

Chapter 9 - Conclusion

This dissertation is an investigation of lost space being reprogrammed as public space, and specifically, the architecture surrounding such a space. The author is of the opinion that stimulating and productive environments are the result of more than just an architectural shell containing some form of program.

A key determinant of this investigation was the influence of empirical theories, theories that promote an architecture that influences and shapes its surrounding environment - creating identity and shelter. This led to a sustained interest in theories surrounding unprogrammed space. Upon studying the site and precedent studies regarding unprogrammed space, it became evident that an effective unprogrammed space needs either strong established public institutions in its vicinity or the introduction of a new form of programme that provides a nucleus around which the new space can sustain itself. Sport was identified as new programme, due to the intrinsic capability of uplifting and unifying community and individuals.

Some lessons gleaned from the study:

1. Sport has an important role to play in creating safer societies, through its educational values and its inherent worldwide network.
2. Additional community benefits of sport include reduction in crime and vandalism, encouraging pride in a community and generating employment and income.
3. Sport events create opportunities for social exchange.

The terrain under investigation provided its own challenges. Movement through the original site was extremely limited, separating the site from the rest of the city fabric and creating a unsafe environment. The area has a distinct lack of identify, to this end the significance of Pretoria's vernacular of Pretoria was consider, the author using the design guidelines gleaned from this investigation to reenergize the inherent potential of the site.

This dissertation proposes an architecture that fulfils its programmatic requirements responsibly and tactfully- an architecture that is a product of its environment and social context. Not merely because it slots in with the present activities, but rather because it alters its environment through active engagement.

Chapter 10 - References

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Appendix

Appendix A - Accomodation schedule

Description	Sub category	amount	dimension	Total Size	Room height	Requirements
GROUND FLOOR						
Toilets						
Men	Wc	4				
	Urinal	7				
	Wash hand basin	6				
Women	Wc	10				
	Wash hand basin	6				
Disabled	1 x cubicle with basin	2				
Changing rooms	Lockers	40	0.3 x 0.3m	4 m2		stacked 2 on top of one another
	Showers	6	0.9m x 1,3m	7 m2		3 for each sex
	Change space	1	2m x 3m	12 m2		for each sex
Retail		4	6m x 6m	144		
Storage (retail)		4				
Kitchen			8m x 16m	128 m2	6m	kitchen to service all take aways and have shaft to upstairs auditorium service area.
Multi - use hall		1	10m x 15m	150 m2		Place for 300 people @ 0.46 m2 per person
Addition education rooms / activity rooms		2	5m x 4m	40 m2		Place for 16 people in each room @ 1.25 m2 per person Intimate, able to open up to big hall
Storage rooms		1	3m x 4m	12 m2		Needs space to stack 300 chairs
Small kitchen		1	3 x 3m	9 m2		Simple washbasins and a oven
FIRST FLOOR						
Reception						
Small Office/Advisors		1	3m x 2,5 m	7,5 m2	4m	
Waiting/meeting area		2	3m x 4m	24 m2	3m	
Foyer/display area		1	4m x 4m	16 m2	3m	
Auditorium		1	9m x 15m	135 m2	6m	
	Seating area	1		92 m2	6m	Moveable seats require 0.46 m2 Seating for at least 200 with chairs, 300 without chairs. able to stack 150 chairs will be provided for under the seating area
	Storage	1				
	lobby/breakout spaces	2	adaptable		4m	
	Stage area	1		20 m2	6m	
Lift	Control room	1	3m x 4,5m	13,5 m2	3m	

Toilets		1 2m x 2m	4 m2	
Men	Wc	3		population of 200
	Urinal	6		
Women	Wash hand basin	5		
	Wc	9		
	Wash hand basin	5		
	Disabled	2		
Media centre	Office and Admin	1 4m x 5m	20 m2	0.2 m2 per user for 100 people
	Books	1 4m x 12m	62 m2	Shelves at 0.62 m2 per person for 100 people
	Reading area	1	20 m2	Caters for 0.4 m2 per person for 50 people

SECOND FLOOR

Gymnasium		1 10m x 15m	150 m2 4m	requires lift for equipment
	office	1 3m x 3m	9 m2	
Changing rooms	reception	1 2m x 3m	6 m2	
	Lockers	40 0.3 x 0.3m	4 m2	stacked 2 on top of one another
	Showers	6 0.9m x 1,3m	7 m2	3 for each sex
Toilets	Change space	1 2m x 3m	12 m2	for each sex
Men	Wc	1		
	Urinal	2		
Women	Wash hand basin	2		
	Wc	2		
Private/doubles as disabled	Wash hand basin	2		
	1 x cubicle with basin	1		
Medical centre - Reception / waiting		1 3 x 4m	12 m2	
- consultation room		2 4 x 5m	40 m2	2 consultants with their own facilities
- general medical area		1 10 x 5m	50 m2	Area for rehabilitation training
Cleaning material/storage		1 2m x 1m	2 m2	
Media centre	Computer rooms	1 15m x 6m	60 m2	2 m2 per user for 30 people



THIRD FLOOR

Offices

General manager	1 5m x 4m	20 m2
Secretary	1 3m x 4m	12 m2
Basketball SA	3 3m x 4m	36 m2
Tshwane Suns	3 3m x 4m	36 m2
Independent organizations	3 3m x 4m	36 m2
Meeting room	2 5m x 3m	30 m2
Social space / kitchen	1 5m x 5m	25 m2

Toilets

Men

Wc	1
Urinal	2

Women

Wash hand basin	2
Wc	2

Private/doubles as disabled

Wash hand basin	2
1 x cubicle with basin	1

Plant room

GENERAL SPORTS FIELD SIZES

Squash courts (coin operated)	1 9,753 x 6400
Soccer field (sevens rugby)	1 100 x 64
basketball court/netball	3 28mx 15m
Volleyball court	2 18m x 9m

Appendix B - Baseline document

Criteria	Target set (ideals)	Design performance	Achieved (y/n)
1 PEDESTRIAN			4.25
1.1 Public amenities	Provision of basic public needs (shade, seating, ablutions, refreshments)	Ablutions, shade, seating, restaurants, shops	1
1.2 Routes	Routes are legible, with lighting and surfaced. Clear boundaries and movement edges	Routes with adequate lighting and slip free surfaces for wheelchair users	1
1.3 Protection	Protection from vehicles, secure environment and proper lighting	Vehicles removed from public space	1
1.4 Public transport	Presence of public transport within 200m	Busstop and Bloed Street taxi association within 300m	0.5
2 CONTEXT			4.5
2.1 Visual appropriateness	Character of development complements character of the site	Pretoria Vernacular	0.5
2.2 Historic retention	Significant buildings are preserved, buildings are re-used where possible	All significant buildings preserved or reused	1
2.3 Views	Views on the site of prominent elements of the city are preserved	View to Union Buildings on main axis	1
2.4 Physical grid	The traditional Pretoria East-West block is retained		1
2.5 Function	Functionality of intervention should not remove activity from the streets.	Programme should not influence street activities	1
2.6 Established need	Need for development in IDP's	Need for building justified	1
3 PUBLIC SPACE			3.75
3.1 Framing	Public spaces to be properly enclosed	Spaces enclosed with trees, buildings or seating	1
3.2 Permeability	Sufficient access and routes	Movement along a strong axis, 4 entrances	1
3.3 Choice	Framework dictates broad functionality on-site yet allows for flexibility in providing a range of appropriate types	Not as flexible as originally planned	0
3.4 Distribution	Presence of mixed use areas.	Multi use programme employed, types of activities include shop, entertain, sport, education	1
4 SCALE			3
4.1 Context appropriate	Buildings facing street should be of	Some current buildings only 6m	0
4.2 Human scale	Buildings and plants should relate to human scale	Trees on public routes, high buildings provided with overhangs on pedestrian scale	1
4.3 Enclosure	Public spaces to be properly enclosed	Precinct properly defined	1
4.4 Urban Morphology	Building scale should fit according to vision for the city and its immediate environment	Emphasys placed on upgrading scale of block	1
4.5 Program appropriate	Buildings should communicate civic and recreational activity	Building recreational, less civic.	0
5 LEGIBILITY			5
5.1 Functional articulation	Building fabric should be representative of its intended use.	Building reflects institutional character	1
5.2 Hierarchy	Spaces and buildings should orientate users	Orientation kept simple, lightboxes in place.	1
5.3 Connectivity	Intervention should enhance pedestrian routes and add additional routes	Emphasys placed on integrating into existing pedestrian network	1

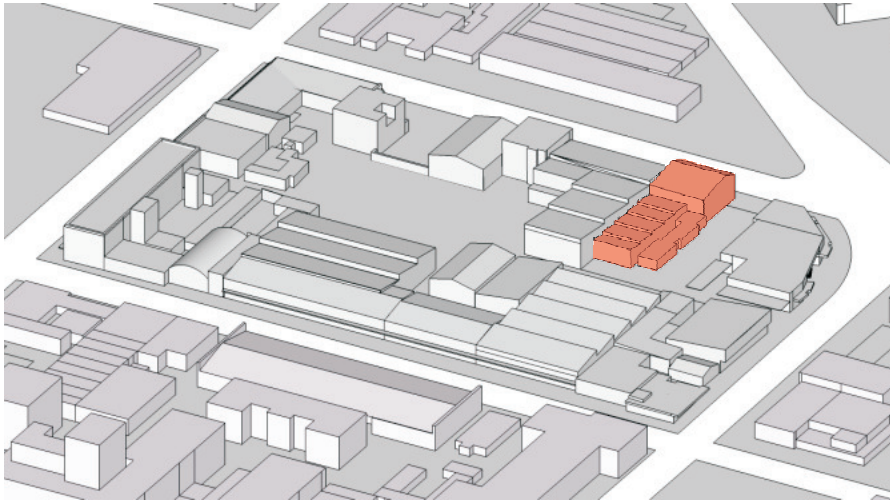
6 ADAPTABILITY			4
6.1 Ease	New urban fabric should be able to absorb programmatic change overtime	Certain degree of flexibility	0
6.2 Megastructure	Services should be easily asseible and leave room for future expansion	Adequate shafts and underfloorbeiling space	1
6.3 Infill	Infill material should be easily adaptable and re usable.	partition walls in office space.	0.5
6.4 Vehicle dimensions	Minimum floor-to-ceiling of 3m	Min of 3.2m achieved	1
6.5 Internal partitions	Non-bearing walls	IN office space	1
6.6 Services	Ease of access	Shafts easily accessible.	1
7 EFFICIENCY OF USE			2.5
7.1 Usable space	Non usable space (ablutions, circulation) not to cover more than 20 % of site	roughly 18 %	1
7.2 Occupancy	Enclosed spaces used for minimum of 8 x 5 resulting in 40 hours use per week	Cannot be confirmed	0
7.3 Space of use	Use of space optimized through management	Space orientated around events	0.5
8 ONGOING COSTS			3.25
8.1 Maintenance	Low maintenance materials and surfaces	Correct materials used, glass fagade could prove high maintenance	0.5
8.2 Cleaning	Limited cleaning, windows easily cleanable	Glazing difficult to clean	0
8.3 Security	Overall security of the intervention	Security a design priority	1
8.4 Disruption	Easily located services and plant room, ease of access to storage rooms.	Services and plantroom adequate	1
9 SITE			3.25
9.1 Brownfield site	Site previously used	Lost space	1
9.2 Neighbouring building	Positive impact on surrounding buildings	Upgrade of entire city block	1
9.3 Vegetation	Maximum vegetation preserved on-site, additional plants added.	Most vegetation (little present) removed	0
10 WATER			2.5
10.1 Use	Water retention processes used	Underground storage tanks for site use	0.5
10.2 Rainwater	Rainwater harvested and used.	Underground storage tanks for site use	0.5
10.3 Runoff	Stormwater kept on-site		1
10.4 Greywater	Greywater recycled		0
11 ENERGY			2.5
11.1 Location	Accessibility of public transport	Taxi and Bus services close by	1
11.2 Ventilation	Passive ventilation	Skylights used for ventilation or cross ventilation Air conditioning required in auditorium/offices	0.5
11.3 Heating and Cooling		Heating/cooling only required in extreme weather conditions	0
11.4 Light fittings	Low energy use bulbs		1
11.5 Renewable energy			0
12 MATERIALS			3.5
12.1 Robust	Due to context and South Africa	Pretoria vernacular	1
12.2 Embodied energy	E.G. wood and concrete	Concrete and brick mostly used	1
12.3 Recycled materials	Use of recycled materials in construction		0



12.4 Maintenance	Materials with low maintenance	Concrete and brick low maintenance, light colour plaster and glass some maintenance	0.5
12.5 Thermal mass	In a temperate climate thermal mass is most efficient method of passive environmental control		1
13 COMMUNITY			3.5
13.1 Local manufacturers	Use of materials and manufacturers situated in Tshwane metropolitan area	Brick and concrete locally available, not Korten	0.5
13.2 Local labour	Use of local labour forces of Tshwane area.	Cannot be confirmed	1
13.3 Skills transfer	Allow for maximum involvement of community in process.	Cannot be confirmed	0
13.4 New opportunities	Proper infrastructure to allow for entrepreneurial developments	Yes	1
13.5 Increased facilities	Shared use of facilities by several parties	Yes	1

Appendix C - Demolished buildings

C1 - Building 1



Erf # 3226

Address: 395 Struben Street

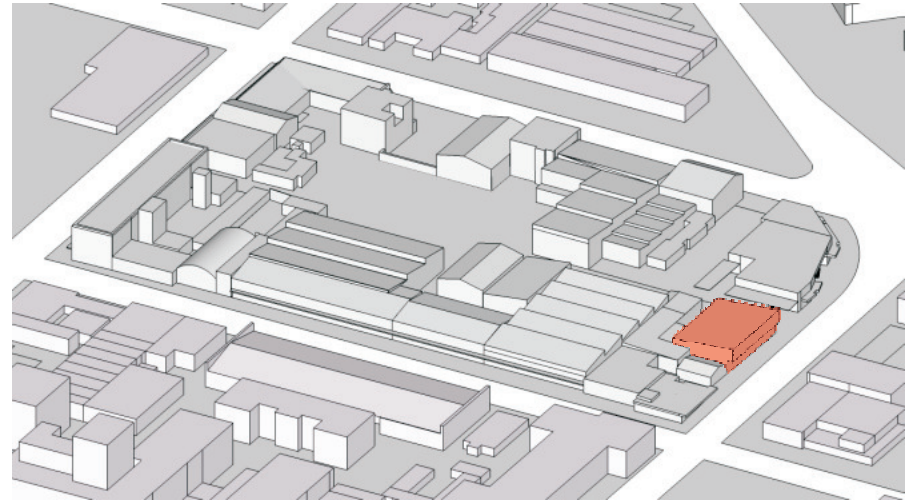
Owned by: City Properties

Current use: Unused, ad hoc additions to the adjacent warehouse, in disuse and architecturally insignificant.

Conclusion: Demolition advised



C2 - Building 2



Erf # R/2/168

Address: 79 Du Toit Street

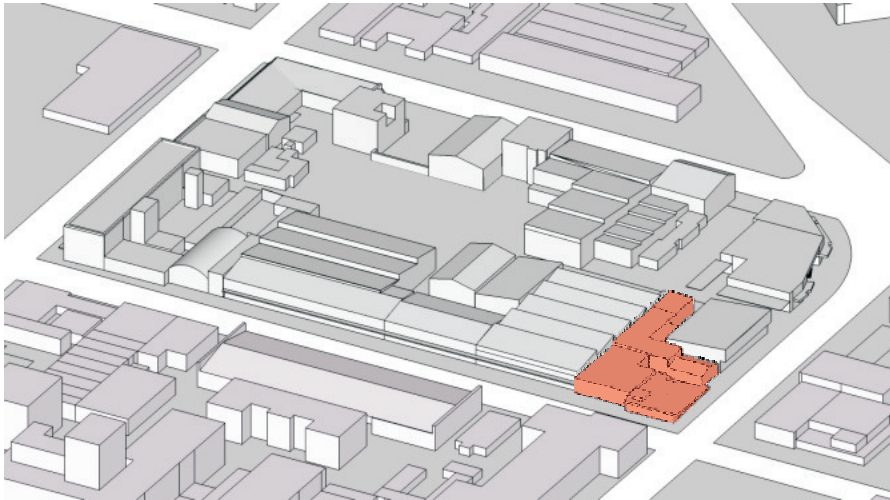
Owned by: Premium Ltd

Current use: Used by Bethesda church as a children's church and church bookstore.

Conclusion: Facility can easily be relocated, and is provided for in the urban planning solution.



C3 - Building 3

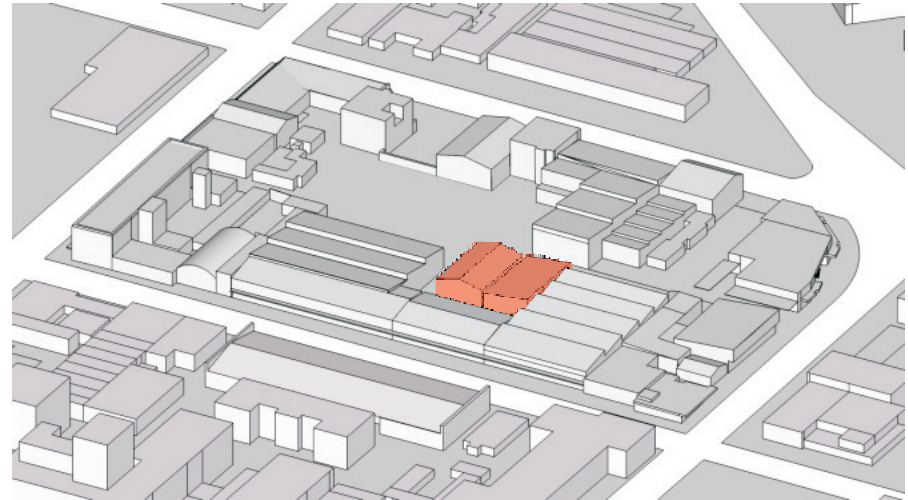


Erf # 1/168 and 6/168
Address: 400 Proes Street & 83 Du Toit Street
Owned by: Du Proes Pty Ltd.
Current use: Informal vehicular repair and security shop.

Conclusion: Facility can easily be relocated into the incubation stalls facing Proes Street, and is provided for in the urban planning solution.



C4 - Building 4

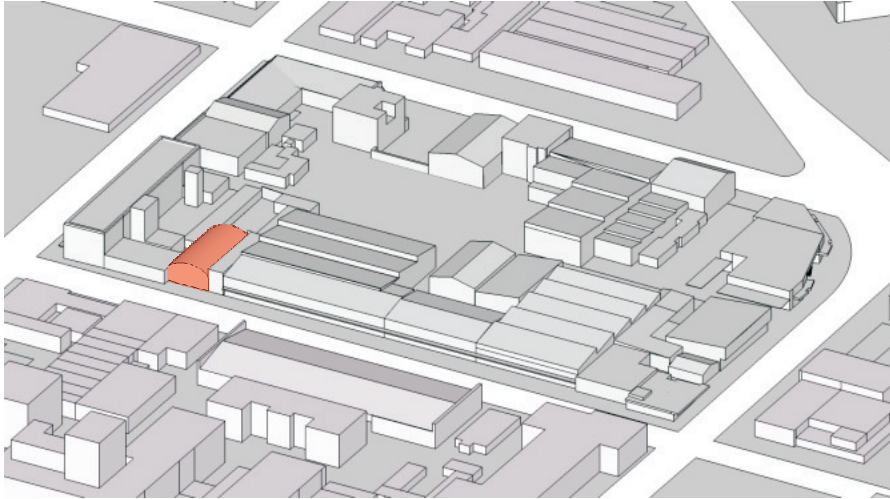


Erf # 3234
Address: 372 Proes Street
Owned by: G.L. GoldSteins
Current use: Limited warehouse use.

Conclusion: Facility can easily be relocated.



C5 - Building 5



Erf # R/164

Address: 374 Proes Street

Owned by: Pretroia Pty. Ltd.

Current use: Informal vehicular repair

Conclusion: Facility can easily be relocated into the incubation stalls facing Proes Street, and is provided for in the urban planning solution.



