARCHITECTS:

The Archives of the Department of Architecture, University of Pretoria¹ state the following about the Old Fire Station Building architects:

“Cowin & Powers Architects started in 1912. This partnership between N.T. COWIN and E.M. POWERS in Pretoria from 1912 was first listed in 1913. The partnership was formed on winning the competition for the Central Fire Station in Bosman Street, Pretoria in 1912, probably in collaboration with JS CLELAND. The partners came second in the competition for the Boksburg Town Hall (1912), and won the competition limited to Transvaal Architects for the Dutch Reformed Church at Greylingstad in the same year, a competition adjudicated by Herbert BAKER. In 1919 they won the competition for the South African Party Club with a simple, solid classical design, characteristic of the period. In 1920 they were placed second in the competition for the ‘Johannesburg University Building’ (the Main Building, University of the Witwatersrand). The Roll of Honour for the Association of Transvaal Architects was designed by Cowin & Powers in 1920. In 1921, TG ELLIS joined the firm, the style of the firm becoming COWIN, POWERS & ELLIS.”
choice of building type

The conservation and re-use of existing buildings in the inner city must be investigated to keep the character of the city alive. The existing Old Fire Station is standing partly empty, while a small part – only one room - is used as an information facility. Other facilities like accommodation, education laboratories and conference facilities are available on the premises, but the building is not utilized to its full potential.

A proposal has been made by the Museum Park Society in co-operation with the African Window to convert the building into a discovery museum for children. The Transvaal Museum, which is located 800 m from the site, is underutilized, and proposals are under way to develop parts of it to play a more interactive role. Therefore, it would seem a more viable option not to remove possibilities from the Transvaal Museum, but rather to increase the density of functions in the surrounding buildings. Turning the Old Fire Station into a children’s museum would exacerbate the current underutilization of the Transvaal Museum.

The development of the Information Node would make visitors more aware of the surrounding activities that are available. The proposal would encourage the re-use of the existing buildings. The Fire Station has a robust internal layout, and can easily be converted. The spaces already lend themselves to accommodation, offices, retail and entertainment.

architectural style, structure and material use of the building

This building has a historical, cultural and architectural value. It is in need of restoration, conservation and re-use.

- The building is built in a U-shape and is placed close to Bosman and Minnaar Streets. The courtyard is open to the west.
- The double-storey façade facing Bosman Street is symmetrically designed around a central axis. This entrance or exit is well defined by a tower on the roof.
- Two identical wings on the northern and southern sides of the courtyard are aligned on a north-west axis.
- The Fire Station is structurally sound and relies on internal and external load-bearing walls.
- Wood-framed windows and doors, timber and granite floors and timber ceilings can in some places be recognized as original finishes.
- The original wooden doors of the vehicle entrances have been replaced by rolling steel doors.
- The original clay tiled roof has been replaced with corrugated iron sheeting which needs repainting. In some places the sheets as well as the waterproofing and gutters will have to be replaced.
- The clay brick walls are currently painted, except for those of the six-storey training tower.
- The section of the fire station presently in use is in good condition. It has been painted and the wooden floors renovated.
- The interior is in a dismal condition. In most places the paint is peeling and damp spots are noticeable.
- Steel moulded fireplaces with timber frames, square tiles and copper plates can still be seen in most of the rooms and offices. The fireplaces are in need of cleaning.
- Some of the electrical switchboard connections have been cut and will have to be rewired.
- Most of the toilets, except for those in use by the existing information centre, are unusable.
FIG 6.4: View of site

MAIN ENTRANCE TO OLD FIRE STATION BUILDING

MINNAAR STREET

FIG 4.16: Floor plans of the Old Fire Station building
FIG 4.17: To explain the Old Fire Station Building, the photographs’ viewpoints are given.

FIG 4.18: Eastern façade (Bosman Street)

FIG 4.19: Detail of entrances at eastern façade (Bosman Street)

FIG 4.20: Original ambulance sign (1912)
2

FIG 4.21: Balconies at south wing, facing towards Minnaar Street
FIG 4.22: Corner of Minnaar and Bosman Street
FIG 4.23: Minnaar Street: View to Bosman Street
FIG 4.24: View from information centre’s entrance towards Minnaar Street House
FIG 4.25: Staircase and entrance into square from Minnaar Street (unused)
FIG 4.26: Signage and entrance of Tourist Centre
FIG 4.27: Training Tower (6 storeys high)

FIG 4.28: Balcony of Conference hall facing into square

FIG 4.29: View of garages and conference hall from square

FIG 4.30: View of garages and conference hall with balcony
FIG 4.31: Northern wing and garages viewed from inside the square

FIG 4.32: Northern wing viewed from inside the square

FIG 4.33: Information centre entrance from square

FIG 4.34: Additional staircase to upper floor

FIG 4.35: Southern wing viewed from inside the square
FIG 4.36: Northern façade balconies facing towards Visagie Street House

FIG 4.37: Entrance of apartment in Northern façade

FIG 4.38: View towards Minnaar Street House

FIG 4.39: Minnaar Street House (currently vacant)

FIG 4.40: Minnaar Street House (view towards square and Training Tower)
**FIG 4.41:**
Two old fire trucks still on site.

**FIG 4.42:**
View to original entrance of the Old Fire Station Building.

**FIG 4.43:**
Original staircase with face brick walls (some painted white) and window detail.

**FIG 4.44:**
Conference hall with original timber roof and floor.

**FIG 4.45:**
Original timber floors and fireplaces in some offices and rooms.
LINKAGE: Linkage represents the glue of the city. It is the act by which all the layers of activity and resulting physical form of the city are united. Urban design is concerned with creating comprehensible links between the following:

- Visual linkage between the City Hall and Transvaal Museum;
- Linkage between the Pretoria Station and tourist attractions;
- Linkage between Church Square and the Pretoria Station;
- Linkage between Church Square and tourist attractions.

BARRIERS: Schubart Street acts as a physical barrier that prevents the extension of the Museum Park in a westerly direction.

ACCESSIBILITY: The site is centrally located and easily accessible from the station. Pedestrian accessibility from Paul Kruger Street is encouraged by the pedestrian-friendly Minnaar Street. The traffic in Bosman Street moves in a northerly direction due to it being a one way street. This creates rapid movement past the site and needs to be considered in the design process. Museum Park enhances pedestrian activity along the streets. High levels of pedestrian movement take place around the site.
NOISE POLLUTION:
The site is protected from major traffic noise disturbances. The eastern side borders Bosman Street, which becomes very busy during rush hour traffic. The thick walls of the old building, however, blocks out most of the noise pollution.

VISUAL CHARACTER AT NIGHT:
The visual character of Museum Park at night is important for determining the actual value of night-time activity. At present, activity in the evening is located more towards the eastern residential area, but does permeate the area towards the City Hall where people move down Paul Kruger Street. Minnaar Street is very quiet at night, especially towards the western end. The visual quality of the site in the evening must be designed carefully and with deliberate consideration as Museum Park may become increasingly utilized after hours.

In The Image of the City Lynch describes how people ‘image’ the city, that is, how they create and remember mental images of the large-scale environments in which they live. He focuses on how people think about the structure of their cities. From verbal and pictorial accounts, he derives five basic elements of the city image: PATH, NODE, LANDMARK, DISTRICT and EDGE.

The contents of city images needed for successful human interaction can be classified into these five types of elements. They can be applied to any urban environment, as they are derived from a study of human needs and activity patterns. These five would be useful in any context of spatial division.

Museum Park forms a district that is already improving the legibility of the surrounding area. Through further applications of design, the area can potentially become easily legible in the urban context.

1 Lynch (1960:46)
PATHS: The channels along which people move.¹

The site is easily accessible. A diversity of tourists and cultures move through the area on a daily basis. The site can easily be accessed by vehicle, train or on foot. This fact reduces the required number of parking bays needed in the area. The train and bus stations are in close proximity to the site. The main point of entry for tourists into Tshwane is the Pretoria Station.² The Blue Train, Rovos Rail, Touring Couches, Spoornet trains (and soon the Gautrain) transport tourists to and from Tshwane.

All the routes surrounding the site are major vehicular routes. Visagie, Paul Kruger and Schubart Streets are prominent vehicular routes and form the main eastern exits from the city centre. Currently, the main entrance to the African Window is on Visagie Street. This poses a problem in terms of the circulation in the streets surrounding the site. All the streets, except for Minnaar Street, are one-ways and if the entrance is missed one has to make a long round trip to return. It makes more sense to allow for pedestrian entrances from all the surrounding streets. This will also increase the use of street parking.

High levels of pedestrian activity take place around the site, which will increase with the development of Museum Park. Paul Kruger and Bosman Streets are also heavily used pedestrian paths from the Pretoria Station to the centre of town. On entering the site via the pedestrian entrance in Bosman Street, one moves through the pergola along Visagie Street House. One encounters the entrance to the African Window after passing the amphitheatre. If the site could be entered from Minnaar, Bosman and Visagie Streets, pedestrian movement through the site will be encouraged. The permeability of the site will be improved if the add-on buildings of the Old Fire Station were to be demolished. This would enhance interaction between the existing buildings on the site. Spaces could then cater for movement through the site.

¹ Lynch (1960:46)
² Fitzpatrick (2006:440)
NODES: Points in the city where paths meet or cross, experienced as points which the observer can enter. The node is a place that creates a space of activity.¹

The precinct in which the site is located accommodates important transportation nodes. The only prominent nodes in the whole of Museum Park area are the Pretoria and Bosman Street Stations. The Pretoria Station is within walking distance from the site. Taxi ranks are located in the area, but taxis are not predominantly considered as a mode of transport for tourists.

Pretorius Square, if defined more clearly and designed to accommodate a diversity of activities, could act as a node space. There clearly exists a strong need and great potential for activity nodes within the Museum Park development. Therefore, nodes should be carefully considered and incorporated. Designing functions surrounding the edges of these nodes will improve legibility in terms of spaces of public gathering and the usage of these spaces.

The current nodes on the site are the African Window Museum. At least one conference a day is held at the facility. The Museum, amphitheatre and two houses do not interact with each other. By demolishing the add-on buildings between the Old Fire Station and the rest of the site, the node could be used to its full potential by giving access to the whole site from four streets. The design will further define and incorporate the functions of the existing buildings on the site.

¹ Lynch (1960:46)
LANDMARK: Physical reference points used for orientation within the city. They are experienced externally and the observer does not enter them as in the case of nodes.

The site allows easy legibility as the African Window stands as a landmark on the main movement routes that surround the site. The Old Fire Station forms a strong corner building and edge, and can be seen as a landmark building. The training tower also acts as a landmark but can easily be missed. The visibility of the tower will be improved by the new development. The City Hall and the Transvaal Museum can also be regarded as landmarks. The visual connection of both landmarks adds to the legibility of the site. At night the lights at the entrance of the African Window Museum draw attention to the building as a landmark. The same technique should be used for the Old Fire Station tower. Visuals are important for nocturnal movement and legibility.

DISTRICT: Areas with a similar spatial and visual character. They are perceived as having some common identifiable character.¹

The greater part of Museum Park is a district on its own because of the mixture of cultural and institutional functions it contains. It is surrounded by districts which all differ in character. To the east are located the residential areas around Burgers Park; to the north are large-scale office developments and the south consists mostly of transport and informal trading areas. The potential of the site is limitless and the Information Node proposal is well suited to the site. The Information Node will complement the focus on information, conservation and education in the area. The conservation aspect would be realized not only by the re-use of the existing buildings on the site but also by increasing the awareness of South African heritage within Tshwane and the tourism field.

¹ Lynch (1960:46)
EDGE: Linear elements not considered as paths by the observer. They are boundaries between two phases or breaks in continuity.¹

Along the north side of Visagie Street, buildings form an edge that defines Museum Park clearly. The only other clearly defined spatial edge is formed by a group of taller buildings towards the south of the City Hall site. The City Hall defines the edge of Bosman Street rather ineffectively.

The edge of Minnaar Street is well defined by the Old Fire Station. The set-back of the defining edge at Minnaar Street House indicates the approach to an entrance. The pergola indicates movement from the pedestrian entrance to the African Window. The wall dividing the surrounding sites and activities from the Old Fire Station will be removed, allowing its façade to become the edge of the node. The other edges to the space will be designed so as to allow activities to spill out onto the space.

The fence along the Bosman Street edge will be removed so that the eastern façade of the Old Fire Station building can become a new edge. The removal of the garage doors will establish a visual link with pedestrians as well as vehicles in Bosman Street. Privacy will be achieved by the horizontal distance when the space is opened up, and will attract people to the square. The edges should encourage activity and promote pedestrian movement.

¹ Lynch (1960:46)
The Fire Station is already associated with an information centre and is clearly visible from all major routes and tourist activities. The spaces already lend themselves to both public and private areas that will complement the Metropolitan Activity Nodes that form part of the development strategy of the Tshwane Spatial Development plan.

Metropolitan Activity Nodes can be defined as the following:

“Centres of economic activity as far as business enterprises in the city are concerned. These are retail and office centres, which should provide opportunities for a wide range of business types and sizes. As far as possible, these nodes should be physically and functionally integrated with and around major railway stations. Metropolitan Activity Nodes should be the highest order activity nodes in the metropolitan area with the highest concentration of residential, commercial, social, cultural and other general urban activities.”

They should be characterised by:
- high intensity and high density mixed land uses;
- highest levels of accessibility;
- 24 hour activity;
- well-defined public spaces;
- pedestrian-friendly environments;
- public transport facilities and activities.

Metropolitan Activity Nodes should be extended into high density, mixed-use activity spines along certain vehicular public transport routes. The site and the existing building can be classified according to all the above criteria, thus the conclusion can be drawn that the site is well suited to accommodate an Information Node.
design philosophy and approach
In *The Production of Space*, Henri Lefebvre\(^1\) contends that there are different levels of space, from very abstract, crude, natural space ("absolute space") to more complex spatialities of which the significance is socially determined ("social space").

A **public space** or a **public place** is a place where anyone has a right to come without being excluded because of economic or social conditions.

**Semi-Public space:**

A broader meaning of public space or place includes also places where everybody can come if they pay, like a café, train, movie theatre or brothel. A shop is an example of what is intermediate between the two meanings: everybody can enter and look around without obligation to buy, but activities unrelated to the purpose of the shop are not unlimitedly permitted.

There is no expectation of **privacy** in a public space. Public spaces are attractive for budget tourists and homeless people. Whilst it is generally considered that everyone has a right to access and use public space, as opposed to private space which may have restrictions, there has been some academic interest in how public spaces are managed to exclude certain groups - specifically homeless people and young people. Measures are taken to make the public space less attractive to them, including the removal or design of benches to restrict their use for sleeping and resting, restricting access to certain times, locking indoor or enclosed areas. Police forces are sometimes involved in moving ‘unwanted’ members of the public from public spaces.
the (social) production of space

Lefebvre argues that space is a social product, or a complex social construction (based on values, and the social production of meanings), which affects spatial practices and perceptions. As a philosopher, he argues that this social production of urban space is fundamental to the reproduction of society, hence of capitalism itself. Social space is a social product - the space produced in a certain manner serves as a tool of thought and action. It is not only a means of production but also a means of control and hence of domination or power.

Lefebvre contends that the production of space in its raw form is nature, which is transformed into a product called art. The Bauhaus group considered themselves to be revolutionaries since they had developed a global concept of space. They understood that objects could not be created independent of each other in space without taking into account their interrelationships and their relationship to the whole. For them, the production of space corresponded to the capacity of productive forces which eventually led to rationality. Therefore, forms, functions and structures came together in a unified conception.

David Adjaye is one of Britain’s leading architects. He combines the physical and emotional with a theoretical approach to the essential elements of architecture. He has explored scale, measurement, space, light and materials in projects that have included private homes, retail spaces, and public buildings, refusing to lower his recognized language to a signature style.

Peter Allison states that public space is never open space. It is continuously legislated, monitored and explored by official institutions. Adjaye regards the creation of public space as a responsibility in his work. He states the following:

“We do not built public spaces; we construct it through a variety of individual govern-mentalities. It is not the organization or buildings choice, but rather the silent but obvious facilities that is recognised by everyday users as symbols of the publicness of space. An architect must visualize to constantly make this aspect visible to obtain the quality of public space.”

1 Lefebvre (1991)
2 Allison (2006:7)
Public space is not an object but rather a value-added principle of existing architecture. ¹ There is a complexity created within buildings that can be seen as a ‘third space’,¹ a kind of invisible zone of maximum interaction and social dialogue between people. This is a fundamental concept of open space, one that is predicated by both the simplicity of design and the individuality of function, use, ethics, and value. Adjaye’s buildings emphasize the functionality of the built environment while considering the experience and understanding of it. Adjaye² state the following:

“Buildings are deeply emotive structures which form our psyche. People think they are just things they manoeuvre through. But the make-up of a person in influenced by the nature of spaces.”

The combinations of the smooth with the rough and the existing and the new are strong concepts in Adjaye buildings. His goal is to make space itself present, to strengthen one’s experience of it. In many ways, Adjaye’s buildings rise from within. In an interview with Peter Allison in ‘David Adjaye, Making Public Buildings’,² he speaks of his public buildings as public rooms, marked by an informality ‘that is about everyday reality’. Attention to materials is one of the elements that he deploys to this effect. David Adjaye’s recent engagement with public buildings comes at a time of renewed urgency and debate around notions of “publicness”.

Architectural elements such as floors and walls, or glass that reflects street activities, are interpreted as material transitions between systems and environments, as boundaries that define openness and closure. The degrees of visual protection and exposure, noise and silence, reflection, colour and texture that materials provide create different modes of perception.

Rosalyn Deutsche¹ defines public space as the intimate connection with ideas about what it means to be human, the nature of society and the kind of political community we want. In this sense, it is not public space but public society that should be attended to first. Public space is never a given; it must constantly be produced and forms an essential part of civil society.

Lefebvre³ explains social space as the following:

“Social space contains a great diversity of objects, both natural and social, including the networks and pathways which facilitate the exchange of material things and information.”

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¹ Deutsche (1996:269)  
² Allison (2006:7)  
³ Lefebvre (1991:25)
ANCHORING PUBLIC SPACE THROUGH DIFFERENCE AND COMPLEXITY - PUBLIC BUILDINGS THAT MAKE PUBLIC SPACES:

Allison\(^4\) explains the concept of public buildings as components of the urban fabric that stand out where they are inserted. They produce a point of gravity around which practices can emerge and take shape. He states that these buildings are not simply in public space, but they are public space.

In public buildings, the wall can be seen as a critical element, normally associated with space that is restricted or private. Environments are given barriers in order to express logical borderlands or boundaries. Barriers must rather become components and parts of connected space and not act as divisions between two different spaces expressed as inside or outside and private or public.

The ‘third space’\(^1\) or wall, is symbolized by its different functions in the context. It is interpreted as borderland rather than borderline. In Adjaye’s buildings,\(^4\) the wall becomes a space that creates or activates public space, and does not divide inside from outside. The integrated objective of the walls of these public buildings ensures that the interactions of the inside and outside are directly co-dependent on each other. The uniqueness of and relationship between each element, the building, the wall and the surrounding context, maintain their specificity. It can be said that the energy of people moving through these elements creates an underlying visual connection between them.

The corner of Bosman and Minnaar Streets lends itself to a new interpretation to form a public space. It is situated in the perfect location with high enough levels of pedestrian and vehicle movement to form a ‘third space’.

Awareness of the interior function would become clear if the corner of the Old Fire Station building were to be opened up. If a visual link between the inside and the outside context were created, the public space could become a more accessible environment.

\(^{4}\) Allison (2006:14)
5.2 DESIGN APPROACH: SUCCESSFUL SQUARES

MISSION FOR SQUARES

The following advice in the layout and design of areas of concern in the public spaces is given by the ‘Project for Public Spaces, Inc.’: 1

flexibility

Public spaces must respond to the changing needs of a community over time. Their design should be flexible and responsive rather than fixed and static. The development of a strategy will allow for the evolution of the public spaces as the development grows and changes.

access

Access and linkages play a major role in creating vibrant public spaces. Optimizing of pedestrian, transit, bicycle and vehicular mobility and access must be consider. The design of streets and walkways will enhance the adjacent land uses and increase mobility for all users, not just cars.

facilities

The role of seating, lighting, shade and landscaping – in short the facilities that make people feel safe and comfortable in a public space must be incorporated into the design. The development aspects include the design of storefronts, restaurants, public buildings and other ground floor uses that will bring energy to the streets and enhance the success of the retail and other commercial uses.

According to Kent’s newsletter: ‘Why Great Places are more than the sum of their parts’ from the ‘Project for Public Space, Inc.’ 2 a successful urban environment’s function, should be made up of destinations. Each destination should offer many things to do. They call this concept the Power of Ten: 2 to be successful, a community should have at least ten great places and each place should have ten different things to do there. This diversity of places and activities ensures that a community will attract the people who will make it a successful place. The Project for Public Space, Inc. firmly believes that the success of public spaces can largely be attributed to the activities, events, recreational uses and social gatherings that take place there, whether planned or spontaneous and not to a fixed design.

Today, more people come to recognize the concealed energy of squares and plazas. Underperforming spaces in the inner-city can be transformed into a great nodes of activity. An understanding of how people will use a place and what activities will draw them there is necessary. Within any successful square or plaza, there should be several dynamic destinations that attract different kinds of people. These destinations should offer many things to do. Creating a great public space requires helping communities articulate a vision for these activities and destinations. The ‘Principles for Creating Successful squares’ 2 creates a concept plan with the following ten basic principles:

1 Kent (2004)
2 Project for Public Spaces, Inc. (2006)
Facilities
A square should feature facilities that make it comfortable for people to use. A bench or waste receptacle in just the right location can make a big difference in how people choose to use a place. Lighting can strengthen a square’s identity with highlighting specific activities, entrances or pathways.

Flexible Design
The use of a square changes during the course of the day, week and year. To respond to these natural fluctuations, flexibility needs to be built in. Instead of a permanent stage, for example, a retractable or temporary stage could be used. Likewise, it is important to have on-site storage for movable chairs, tables, umbrellas.

Seasonal Strategy
A successful square can’t flourish with just one design or management strategy. Great squares change with the seasons. Skating rinks, outdoor cafés, markets, horticulture displays, art and sculpture help adapt our use of the space from one season to the next.
6 Access
To be successful, a square needs to be easy to get to. The best squares are always easily accessible by foot: Surrounding streets are narrow; crosswalks are well marked; lights are timed for pedestrians, not vehicles; traffic moves slowly; and transit stops are located nearby. A square surrounded by lanes of fast-moving traffic will be cut off from pedestrians and deprived of its most essential element: people.

7 The inner Square and outer Square
The streets and sidewalks around a square greatly affect its accessibility and use, as do the buildings that surround it. An active, welcoming outer square is essential to the well-being of the inner square.

8 Reaching Out
Just as important as the edge of a square, is the way that streets, sidewalks and ground floors of adjacent buildings lead into it. The influence of a good square starts at least a block away. Vehicles slow down, walking becomes more enjoyable and pedestrian traffic increases. Elements within the square are visible from a distance and the ground floor activity of buildings attract pedestrians.

9 The Central Role of Management
The best places are ones that people return to time and time again. The only way to achieve this is through a management plan that understands and promotes ways of keeping the square safe and lively. For example, a good manager understands existing and potential users and gears events to both types of people. A feeling of comfort and safety in a square should be created, fixing and maintaining it so that people feel assured that someone is in charge.

10 Diverse Funding Sources
A well-managed square is generally beyond the scope of the average city parks or public works department, which is why partnerships have been established to operate most of the best squares examples. These partnerships seek to supplement what the city can provide with funding from diverse sources.
5.3 _Structural flexibility is required to accommodate varying spatial needs and loadings._

_Ground floor areas adjoining public spaces must be incorporated by ‘active’ rather than ‘passive’ uses. There should be interaction between inner ‘private’ spaces and outer ‘public’ spaces._

_Multiple entrances must be created to encourage interaction between public and private areas and to improve planning adaptability. Too many entrances may lead to the legibility of the block breaking down. Many entrances must be closable for security and legibility reasons._

_In locations where the privacy of the ground floor level should be preserved, a change in level between pavement and ground floor should be introduced. Privacy can also be achieved by horizontal distance, or a combination of horizontal and vertical distances._

_Balconies on the public facades allow the private domain to interact with the public areas and enhance surveillance of the public domain._

_On-street parking will be provided throughout, to support street activities. Street intersections are intended to aid the crossing of pedestrians, incorporating traffic calming devices where appropriate. This was already done when Minnaar Street was upgraded._

_To be successful, mixed-use developments need a ‘live-in’ community. When a place is one’s home, the local environment becomes one’s concern. There are already apartments and rooms designed for the original usage of the existing building. The proposed development will take a residential or accommodation component into account._

_The layout of the site lends itself towards the idea of the perimeter block, with the exception that the edges are more defined. Perimeter blocks define the public realm, only retreating from the street to form focal nodes. This creates continuity of the street and assists its use in terms of legibility and orientation. Perimeter blocks also define a private realm that offers security and privacy._

_Active pavements form a vital component of the public realm. Where appropriate, they can be up to 5 meters wide, allowing activities to spill out from the building, if desired._

_Both the existing site and building lend themselves to the easily implementation of the above guidelines._
precedent studies
The 'recycling' of a building is a reaction to the shortage of floor space in the inner city and the problems created when towns spread outwards. The re-use of buildings has important environmental, social and economic advantages for the surrounding areas. It is more cost effective and ecologically sustainable in the long term than the construction of a new building. One of the most important benefits of re-using an old building is the retention of the 'energy within'. This 'energy' is unique to a certain time – the building's heyday – and this time can not be copied or replaced by a new building. Historical buildings have a personality that makes them one of a kind.

Carte\(^1\) states the following:

“Socially, the adaptation of abandoned constructions generates dynamism, small concentrations of urban reorganization and an attractive visual variety. The reutilization of a historic building for the future improves the quality of life in neighbourhoods and built-up areas as well as keeping an important part of the town's collective memory alive.”

Mostaedi\(^2\) explains what rehabilitating architecture involves:

“Rehabilitating architecture involves delving into the past in order to rewrite history and give it new life. To restore, preserve, to repair, to reconstruct, to intervene. This family of terms refers to the same practise that seeks to refurbish old spaces in order to give them a new use, whilst safeguarding their historical character and holding back excessive expressions of personality by the designer. It is a difficult balance involving many conflicts over historical research and technical solutions.”
Carte\textsuperscript{3} supports the option of intervening in disused historical buildings, so that old structures can host different entities or activities. This is in many cases the result of a rational approach aimed at facing the scarcity of space in big cities and the high prices of space generally. A multifunctional solution often allows the final user, by offering different services or options in a given space, to optimize the use of the building.

Historic places embody the traditions and contributions of all who have used them in the past. If the city needs to remain a distinctive place with a high quality of life, then the historic places, buildings, neighborhoods, towns, and landscapes are essential resources for the present and the future. The challenge is to build on these foundations without discarding or demolishing the distinctive legacy of the past. Historic places embody the record of the identity of a society. They reflect tradition and a sense of place. They define quality of life.

The aim of this thesis is the reutilization of the Old Fire Station building to create a node with information and complementary facilities for public use. The building will accommodate new functions. Alterations with a specific use in mind will transform the existing space to house flexible and multidisciplinary facilities. These will breathe new life into Museum Park, the surrounding area and the Tshwane tourism industry.

The following projects act as precedent studies and inspire the design development of the Information Node as adaptive re-use for a public building:
6.1 DAVID ADJAYE
Nobel Peace Centre
2002-2005, City Hall Square, Oslo, Norway

The Centre is located in the Old Vestbanen Station and has strong external form that encloses a number of highly differentiated spaces within a masonry structure. Where the original space is visible, they have been transformed by radical decoration. In other places the interiors have been reoccupied by a series of installations whose materiality and orientation contrast with the enclosing fabric. Whichever approach has been used, the overall intention remains the same: to create a powerful sequence of experiences which illustrate the work of the Peace Prize programme.¹

¹ Allison (2006:24)

The canopy introduces that a new use of the existing has taken place before entering the building. 'It brings together two architectural elements which normally lead separate lives: the gateway or portal and the type of arching footway which is associated with bridges'.¹

¹ Allison (2006:35)

reception:
The area is coloured red, with a resin finish to all surfaces, furniture and storage. The use of colour and new elements contrast with the original building.¹

exhibition space and cinema:
There are two spaces for temporary exhibitions. The larger one is located on axis with the main entrance. The smaller one, for more informal exhibitions, is on the first floor. The windows can be closed off by the full-height pivoting doors. When the windows are not covered, the doors can be placed diagonal to create five separate bays. There is a small cinema next to this space.¹

¹ Allison (2006:35)

noble field:
The title refers to the manner in which each of the Peace Prize laureates is represented by a monitor standing on a clear acrylic support. At rest, the monitor displays a portrait of that person, but when approached by a visitor, it switches into a video presentation. The dark blue colour of the floor, walls and ceiling focuses attention on the monitors. This creates a calm atmosphere.¹

¹ Allison (2006:35)

café de la Paix:
In contrast to the reception area, the café is painted in different shades of green. The Yellow and Green is a spatial version of the maps on which airlines represent their flights by drawing a line between different destinations. The building is reused by mainly decoration, rather than a installation to preserve the original structure.²

² Allison (2006:35)
Influences on the design approach

- an existing building is converted to a new usage, without destroying its historical value
- the position of the building on the site and its scale is consistent with that of the Old Fire Station building
- the handling of the street front and the introduction of new elements emphasize the entrance
- the circulation of people between the different functions in the existing building
- new and dramatic colour usage in the interior that contrasts with the existing
- the use of new technology as an interactive information medium.
DAVID ADJYAE

Idea Store Chrisp Street

2001-2004, 1 Vesey Path, East India Dock Road, London.

The shopping centre as Crisp Street was built in 1950’s and serves as housing. The site for consisted of an shop unit and the larger deck which previously formed its roof.

While sensitive to its location, the exterior of the Chrisp Street Idea Store is perceived as a single volume. The quality of light and extensive use of timber create a warm interior. The use of identically coloured glass panels on the two Idea Store is a large-scale graphic device which reinforces the presence of these facilities within the communities they serve.

The use of glass in the facades respond to the materiality of the adjacent shop fronts, as well as the requirements for the new building. The front facade is most transparent, allowing the interior to be seen from the outside.

Influences on the design approach:

1. the use of coloured glass to create a unique identity during the night and the day
2. the use of light as a tool to differentiate between the old and new structures
3. glass facades that create a dialogue between the inside and outside environments
4. public and private spaces differentiated through proportion and scale of elements
5. re-use of an existing building.

1 Allison (2006:163)
2 Allison (2006:172)
Influences on the design approach:

- the use of material and structure to create walls that define interior and exterior spaces
- the use of light as a material art medium
- the accessibility of the building.

DAVID ADJAYE
Thyssen-Bornemisza Limited Edition Art Pavilion

2005, Islands of San Lazzaro degli Armeni, Venice, Italy.

The Venice pavilion\(^3\) was designed to present ‘Your black horizon’, an installation by the artist Olafur Eliasson. In the windowless space, a horizontal line at eye level serves as the primary light source. It is about personal orientation in both inner and outer space.

This pavilion is conceived as a two-sided: a pathway leads to a loggia which a view of the Laguna, or access to an impressive art work. As it is constructed of prefabricated components, it is capable of being moved to another location. Timber are the primary material in its construction for economy, lightness and ease of replacing damaged components. It is composed of a gallery that forms the main volume enclosed a column-free space, loggia, and ramped access. The louvers protect the entrance sequence from the glare-inducing view across the Laguna and provide an opportunity for the eye to adjust to light levels inside and outside the pavilion.\(^3\)

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3 Allison (2006:89)
The architects used an industrial warehouse as a container and added two isolated structures. The structures are suspended above a pool of water, a visual paradox which inverts the usual heavy-light order. The rest of the studio is very open, luminous and socially orientated.

Two cube shapes welcome the visitor with their translucent screens. Translucent screens of the modules are double glazed windows which are filled with ping pong balls and plastic beads creating a filter to give the soft light needed in the work zones. The café serves as an area for informal meetings and as a waiting room. On the opposite side a continuation of the flooring rises up from the ground to form the reception table.

Influence on the design approach:

- the creative solution of keeping the original structure of the existing building, and inserting free-standing elements (or rooms) with different functions into the space
- the use of water as a tool for separating zones (private and public) without a visual vertical barrier
- new uses of materials (like the ping pong balls in double glazing) to create a playful atmosphere.

1 Carta (2006:37)
The project involved the renovation of a Fire Station in disuse for an important theatre company from Quebec.\(^2\) Built in 1914 in the style of the Unity Temple by Frank Lloyd Wright, the building holds workshops, rehearsal room and offices. The architect conserved and restored the characteristic ceramic bricks of the era, adding lightweight elements which contrast well with the brickwork and increase the value of the original construction.\(^2\)

The extension is integrated within the context of the park. The glass facades lighten the concrete structure and at night transform the space into a light-house, visible from afar.\(^2\)

The axis of circulation originates from the very high space of the observation tower. As with the hall, the architects built an elevated walkway which link the rooms to the floor above.

**Influences on the design approach:**
- The building’s original function is the same as that of the proposed thesis building
- The usage of elements, like the training tower and its incorporation into the new use of the building
- The contrast of the new additions with the old existing building.
The need to create an attractive area from where to sell furniture, to stimulate investment and change the neighbourhoods identity in a positive way, led the architects to develop a program in four phases. It involved the conversion of two abandoned industrial warehouses in to a showroom, space for renting for design studios and offices. The project needed a striking visual identity but one which could be integrated with the neighbourhood. The solution was to cover the building with a series of diverse layers which partially covered it. Envisaged as a pedestrian zone and social centre of the complex, the space between the warehouses, usually reserved for parking, is a fundamental element of the project. The brick structure of the warehouse was renovated and the interior was minimally equipped in steel, wood and glass, so as not to detract from the furniture exhibited.\(^1\)

Influences on the design approach:

- taking the context and the influence of the neighborhood into consideration when making design decisions
- the treatment of the street front and parking as a space of interaction
- branding is incorporated in the layering of the building
- the use of shading and landscape elements to soften the harsh concrete paving
- materials chosen to contrast the existing with the new for exterior and interior
- the simplicity of new elements.

\(^1\) Carta (2006:166)
Built in 1874, the headquarters of General Mills was one of the greatest flour factories of the world. Despite being declared a site of national interest, the building has been in disuse and later a fire destroyed the whole interior. The museum, an independent space of glass and steel, has been carefully integrated into the remains of the complex with great success. In addition, the project includes the conversion of the silos and the transformation of the factory’s old offices into shops, small offices and lofts.

To benefit form the situation on the shores of the Mississippi, the architect created various accesses and walkways so that the flour complex works as a passageway link between the centre of town and the river. The decision to leave the remains of the burnt building and introduce a luminous glass space creates a balanced complex with an attractive contrast between the new and the old.

Influences on the design approach:
- the dynamic addition of the ‘light box’ inserted between the old and new buildings creates a new awareness of its historical value
- the use of a glass and steel structure that is not dependent on the original structure of the existing building
- the creation of a multi-functional building that responds to the context and its systems.
Open extended business hours

Open 24 hours a day, seven days a week

FIG 7.1: Diagram of accommodation network
FIG 7.2: Floor plans of Old Fire Station building, indicating function zones

THE CONCEPTUAL LAYOUT OF THE BUILDING

- OFFICES
- ACCOMMODATION
- CONFERENCE HALL
- TOILETS
- INFORMATION
- ACCOMMODATION
- TOILETS
- INFORMATION
- DOUBLE VOLUME

MINNAAR STREET
- most visible from street corner (coming from the station in the one way Bosman Street)

NEEDS TO LINKS WITH OPEN WINDOW MUSEUM (OLD MINT BUILDING) AND AMPHITEATER

NEEDS TO LINKS WITH OLD MINNAAR STREET HOUSE

CUL-DE-SAC: ideal for bus pick-up points

ground floor

first floor
THE EXISTING SITE AND BUILDINGS

The Old Fire Station building is closed off from the activities in its surroundings. The walls and fences around the building are removed to create a connection between the activities on the site.

The structures that were added onto the original Old Fire Station Building are demolished.

Circulation spaces between the original structures are established.

Opportunities to create new buildings that will be more supportive of the site and activities are incorporated with the new site layout.

DISPLAY CORRIDORS

The original fire vehicle garages are re-used for the main entrance.

Glass corridors connect the street with the activities inside.

These corridors act as the main information exhibition areas.

Different formats are used to provide information, for example digital projection, touch screens and displays.

Wire frame images of the evolution of fire vehicles are graphically displayed on each glass panel to remind the user of the original function of the building.
CAFÉ, INTERNET, BOOKSHOP, TOILETS AND LOCKERS

These functions act as the main supporting elements of the Information Node.

The original entrance to the rooms is re-used.

Most of the original walls are demolished.

The original fireplaces are re-used as focal points.

The original patios are re-used for outside seating to enhance the activities on Minnaar Street.

The walkways are used as outside seating to enhance activity in the square.

The toilets and internet facilities are placed as loose standing elements in the space.

INFORMATION

The original entrance of the Old Fire Station Building is again utilized as the main entrance to the Information Node.

The internal walls and first floor are demolished to create a double volume open space.

The original layout of the walls is displayed graphically as a watermark on the floor.

The corner of the building is opened up with a new glass façade layer, to make the activities inside visible from the street.

A reception ‘box’ and staircase are placed inside this space as loose elements that connect with the first floor.

FIG 7.5: Concept model of the Information

FIG 7.6: Concept model of the café, internet, bookshop, toilets and lockers
RETAIN AND ENTERTAINMENT:

- New shop fronts are created on the eastern and northern facades.
- These new structures form a supporting layer of separate entrances and serve as marketing tools for each shop.
- The Training Tower acts as an activity node in its own right, for example as a cocktail bar with seating.
- The tower is emphasized with lighting and digital projection to create a dynamic landmark, visible from the street.

CONFERENCE FACILITIES AND OFFICES:

- The original hall is re-used as a conference facility.
- Double-volume skylight shafts are inserted through the roof and floor. These connect the ground floor activities (display corridors) and the first floor activities (conference hall) visually with each other, and also enhance the natural light quality of the spaces.
- The original room layouts of the Old Fire Station building are re-used as offices, storage and toilet facilities.
NEW BUILDINGS: TOUR AGENTS AND OPERATORS / OFFICES / VENUE FOR FUNCTIONS OR EXHIBITIONS

The new buildings are placed so as to accommodate supporting functions that could not be accommodated inside the original building. The new buildings are seen as a new layer to complement the existing structures and to form an enclosed feeling away from the street. Minnaar Street House is incorporated into the square's activities by linking the old and new with walkways. The house is used as a restaurant for the public and boutique hotel guests. Catering for the function venue and conference facilities can be supported by the restaurant. By placing the new correctly scaled structures strategically, a visual link with the African Window Museum and Visagie Street House is created. Access is made possible through the Bosman or Minnaar Street entrances to the Museum and Visagie Street House.

ACCOMMODATION

The original layout of the rooms ideally lends itself to hotel accommodation. Two of the original rooms are joined to form one new boutique-style hotel room. New bathrooms are placed as loose elements, raised from the floor to accommodate services with minimum impact on the original building. The main information reception area doubles up as the boutique hotel reception, with lounges at each wing entrance acting as security points for guests. Skylight shafts enhance the natural light quality in the corridors to the rooms.

FIG 7.9: Concept model of the accommodation

FIG 7.10: Concept model of the new buildings
LAYERING:
The original building form and identity is preserved with only essential walls removed to accommodate new functions. New structures are layered onto the existing to create spaces for these functions. The primary function of information is layered by the secondary functions, creating a rich and diverse environment.

CONTAINED SPACES:
The concept of creating space within space¹ is used as a design generator: smaller spaces are placed as loose objects inside the original building envelope. These objects accommodate the services of the different functions with minimum impact on the original structure. The ‘contained spaces’ are either hovering or cut into the original floor level to emphasize that they are detached from the original structure. When combined with lighting, the objects become elements floating in space.

OLD VERSUS NEW:
To easily differentiate between the existing and add-on structures, deliberately contrasting materials and construction technologies are used. Transparent and translucent materials create an architectural language of lightness, allowing the new structure to be sensitively inserted into the existing building. The outer skin of the building is punctured at critical points, allowing the glass insertions to reach out from within, giving a glimpse of the functions contained inside.

PLACEMAKING:
New structures are added to the existing to articulate both indoor and outdoor functional spaces. The perceived scale is reduced in certain areas to create human friendly spaces. The square’s ambiguous boundaries are completed to contain the public outdoor space and increase the sense of enclosure. The approach and circulation routes through the building are used as organizing devices linking functions and spaces. Various degrees of spatial and visual continuity between adjacent spaces are achieved through the treatment of the boundaries that both separate and bind them together.

¹ Ching (1979:196)
FIG 7.11: Concept model of the site
Two portions of the building are chosen to be investigated for the design development of the Information Node.

These are the following:

**PORTION A: Information**

This portion includes the following:
- the glass facade
- the reception area with staircase
- interactive work stations and display
- information corridors
- the conference hall with skylight shafts.

**PORTION B: Café, internet facilities, bookshop, toilets and lockers.**

This portion includes the following:
- a cafe with outside seating
- interactive workstations
- a bookshop
- toilets
- lockers
- the boutique hotel lobby and rooms.
FIG 7.13: 3D model of Portion A – Information with reception
FIG 7.14: Reception counter and staircase
FIG 7.15: View of the Information when entering from the Minaar Street entrance.
FIG 7.16: Reception counter with views to the Coffee Café and the training tower

FIG 7.17: Walkway with a view of the training tower

FIG 7.18: Walkway with a view of the conference hall
FIG 7.19: (top)
Walkway with a view of the Minnaar Street entrance

FIG 7.20:
Interactive workstations

FIG 7.21: (top)
View from inside the reception

FIG 7.22:
Information corridors with Minnaar Street House in the background
7.5 PORTION B

FIG 7.23:
3D model of Portion B – Ground floor:
Internet and Coffee Café, Toilets and Lockers
FIG 7.24: 3D model of Portion B – First floor: Boutique hotel
FIG 7.25: Entrance to the Coffee Café and Bookshop

FIG 7.26: View towards the Coffee Café’s outside seating

FIG 7.27: Toilets and Bookshop
FIG 7.28: (top) Internet workstations and Toilets

FIG 7.29: Original fireplace with Internet workstations

FIG 7.30: (top) Coffee Café with counter seating

FIG 7.31: Coffee Café with a view towards the information
8.1 CONTAINED SPACES

The design strategy of ‘contained space’ is used for different functions in the building. Some of these functions include the following:

- reception
- interactive work station and display
- toilets
- bookshop
- bathrooms in boutique hotel rooms
- outside seating for the café

The construction of these objects is based on the same principle: a steel structure layered with specific materials to accomplish its function.

The reception area in the Information Node is analyzed as an example in terms of the construction method and materials used.
FIG 8.2: 3D model of the Interactive workstation concept

FIG 8.3: 3D model of the Toilet cubicle concept
8.2 CONSTRUCTION METHOD

MAIN STRUCTURE:

- Four mild steel channel frames are bolted to the original concrete floor.
- Timber rafters are bolted to the original floor to create a new level. This creates one floor level in the reception area that is accessible to everyone.

SUB-STRUCTURE:

- Mild steel square hollow section frames (with a steel cross supporting structure) form the sub-structure.
- The sub-structure is bolted to the main channel structure.
- The staircase consists of two main M.S. steel channel structures bolted to the floor.
- Custom-made M.S steel T-brackets are bolted to each of the main staircase channels. They connect the two channels supporting the timber treads.
TIMBER TREADS AND LIGHT FITTINGS:

- Eucalyptus timber treads are supported by a custom made T-shaped steel plate. This tread is bolted between the two supporting channel frames.

- Acoustic panelling and a timber boarding finishing layer are fixed underneath the timber treads.

- Light fittings that illuminate the panels from the inside are fixed to the square sections.

- The staircase screen consists of structural fins bolted to the floor.

CLADDING AND STAIRCASE SCREEN

- 3Form Chroma panels are bolted to the brackets on the substructure.

- Acoustic panelling is placed underneath the work counter.

- 3Form panels are fixed between the structural fins to create the staircase screen.

- Stainless steel hollow circular section handrails are bolted to the wall and 3Form panels.
8.3 MATERIALS

RECEPTION BOX CLADDING AND WORK SURFACES

3Form panelling is used to clad the steel sub-structure of the reception box. It is fixed to the sub-structure with bolts and brackets. With a light source incorporated between the 3Form layers, an illuminated red box is created that makes it a focal point, visible from the street.

![3Form Chroma Panels, bolted to brackets on the sub-structure](image)

**FIG 8.8:** 3D model of Reception’s structure cladding

**FIG 8.9:**

**3FORM CHROMA**

CAST POLY(METHYL METHACRYLATE (PMMA)) RESIN.

COLOUR: CRANBERRY

TEXTURE: RENEWABLE MATTE

9 / 25 / 50 mm THICKNESS

This material makes use of aura colour infusion technology that creates a solid surface saturated with luminous colour. Either naturally or artificially illuminated, Chroma has a radiant, jewel-like colour. It has the same working properties as wood. The coloured resin panels are engineered to be resurfaced and re-coloured again and again. This prevents the Chroma material from entering the waste stream and allows each panel to be multi-cycled into new architectural installations. A durable finish and easy installation makes this material ideal for the reception box.
FLOORING

The original timber floor is removed and reused to create the main movement route in the information space. It is contrasted with a highly finished industrial floor with watermark graphics of the original wall layout. The 3Form material is used as an illuminated floor to create the illusion of a floating reception box.

FIG 8.10:
ORIGINAL OREGON PINE FLOORING
RE-USED FOR THE MAIN WALKWAY

The original timber flooring is re-used to remind the user of its heritage value. It gives a rustic, weathered look that contrasts with the new materials. It also adds warmth to this huge open space.

FIG 8.11:
B.A.S.F – MASTERTOP 1362
POLYURETHANE-BASED FLOOR
COLOUR: CHARCOAL WITH WATERMARK GRAPHICS OF ORIGINAL WALL LAYOUT OF OLD FIRE STATION BUILDING

The product is self-levelling and crack bridging, with a seamless finish. It is ideal to use in a high-traffic area with properties of abrasion resistance and resilience, good impact sound insulation and comfort underfoot. It is easy to clean and maintain and UV resistant.

FIG 8.12:
3FORM: STRUTTURA COLLECTION: STAGE 40mm

The Struttura collection has structural capabilities and is graded for exterior construction. Stage is a cellular technology that uses the concept of extruded core honeycomb. The product is ideal to use as flooring due to its structural strength and durable finish. A diffused light effect is achieved when this material is illuminated from underneath. It is used to emphasize the new elements (like the reception box) as free-standing objects.
LIGHTING

The quality of light is affected by the colour and textures of surfaces and their reflectivity. When using the 3Form Chroma panels with strip fluorescent back lights, a diffused red light will be reflected onto the service and work counters. Therefore tracks with halogen spot lights are placed inside the channels above the counters to produce the correct quality of bright light.
FIG 8.16:
OW ACOUSTIC: ACOUSTIC PANELING PERFORATED ALUMINIUM PLATE WITH SQUARE HOLES

This product provides a very good wide-band absorption effect, which is ideal if noise and reverberation problems occur over a large frequency spectrum.

FIG 8.17:
ACOUSTIC PANELING GIVEN TWO COATS OF BLACK ACRYLIC PAINT. PLACED UNDERNEATH TIMBER BOARDING

FIG 8.18:
TIMBER BOARDING

The eucalyptus timber boarding slides into the custom made aluminium profile brackets. No screws or nails are visible with this fixing system. The timber boarding will be spaced so as to allow maximum sound absorption by the acoustic panelling underneath.

ACOUSTIC WALL & CEILING PANELING

Acoustic panelling is placed inside the reception box to create a comfortable sound environment with adequate sound absorption levels. Acoustic panels are placed underneath the work counter where they will be unobtrusive. The ceiling consists of layered acoustic panelling, with a finishing layer of timber boarding. The most important physical characteristic of the acoustic qualities of an area is its reverberation time, which is determined by the absorption qualities of the room – the walls, floors, ceiling, contents and volume.

Room area acoustic conditions can be considered optimal if the people within feel comfortable. Offices and conference areas benefit from an improved conversation atmosphere when noise is decreased and the audibility of the spoken word is improved.
CEILING & WALL COVERINGS

With the walls on the first floor of the Old Fire Station building being demolished, the ceiling over the new double volume space needs to be replaced. The ceiling will be curved in the same way as the timber ceiling in the original hall. It connects the two spaces visually, and enhances the new interpretation of the existing with the use of new technology and materials.

Graphics can be printed onto the fabric and used for ceiling or wall coverings. The entire system is no more than 10 mm thick and no fixings are visible. It is ideal to use for branding and as information sources (like maps and photographs), and can be changed over time.

FIG 8.19: ALYOS CEILING AND WALL SYSTEM

This system consists of a covering material of polyester fabric coated with polyurethane. The lightweight system is suitable for all ceilings. The covering material is stretched from wall to wall and is held in position by special profiles attached to the perimeter of the room. The type of material and the quality of the coating allow optimal tension to be achieved without joints, seams or suspension brackets. It is ideally suited to renovation projects as it leaves no mess, has a short installation time and gives off no fumes.
ADDITIONAL MATERIALS USED IN THE DESIGN

FIG 8.20:
3FORM CHROMA: CAST POLYMETHYL METHACRYLATE RESIN.
COLOUR: VITAMIN C
TEXTURE: RENEWABLE MATTE
9 / 25 / 50 mm THICKNESS

FIG 8.21:
3FORM STRUTTURA: CAST POLYMETHYL METHACRYLATE RESIN.
PEP TOPAZ
19 mm THICKNESS

FIG 8.22:
3FORM VARIA: CAST POLYMETHYL METHACRYLATE RESIN.
ORGANIC: TING TING
3 - 25 mm THICKNESS

FIG 8.23:
3FORM STRUTTURA: CAST POLYMETHYL METHACRYLATE RESIN.
DUE CRYSTAL
6 / 16 mm THICKNESS

FIG 8.24:
IRON PAINT
CONTAINS IRON FILLINGS WHICH CREATES A METALLIC FINISH ON FEATURE WALLS

FIG 8.25:
EUCALYPTUS SALIGNA.
INDIGENOUS AFRICAN TIMBER
Moderately durable timber that is used in general construction and flooring


