

# **OBSERVATORY TERRAIN DEVELOPMENT**

## **BACKGROUND INFORMATION**

### **PROJECT DESCRIPTION**

### **TERMS OF REFERENCE**

and

### **SUBMISSION REQUIREMENTS**

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#### **PROJECT ORIGIN**

The South African Agency for Science and Technology Advancement, (**SAASTA**) is a business unit of the National Research Foundation (**NRF**), a parastatal with its line department the Department of Science and Technology (**DST**). The mandate of SAASTA is to bridge the divide between science and society by communicating science to the general public using a variety of modalities including publications, national programmes run on behalf of DST, formal and informal intervention at school level, permanent and travelling science educational exhibitions. For this reason, a site was entrusted to SAASTA to develop and manage as a *Science Activity Centre*.

#### **BACKGROUND TO THE OBSERVATORY SITE**

**The site and its prior uses.** The site of 3.5ha is situated in the suburb of Observatory in Johannesburg, 15 minutes from the city's CBD. The site was bequeathed to the State (then the Union of SA) by the Bezuidenhout family in 1903, specifically for the purpose of "*Science as carried on in an observatory, for meteorological, astronomical or strictly allied subjects*". Today this is interpreted more broadly but the emphasis remains on science and technology activities. The site once housed CSIR National Research Institutes after which it was acquired by the Association of Scientific and Technical Societies (AS&TS). Two AS&TS affiliate societies still maintain offices on site. The Astronomical Association of Johannesburg makes/made use of some of the buildings and telescope facilities and popular lectures still regularly take place in the evenings in the telescope auditorium. The terrain has in the past been used to stage SET related events such as career and technical expos, science fairs and gala functions.

**Historical context and heritage resources.** The terrain is of particular historical importance and started out as a meteorological station in 1905. An astronomical observatory (the *Union Observatory*) was commissioned on this site in 1926. The original 26½" refractor telescope is still functional in the same building designed by Sir Herbert Baker in 1904. Attached to the telescope 'dome' is a small lecture hall/auditorium seating approximately 120 people. Prior to 1994, negotiations were started with the National Monuments Council to declare certain areas of the terrain Conservation Areas and specific buildings as 'National Monument Sites'. These terms no longer apply, but any alterations to the following historic buildings will have to be cleared with the National (SAHRA) or Local (PRA) heritage resource agency:

- A 'pre-fabricated' wood and iron house (circa 1899). This was a British Army Officer's house which was moved from Roberts Heights in Pretoria and used as the first Director's house at Observatory until 1910.
- The telescope dome and linked auditorium referred to above
- The Government Meteorological Observatory. Designed by Sir Herbert Baker and opened by Viscount Milner in 1905. It is now known as the 'Library'.

- A three bedroom residence completed in 1935 and known as the Caretaker's House.
- Innes House, at the entrance to the terrain, is also a Herbert Baker design but falls outside this project because it is the property of the SA Institute of Electrical Engineers (SAEE).

**Other buildings.** On terrain are a number of mini observatories and a three storey office block, inked to a single story office block built in the 1960's. Most of the buildings are in good structural condition but in some disrepair, maintenance having been neglected for some years.

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## **PROJECT DESCRIPTION**

**Vision.** The vision is to create a vibrant science hub – a place where People meet Science.

**Objective.** The objective is to develop the site into a multidisciplinary, multi-purpose science facility where both science awareness and science education-related activities will take place throughout the day as well as after hours.

**Target audience.** It is expected that the site will see a high proportion of educators and learners, scientists, special interest groups, local and international tourists and the general public.

## **PROJECT OVERVIEW**

The complete project will be developed in stages using a phased approach.

### **PHASE I**

**Objective.** To render the site functional as early as possible in order that core programmes may be run.

Two main aspects will be addressed during this phase:

#### **SUB-PHASE A. Statutory Heritage compliance and Planning Phase**

Although it is not a legal stipulation to obtain PRHA or SAHRA approval to renovate buildings less than 60 years old, it is our intention that a Heritage Impact Assessment (HIA), based upon a full Site Development Plan (SDP) should be undertaken and prepared at the earliest possible stage. This will run in parallel with Phase I, Sub-Phase B construction and site works. The outcome of this exercise will indicate any additional compulsory factors to take into account and place us in a position to plan the greater project within the bounds of statutory restrictions and regulations.

## **SUB-PHASE B. Architectural, Construction and Site Works**

Phase I calls for development and upgrading of the following structures and facilities:

### **1. Learning & Training Facility**

**Allocated Structure.** An existing multi-storey office block has been earmarked as the *Learning and Training* facility. The building has a three level North wing (750m<sup>2</sup>) and a two level South wing (500m<sup>2</sup>).

**Work Required.** This facility will need to be structurally maintained, renovated, upgraded and refurbished. Any proposed structures to be added will need to be planned and designed.

**Functional Areas.** The following functional areas will need to be developed:

- Open exhibition space for permanent displays on each of the three North Wing levels.
- Offices accommodation for four permanent staff members (South Wing)
- Training areas, South Wing. To include:
  - Two 60m<sup>2</sup>, 30 seat, Chemistry & Physics demo-labs.
  - Two 60m<sup>2</sup>, 30 - 40 seat, Workshop/Seminar/Lecture halls
  - A Computer Training Centre
  - A Library/Scholar Resource Centre/Teacher Media Centre

**Visitor Numbers expected.** When fully occupied, 140 people should be able to attend different training functions in the South Wing at any one time while the exhibition area (North Wing) should be able to accommodate three groups of 60 persons at a given time.

### **Infrastructural requirements**

- Additional toilets
- Disabled access
- Professionally fitted out laboratories
- Removal of internal non-load bearing walls to allow for open exhibition space
- Upgraded fire & safety measures for groups/crowds
- Provision for electrical, telephony and IT reticulation
- Air conditioning in public halls where required
- External structural work, maintenance, improvement and upgrading

### **2. Parking Facilities**

Existing parking will need to be upgraded and/or extended to allow for a minimum of two to four school buses, one to two tourist coaches and 15 – 20 car parking bays for office staff and day visitors.

### **3. Site Works and Landscaping**

To allow easy access to the Learning and Training building and to create pleasant surroundings, rehabilitation and landscaping of the grounds in the immediate vicinity of the building will be required.

**4. Security.** Attention will need to be given to building, terrain and perimeter security.

## FUTURE PHASES

The following additional work, listed below (in no order of priority) to complete the project, has been suggested. This list however, may change with changing strategy and/or final planning and input from the appointed development agent. Future phases will be planned and carried out over a period of time in accordance with the Site Development Plan and Project Management Plan developed as part of Phase 1, Sub Phase A.

- Separate dormitory-style overnight accommodation for learners and educators.  
To include: A recreation hall/common room, ablution facilities; refectory.
  - A newly designed and constructed auditorium/conference facility, seating between 200 – 250 people. To include: Full range of audio visual facilities; possibly designed as a split facility namely two smaller linked auditoria.
  - Construction of an exposition/events/banquet hall – unless the conference facility can be planned to accommodate these functions.
  - A linked staff canteen (30 seated persons) and visitor kiosk
  - Restored pre-fabricated iron and wood house [possibly relocated on site] and developed into a period restaurant.
  - Conversion of 'caretaker's house' into a VIP guesthouse.
  - Renovation of existing and/or constructing of new visitor toilet facilities
  - Extended parking facilities.
  - Construction of a Camera Obscura on the ridge
  - Restoration of the main telescope dome and auditorium
  - Restoration of other historic buildings on site
  - Restoration of mini telescope domes
  - Long term terrain development. (PLEASE NOTE: Proposals for development beyond Phase 1 will be dealt with under further calls, for which interested parties will need to specifically tender for for these future developments.)
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## TERMS OF REFERENCE

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### INTRODUCTION

Firms short-listed and invited to the compulsory terrain briefing session will be expected to comply with the stipulations and time schedules detailed below:

- The following documentation to be presented to SAASTA no later than **17 October 2005**
  - A Preliminary Site Development Plan (SDP). To include proposed phasing and time frames for the full project.
  - A cost estimate for completion of a Final SDP
  - An outline of the stages necessary and cost estimates to complete an HIA (Phase 1, Sub-Phase A)
  - A detailed Project Management Plan for the full project
  - A detailed Project Management Plan for the completion of Phase I of the project (Including Sub-Phases A and B)
  - A detailed outline and cost estimate for the completion of Phase I, Sub-Phase B of the project

Organisations expressing interest in the development of the Observatory Site must be able to demonstrate the following:

- Good understanding of the objectives SAASTA hopes to achieve by redeveloping the site
- Experience in project managing similar projects of this nature
- Experience in implementation of large projects of this nature
- Sufficient trained human resource capacity to manage and implement large projects of this nature
- Possess the infrastructure to deliver on specialised tasks and sub-tasks in planning and implementing large projects of this nature
- Experience in conducting Historical Impact Assessment studies
- Experience in drawing up of the required Site Development Plan
- Experience in drawing up detailed specifications for tendering purposes
- In depth knowledge of heritage statutes, requirements and due processes and procedures to follow in a project of this nature
- Good financial, project, communication and organisational management skills
- Good working relationships with a variety of sub-contractors and specialist consultants

**The successful organisation will be expected to deliver the following:**

- A Site Development Plan (SDP) completed and approved by SAASTA
- A Heritage Impact Assessment (HIA)
- Negotiations with stakeholders/experts deemed necessary to complete the HIA
- Submission of the HIA to SAHRA
- Liaison with SAHRA on behalf of SAASTA
- Detailed costing estimates of all tasks and subtasks to complete Phase I
- Cost estimates for later phases to complete the full project
- Assisting SAASTA in drawing up detailed tender specifications for Phase I, Sub-Phase A. (Construction/refurbishing/site work and other sub-contracting.)
- Regular meetings with SAASTA and feedback and reporting on progress
- Phase I, Sub-Phase A, construction/upgrading, started by 01 February 2006
- Regular site inspections during construction work
- Direct communication with sub-contractors
- Signing off of certificates of construction work satisfactorily completed

**PROPOSED TIME FRAMES**

- Closure of receipt of Expressions of Interest: 23 September 2005 at 16:00
- Compulsory site briefing for short-listed bidders: 3 October 2005
- Deadline for Proposal Submissions: 17 October 2005
- Proposal presentation to Saasta Review Committee: Week of 18 – 21 October 2005. Final date to be announced.
- Appointment of Principal Agent: 01 November 2005.
- Completion of Scoping Exercise and SDP: 30 November 2005
- Start with construction tendering processes: 01 December 2005
- Completion of HIA and presentation to SAHRA: 30 December 2005
- Receipt of feedback from SAHRA: 16 January 2006
- Start with construction work Phase I, Sub-Phase B: 01 February 2006

**Financial Indicator**

The contracted organisation will operate with a budget of up to R7.5m (including VAT) for the statutory/planning phase, Phase 1, Sub-Phase A and Phase I, Sub-Phase B of the project. Firms will be expected to develop the most economic strategy to implement the bulk of what is called for in this first phase.

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**SUBMISSION REQUIREMENTS  
FOR THE EXPRESSION OF INTEREST**

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**TO QUALIFY, THE FOLLOWING INFORMATION MUST REACH US  
ON OR BEFORE 23 SEPTEMBER 2005 AT 16:00**

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**INFORMATION REQUIRED:**

NAME OF FIRM

NAME OF PERSON PREPARING THIS SUBMISSION

TITLE AND POSITION IN THE ORGANISATION OF PERSON PREPARING  
SUBMISSION

CONTACT INFORMATION

**The following minimum details should be included in your submission:**

- COMPANY CV
- BEE PROFILE
- SUMMARY OF PROJECTS THAT WILL INDICATE EXPERIENCE IN WHAT IS CALLED FOR IN THE OBSERVATORY DEVELOPMENT PROJECT
- AWARDS WON
- PREVIOUS/PRESENT GOVERNMENT CONTRACTS
- CVs OF MAIN MEMBERS OF STAFF WHO WILL BE ALLOCATED TO THE PROJECT IF SUCCESSFUL
- REFEREES. PLEASE LET US HAVE THE NAMES AND CONTACTS OF TWO CLIENTS THAT YOU HAVE PREVIOUSLY SERVICED BY WAY OF PROJECT MANAGING A DEVELOPMENT SIMILAR TO THE OBSERVATORY PROJECT

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**PLEASE POST SUBMISSIONS TO:**

SAASTA  
P O BOX 1758  
PRETORIA  
0001

**OR HAND DELIVER OR COURIER SUBMISSIONS TO:**

SAASTA,  
DIDACTA BUILDING  
211 SKINNER STREET  
PRETORIA CENTRAL.

**MARK SUBMISSIONS FOR ATTENTION: MR E HANAU.**

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