Fig. 1: Some of us from ‘The Old Power Plant’ Framework group whilst on a site visit, from the left: Tracy Leigh Clark (me), Isaan Pauw, Mias Claassens, Jaco van Biljon and P G Smit

Fig. 2: Aerial photograph of Pretoria West

Fig. 3: Worldwide locality diagram

Fig. 4: Map identifying the Pretoria CBD and Atteridgeville (AV) as activity nodes and showing Pretoria West (PW) as an area of transition between these nodes.

Fig. 5: Sub-support system for the city of Pretoria; diagram demonstrates the location of Pretoria West along an activity spine between the CBD and Atteridgeville.

Fig. 6: Diagram demonstrating a network of sub-support cells around the CBD.

Fig. 7: Existing urban infrastructure.

Fig. 8: Regional and national connectivity.

Fig. 9: Urban fabric of multiplicity.

Fig. 10: Perceptions

Fig. 11: Industrial heritage

Fig. 12: Photograph of how the power station looks today, highlighting the old part of the plant that is shown in the historical photograph (fig. 13), one can see how much the plant has grown over the years.

Fig. 13: Old photograph of the Old Power Plant from 1932

Fig. 14: Aerial Photograph with outline highlighting Old Power Plant Site.

Fig. 15: Framework for Old Power Plant Site

Fig. 16: Increasing access to the site as proposed by the framework.

Fig. 17: Showing proposed permeability of the site.

Fig. 18: Diagram of new energy inputs to the site.

Fig. 19: Phase 1 - Repair

Fig. 20: Phase 2 - Define

Fig. 21: Phase 3 - Connect

Fig. 22: Phase 4 - Continue

Fig. 23: Detailed Framework proposal for The Old Power Plant.

Fig. 24: Aerial photograph showing entire Power Plant Site.

Fig. 25: Aerial photograph highlighting Detailed Framework Area and the 1923 turbine Hall.

Fig. 26: Four storey limit

Fig. 27: Household mix

Fig. 28: House cluster

Fig. 29: Quiet backs

Fig. 30: Available: http://2.bp.blogspot.com/_o7NL6EPE8no/SP9sKW_79dI/AAAAAAAAC3w/Le8i_gKjVUw/s400/10.jpg Accessed 30 April 2010

Fig. 31: (McCown 2009)

Fig. 32: Available: http://3.bp.blogspot.com/_o7NL6EPE8no/SP9sKALN2tI/AAAAAAAAC3g/Q99bclD91r4I/400/2.jpg Accessed 30 April 2010

Fig. 33: Available: http://4.bp.blogspot.com/_o7NL6EPE8no/SP9stHoaq4I/AAAAAAAAC4o/Tw66W5hJgeY/s1600-h/15.jpg Accessed 30 April 2010

Fig. 34: Restored exterior of the substation. (McCown 2009)

Fig. 35: Showing the clear contrast between the existing brickwork and the new timber and red steel. Available: http://4.bp.blogspot.com/_o7NL6EPE8no/SP9s70DZyi/AAAAAAAAC4g/N_kEdNf3T6E/s400/12.jpg Accessed 30 April 2010

Fig. 36: (Pesavento & Piano 2001)

Fig. 37: (Pesavento & Piano 2001)
Fig. 38  (Pesavento & Piano 2001)

Fig. 39  Showing glass curtain wall which allow an undisturbed view of the volume of the building (Pesavento & Piano 2001)

Fig. 40  View of the eastern elevation of the building (Pesavento & Piano 2001)

Fig. 41  Western elevation of the building in its context appears entirely unaltered (Pesavento & Piano 2001)

Fig. 42  Concrete posts stand in memory of the old drill hall piers. Available: http://www.joburg-archive.co.za/images_2007/sep/drillhall2.jpg Accessed 17 October 2010

Fig. 44  Upper floor exhibition space (Drill Hall 2004:52)

Fig. 43  Reinterpretation of the original roof, supported on lightweight steel and glass construction (Joubert et al 2009:125)

Fig. 45  Firemen inspect the damage from the fire. Available: http://www.joburg-archive.co.za/image_library/images_historic_jhb/Drill_Hall-2.jpg Accessed: 17 October 2010

Fig. 46  Damage caused by the fire. Available: http://www.joburg-archive.co.za/image_library/images_historic_jhb/Drill_Hall-1.jpg Accessed 17 October 2010

Fig. 47  How the Drill Hall originally looked (Joubert et al. 2009:124)

Fig. 48  How the Drill Hall looks today, one can see how the memory of the original form has been preserved. Available: http://www.joburg.org.za/fifaworldcup/images/stories/gallery10/hr/drill_hall.jpg Accessed 22 April 2010

Fig. 49  Elevation of the Old Turbine Hall (Author's own. Taken August 2010)

Fig. 50  View of the refurbished South Boiler House (left), and the new office building (right) from turbine square (Krige & Beswick 2008:140)

Fig. 51  Large industrial like volumes in the new offices (Krige & Beswick 2008:105)

Fig. 53  Turbine square garden. Column grid lines have been extended into the landscape, reinforcing the building’s connection to the ground (Krige & Beswick 2008:117)

Fig. 52  Rhythm created along the Jeppe Street elevation inspired by the Turbine Hall (fig. 44) (Krige & Beswick 2008:114)

Fig. 54  Boiler chimneys from the demolished North Boiler House

Fig. 55  Reinterpretation of North Boiler House Chimneys as skylights in new office building

Fig. 56  Steel cross bracing used in original construction

Fig. 57  reinterpretation of steel cross bracing in concrete

Fig. 58  Circular skylights found in original construction

Fig. 59  Circular skylights reinterpreted in new building

Fig. 60

Fig. 61

Fig. 62

Fig. 63

Fig. 64  Panoramic view from restaurant

Fig. 66  The new addition literally explodes from the heritage building

Fig. 65  The Gloria Hyacinth Chen Court framing a view of the heritage building

Fig. 67  Graffiti by the artists

Fig. 68  Activity on a saturday evening

Fig. 69  Lino prints by one of the resident artists

Fig. 70  Tables rented by the artists

Fig. 71  Art decorates every available corner in the studio

Fig. 72  Double volume artists’ studio

Fig. 73  Murals cover every inch of the front of the building

Fig. 74  Graffiti by the artists
92  [Fig. 122] Turbine Hall - spaces
94  [Fig. 123] Turbine Hall - character
96  [Fig. 124] Turbine Hall - textures
100 [Fig. 125] Showing the three main phases of progressive construction of the old Turbine Hall

(Base map provided by Google Earth 3D buildings 2010 and edited by author)
101 [Fig. 126] Process of electricity production at the Power Plant
102 [Fig. 127] triangle of activity
103 [Fig. 128] Diagram showing the three sections of the turbine hall
103 [Fig. 129] Conceptual diagram demonstrating degrees of permeability, public access and progression
103 [Fig. 130] Conceptual diagram demonstrating different approaches to new architecture
104 [Fig. 131] Diagram demonstrating harvesting northern light by cutting courtyards into the building, suggests which spaces could be appropriate for living and for working
105 [Fig. 132] Diagram outlining how different functions support each other
105 [Fig. 133] Production to the East and recreation to the West
105 [Fig. 134] North sun vs. view to the west
106 [Fig. 135] Hierarchy of spaces
106 [Fig. 136] Diagram demonstrating approach to new interventions in section
106 [Fig. 137] Diagram demonstrating approach to new interventions in plan
107 [Fig. 138] Diagram demonstrating the use of courtyards and height to create public and private spaces
107 [Fig. 139] Conceptual diagram demonstrating the external focus of working environments and the internal focus of living environments
107 [Fig. 140] Restore
107 [Fig. 141] Integrate
107 [Fig. 142] Intervene
108 [Fig. 143] Site analysis exploring the interplay between different spaces around the turbine hall
109 [Fig. 144] Axonometric exploring where circulation and light penetrate the existing mass
110 [Fig. 145] West Elevation (not to scale)
112 [Fig. 146] North Elevation (not to scale)
113 [Fig. 147] South Elevation (not to scale)
114 [Fig. 148] East Elevation (not to scale)
116 [Fig. 149] B1 - B1 section through existing building
116 [Fig. 151] B1 - B1 Section (not to scale)
116 [Fig. 150] B1 - B1 section showing new and demolished work
117 [Fig. 152] B2 - B2 section through existing building
117 [Fig. 154] B2 - B2 Section (not to scale)
117 [Fig. 153] B2 - B2 section showing new and demolished work
118 [Fig. 155] C1 - C1 section through existing building
118 [Fig. 157] C1 - C1 Section (not to scale)
118 [Fig. 156] C1 - C1 section showing new and demolished work
119 [Fig. 158] Diagrammatic ground floor plan (not to scale)
119 [Fig. 159] Diagrammatic first floor plan (not to scale)
120 [Fig. 160] 3D perspective view (not to scale)
125 [Fig. 161] Restore - The new steel touches the existing concrete lightly, a steel spacer separates the two making it seem like they do not even touch
125 [Fig. 162] Integrate - A steel haunch is fixed to the existing column to support the new beam, this emphasises how the two are connected
125 [Fig. 163] Intervene - In this instance two beams are used and run past the column making it seem like they are not even directly connected
<table>
<thead>
<tr>
<th>Page</th>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>Fig. 164</td>
<td>1:20 Technical section</td>
</tr>
<tr>
<td>127</td>
<td>Fig. 165</td>
<td>D1 - D1 section through existing building</td>
</tr>
<tr>
<td>127</td>
<td>Fig. 166</td>
<td>D1 - D1 section showing new and demolished work</td>
</tr>
<tr>
<td>130</td>
<td>Fig. 167</td>
<td>North West perspective</td>
</tr>
<tr>
<td>132</td>
<td>Fig. 168</td>
<td>North Elevation [Restore]</td>
</tr>
<tr>
<td>132</td>
<td>Fig. 169</td>
<td>North West perspective [Restore]</td>
</tr>
<tr>
<td>133</td>
<td>Fig. 170</td>
<td>Western perspective [Integrate]</td>
</tr>
<tr>
<td>133</td>
<td>Fig. 171</td>
<td>Perspective view of ground floor workshops [Integrate]</td>
</tr>
<tr>
<td>134</td>
<td>Fig. 172</td>
<td>South Elevation [Intervene]</td>
</tr>
<tr>
<td>134</td>
<td>Fig. 173</td>
<td>North Western perspective of the Artists' Studio and Arts and Crafts Gallery [Intervene]</td>
</tr>
<tr>
<td>135</td>
<td>Fig. 174</td>
<td>Ground Floor Plan (Not to scale)</td>
</tr>
<tr>
<td>136</td>
<td>Fig. 175</td>
<td>First Floor Plan (Not to scale)</td>
</tr>
<tr>
<td>137</td>
<td>Fig. 176</td>
<td>Second Floor Plan (Not to scale)</td>
</tr>
<tr>
<td>138</td>
<td>Fig. 177</td>
<td>Third Floor Plan (Not to scale)</td>
</tr>
<tr>
<td>139</td>
<td>Fig. 178</td>
<td>Loft Level Plan (Not to scale)</td>
</tr>
<tr>
<td>140</td>
<td>Fig. 179</td>
<td>Western Perspective</td>
</tr>
<tr>
<td>144</td>
<td>Fig. 180</td>
<td>Longitudinal Section (Not to scale)</td>
</tr>
</tbody>
</table>


NORBERG-SHULTZ, C. The Phenomenon of Place. p. From:

PALLASMAA, J. The Geometry of Feeling. p. From:


SNYDER, G. The Etiquette of Freedom. p21-39 From:


http://www.southafrica.info/travel/cultural/beautifulthings.htm
Accessed 16 October 2010


http://www.newtown.co.za/heritage/view/index/turbine_hall
Accessed 12 October 2010