

Aerial photo of SuperSport Park

Fig.60

 Proposed site for Hi-Performance Centre



 Centurion Rugby Club



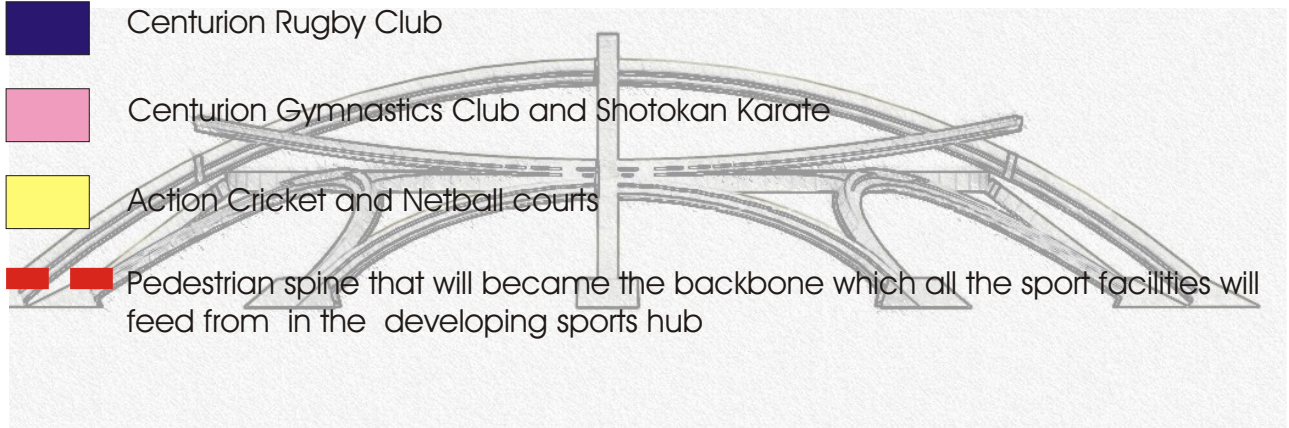
Centurion Gymnastics Club and Shotokan Karate

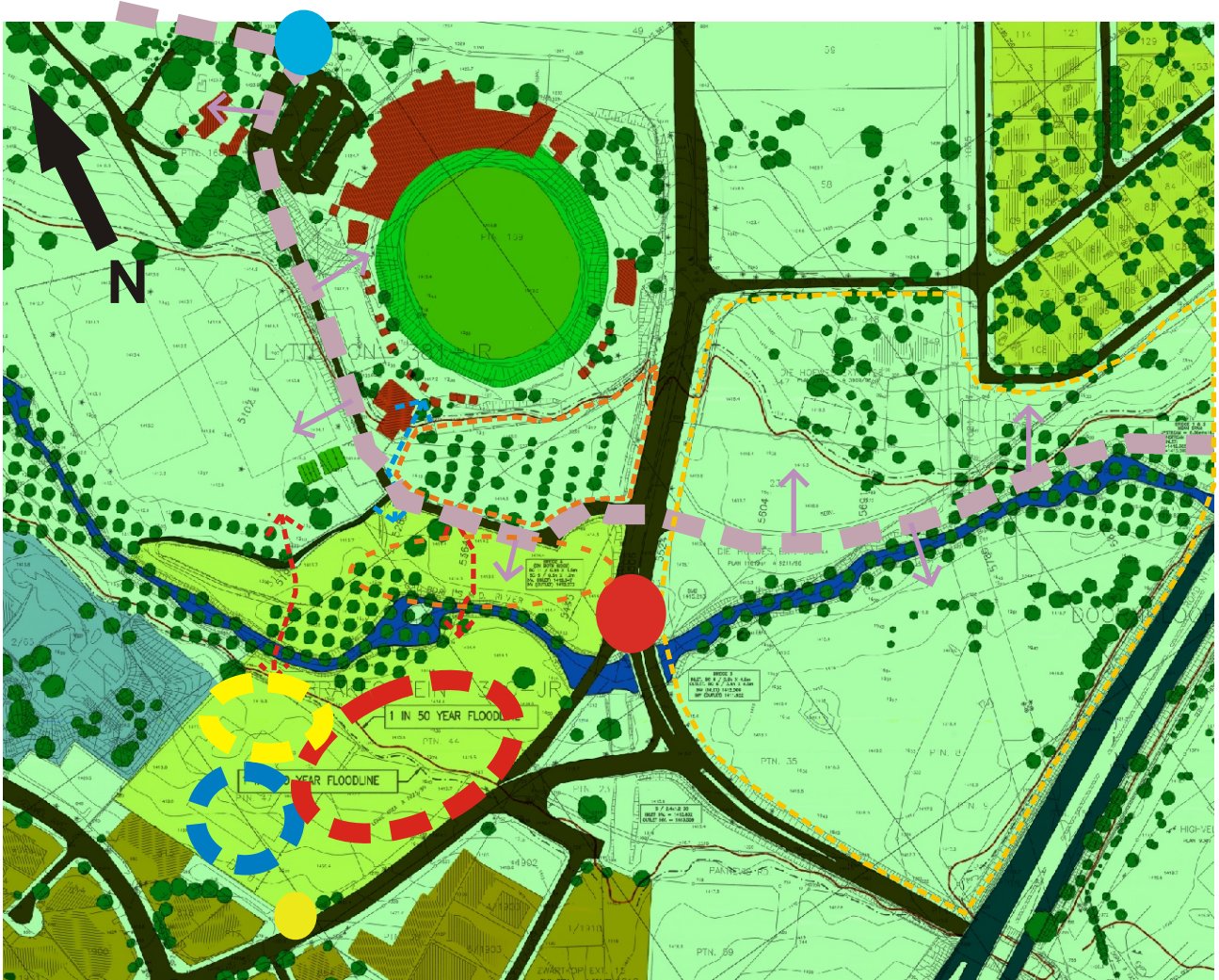


Action Cricket and Netball courts



Pedestrian spine that will become the backbone which all the sport facilities will feed from in the developing sports hub

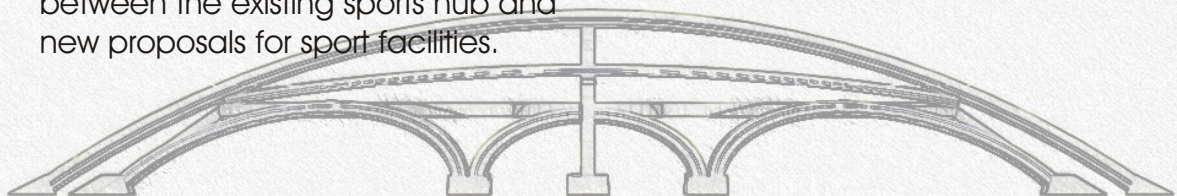


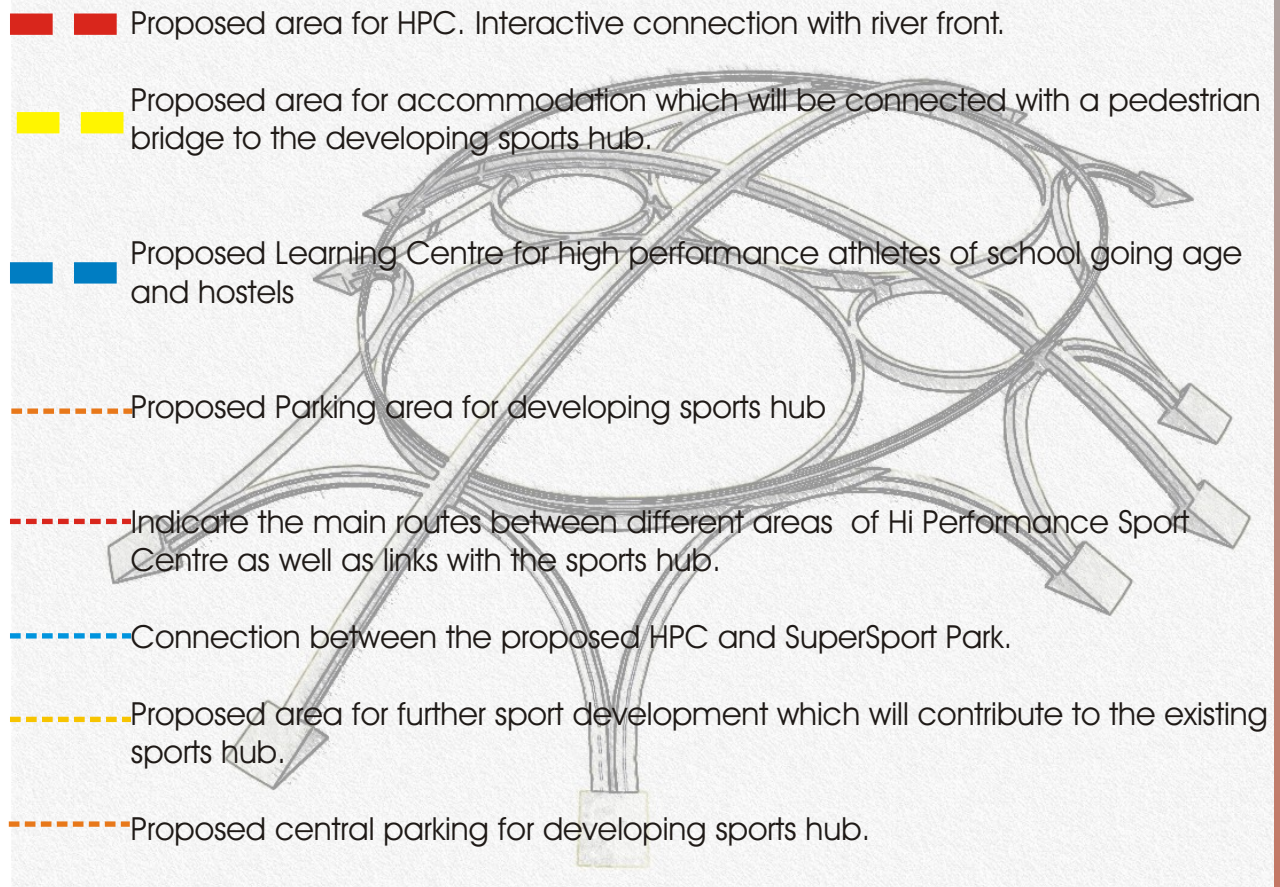


Flood line plan

Fig.61

According to the site analysis the surrounding sites are mainly sports venues that contribute that this area can be classified as a sports hub in Centurion. According to the Centurion Integrated Development Framework this zone should be used for sport development and recreational facilities. With all the surrounding sports facilities a central pedestrian spine is developing from which all the facilities will feed from. The Centurion Rugby Club will be upgraded for rugby, soccer and other sport that need fields for training. Any further sports development will take place on the eastern side of South Street. The pedestrian spine will be the linkage between the existing sports hub and new proposals for sport facilities.





- Pedestrian spine which will become the backbone from which all the sport facilities will feed from

- Main entrance to site and sports hub. Will become an important node in further development of sports hub.

- This entrance may become the primary entrance to the developing sports hub.

- Entrance limited for services only

SportScience Centre

The Hi-Performance centre sport science services vision is to be a state of the art leader in revolutionizing the management of sport performance and sport development in South-Africa.

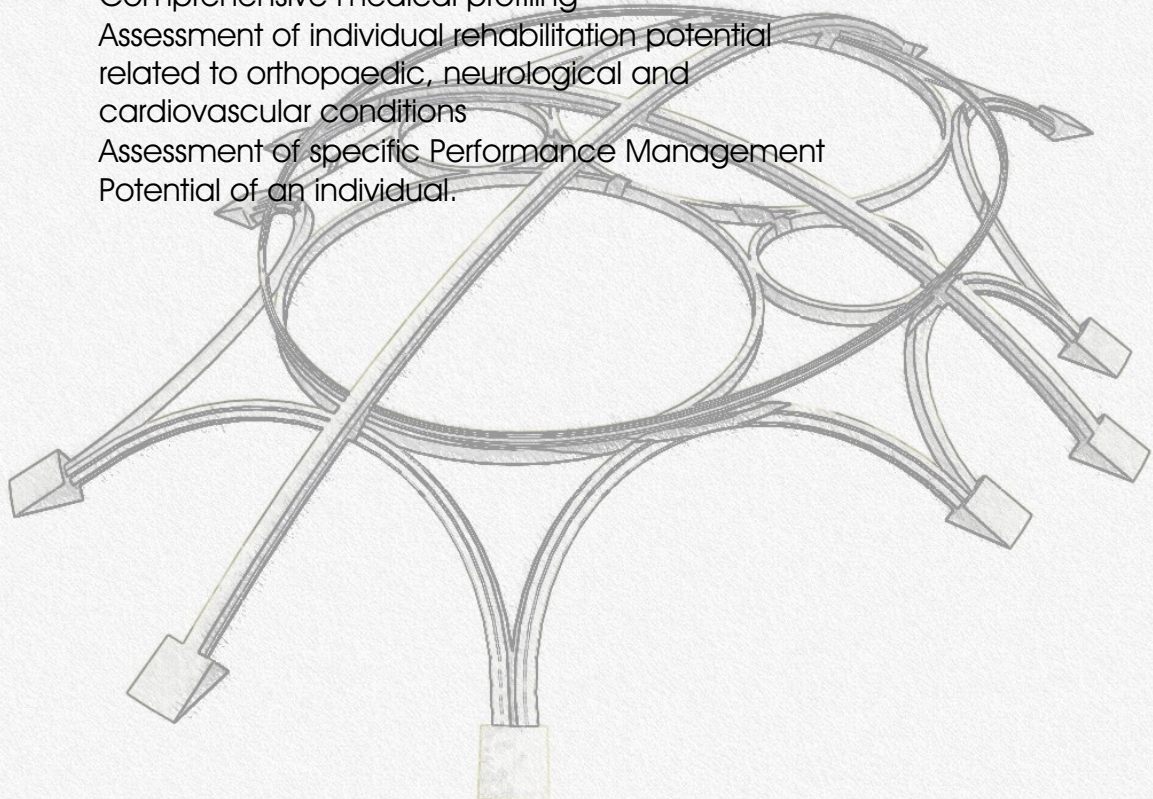
The sport science services will offer a seamless product mix, appealing to the high performance athletes who belong to the top echelons of their national, provincial, club or school structure, performance enhancers who want to improve their performance, health and fitness enthusiasts, and patients requiring rehabilitation and intervention who are required by virtue of an injury or illness to a frequent curative service.

Medical Research Centre

With the aim of being the state of the art leader in multi disciplinary assessments, the assessment centre will offer a range of products focussing on scientific analysis and the measurement of an individual entailing physical and psychological assessment.

The product mix will include:

- Comprehensive biophysical measures
- Lifestyle behaviour assessment and potential to improve lifestyle management of individuals
- Measurement of individual potential in specific sport, such as rugby, soccer, tennis, etc.
- Comprehensive medical profiling
- Assessment of individual rehabilitation potential related to orthopaedic, neurological and cardiovascular conditions
- Assessment of specific Performance Management Potential of an individual.



Sport Science Gym

The sport science gym is set to revolutionize the health and fitness industry in South Africa by:

- Using advanced training technology
- Employing multi disciplinary professional staff members and applying a scientific paradigm.
- Lifestyle management and education
- Outcomes-based measurement and reporting on multi disciplinary intervention strategies
- Networking and initiating synergistic relations with other role players in the industry

Sport Science Gymnasium uses the most advanced equipment and technology currently available in the fitness industry using SmartTechnology®, which provides an outstanding way to manage exercise and training. This is integrated with other software programs to provide a comprehensive member management system.

The Smart Key® is a computerized key that is assigned to each member once they have been through a health and fitness assessment. The key stores all personal data and is used to log training sessions. For each training session it is inserted into the control panel of the TechnoGym®System equipment, where it directs and controls the workout intensity and records all the information from the session. The Wellness Expert® is an interactive touch screen computer console providing feed for members to view workout details for the day, test results, previous training results and performance indices, and to download the information saved from a completed workout onto the central database.

The training system used by Sport Science Gymnasium during lifestyle management is uniquely sophisticated in that:

All cardiovascular training is heart rate controlled (even spinning and aerobics classes). Heart rate controlled training increases the individual effectiveness and safety of cardiovascular training. It enables one to exercise at an intensity that stimulates the optimal adaptation for specific goals without the risk of under or over training. It also provides a safe environment for members with high cardiac risk, or previous cardiac problems to exercise in a safe, monitored manner.

Strength training controls range and speed of motion. Once again, the control facilitates optimal adaptation and avoidance of injuries. It also provides an environment for those members with special exercise needs to work safely.

The individual "key" directs and controls each workout, and gives immediate feedback on exercise execution and records workout data. This biofeedback system ensures that the intensity of exercise and rate of progression is determined individually and internally. Internal control means the system is responding to the person holistically, which is essential as mental, emotional, and psychological factors all contribute toward physiological responsiveness.

Auditorium

The Auditorium will provide a high tech environment focussing on comfort with ergonomically designed chairs, and will be enhanced by state of the art audiovisual equipment. The auditorium will be available for hiring to groups and will also be able to screen movies and sporting footage at regular intervals for individuals and groups to enjoy.

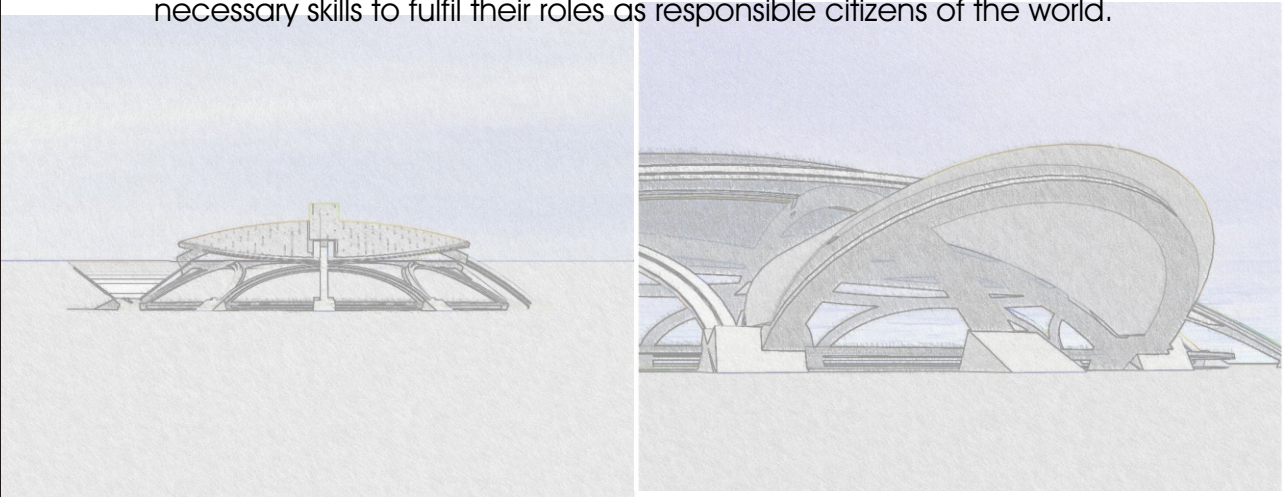
Learning Centre

The learning centre's vision is to create a centre of academic distinction that compliments and echoes the vision of its sport partners.

The learning centre will offer a flexible and internationally recognised academic programme to high performance athletes of school going age. The learning centre will acknowledge and support the unique sporting needs of its learners, but will also place a high premium on academic excellence. It will embrace the Hi-Performance centre philosophy of holistic development, and will aim at developing well-rounded sporting individuals.

The learning centre will support learners in their goal to achieve academic distinction by offering:

- A curriculum of the highest academic standard that is recognised by Universities and Technikons, nationally and internationally
- Establishing and maintaining communication with various sports coaches to detail the academic and sport programmes of learners
- Designing tailor-made academic paths for students, taking cognisance of their sporting programmes
- Offering a structured learning environment in which learning is facilitated by supportive and highly qualified teachers and tutors
- Embracing technology by providing interactive computer assisted learning programmes that allow learners to keep up with their studies despite their demanding schedules.
- Allowing learning to take place at learners' own time and pace
- Implementing a system of continues assessment that will allow learners and teachers to monitor the academic progress of learners
- Implementing a comprehensive life skills programme to equip learners with necessary skills to fulfil their roles as responsible citizens of the world.



Accommodation Schedule	Area	Total area	Light intensity	Temperatures	Ventilation	Air changes
Phase 1						
Administrational area		639 m²				6
Entrance		151 m ²		18 °C	0.50 W/m ³ °C	
Reception		30 m ²		18 °C	0.33 W/m ³ °C	
Administrational offices	4 22 m ² per office	88 m ²		20 °C	0.33 W/m ³ °C	
Strongroom		5 m ²		18 °C	0.08 W/m ³ °C	
Security office		12 m ²		20 °C	0.33 W/m ³ °C	
Shop		341 m ²		18 °C	0.17 W/m ³ °C	
Circulation		12 m ²				
Gymnasium		1707 m²				10
Control desk/Supplements		24.6 m ²				
4 Consultation rooms	16.3 m ² per room	65 m ²	500 lux	18-21 °C	0.17 W/m ³ °C	
Circuit training and Cardio equipment		420 m ²	200 lux	16 °C	0.25 W/m ³ °C	
Weight training		361 m ²	200 lux	16 °C	0.25 W/m ³ °C	
VIP Weight training		275 m ²	200 lux	16 °C	0.25 W/m ³ °C	
Aerobics		245 m ²	200 lux	16 °C	0.25 W/m ³ °C	
Toilets		87 m ²	100 lux	24 °C	0.33 W/m ³ °C	
Male		83.8 m ²				
Showers	4					
Toilets	2					
Urinals	3					
Washbasins	7					
Handicap	1					
Lockers	50					
Steam bath	1 6 m ²					
Female		101 m ²				
Showers	4					
Toilets	5					
Washbasins	7					
Handicap	1					
Lockers	50					
Steam bath	1 8.7 m ²					
Circulation		45 m ²				
Restaurant		701 m²				
Restaurant	1.4 m ² per seat	462 m ²	200 lux	18 °C	0.33 W/m ³ °C	
Kitchen		101 m ²	500 lux	18 °C	0.33 W/m ³ °C	20-60
Circulation		115 m ²				
Toilets		23 m ²	100 lux	24 °C	0.33 W/m ³ °C	10
Male		11.5 m ²				
Toilets	1					
Urinals	1					
Washbasins	3					
handicap	1					
Female		11.5 m ²				
Toilets	1					
Urinals	1					
Washbasins	3					
handicap	1					
Medical		308.3 m²				
Reception/Office		20 m ²	200 lux	20 °C	0.50 W/m ³ °C	6
Storeroom		3 m ²		15 °C	0.08 W/m ³ °C	
Waiting room		27.8 m ²		18 °C	0.67 W/m ³ °C	
5 Consultation rooms	22.6 m ² per room	113 m ²	500 lux	18-21 °C	0.17 W/m ³ °C	
Specialized equipment		76.2 m ²	200 lux	18 °C	0.25 W/m ³ °C	
Circulation		30.9 m ²				
Toilets		37.4 m ²	100 lux	24 °C	0.33 W/m ³ °C	10
Male		17.9 m ²				
Toilets	2					
Urinals	1					
Washbasins	3					
Changing	1					
Pandicap	1					
Female		19.5 m ²				
Toilets	3					
Washbasins	3					
changing	1					
Handicap	1					
Auditorium	100 persons	275.9 m²	100 lux	18 °C	0.67 W/m ³ °C	10
Swimming		2055 m²				
Swimming pool	8 lanes	1512 m ²	200 lux	26 °C	0.17 W/m ³ °C	
Pavijeon for 1200 people		610 m ²	200 lux	26 °C	0.17 W/m ³ °C	
Pump and services		95 m ²				
Office and administration		120 m ²	200 lux	20 °C	0.5 W/m ³ °C	
Circulation		182 m ²				
Squash		219.6 m²				
Courts	2 63.8 m ²	127.6 m ²				
Pavilion for 132 people		71 m ²				
Circulation		21 m ²				
Indoor openspace		5312 m²				
Ruining track 200m		3987 m ²	200 lux	18 °C	0.25 W/m ³ °C	
Circulation		1325 m ²				
TOTAL		11 218 m²				