

# Sakhile ECD & Eco-Tourism Centre

in partnership with Legal of Grace - South Africa

KwaZulu Natal Province, uKhahlamba District

Obujanani Location - Amazizi Village

Google maps: <https://goo.gl/maps/SEumWposjaT2>



## Report On A Site Visit Held 19th January 2019

This report should be read in conjunction with project proposal established earlier and as a continuation thereof. The aims of the site visit was to finalise site survey and site documentation, to assess building skills available locally and to connect better with unique Zulu traditional skills available in Amazizi Village. These unique traditional Zulu skills include and are not limited to mat weaving, basketry and vernacular construction traditional structures such as of uhlaka / inqolobane / osakeni (granary) while the building skills in mainly general tend to be limited by development scale in the small Amazizi village. The site visit will aid in the preparation of the project construction while addressing both the funders and community expectations. In reflection of the project's vision and objectives it is needed to consider its longevity and possible exploration of government grant to sustain the project beyond good will and charity. The site visit was successful in further connecting the building process of the Sakhile ECD & Eco-Tourism to locally available building skills and in seeking to enhance community participation. This document will be followed up shortly by a detailed construction schedule.

Compiled by Kevin Kimwelle

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SAPOA 2018 Joe Slovo Community Project - Overall Transformational Winner:

[www.sapoa.org.za/convention/media/press-releases/the-2018-sapoa-property-developments-awards-for-innovative-excellence-winners-announcement/](http://www.sapoa.org.za/convention/media/press-releases/the-2018-sapoa-property-developments-awards-for-innovative-excellence-winners-announcement/)

Nominated for Design Indaba's 2017 MBOISA (Most Beautiful Object In South Africa):

[www.designindaba.com/videos/interviews/beauty-sustainable-design-joe-slovo-west-community-project](http://www.designindaba.com/videos/interviews/beauty-sustainable-design-joe-slovo-west-community-project)



*main road leading into Amazizi village*

### **Towards holistic sustainability**

Sustainability interconnects the domains of *environment*, *economic* and *sociocultural*, based on the principles of systems thinking. This is being applied through;

*Environmental sustainability:* Sakhile ECD & Eco-Tourism Center, the green project proposal, will be achieved through;

- green education promoted by the pre-school
- incorporating a green eco-center as part of the school
- passive design that uses the surrounding environment to conceive energy
- green building techniques that promote recycling
- green design that ensures water conservation by harvesting rain water and further incorporating a grey water reticulation system that re-uses grey water for greening the school





*elderly Zulu women weaving for livelihood*



*Zulu mats made from dried reeds*

*Cultural sustainability:* The project will be achieved through incorporating the local community in the construction and maintenance of the structure. This will be achieved through:

- incorporating Zulu weaving and basketry into the pre-schools education
- incorporating Zulu cultural design aspects into the green design
- incorporating local building methods and materials into the pre-schools construction





*Amazizi village at a glance*

*Financial sustainability:* this will be achieved by registering the ECD to receive the South African government grant which are specifically set aside to assist such centres. This means that the pre-school can receive an operating budget from department of social development including a meal for the children. The current grant is figure of about R145,000 bi-annually (depending on how approved) . This requires the school to;

- the building has to be approved as an ECD (Early Childhood Development) Centre by Department of Social Development
- the programs of the ECD, the principal and teachers will have to meet the accreditation standards expected by Department of Social Development



*A traditional Zulu basket & mat weaver*

### **Managing community expectations**

The current project timeline is projected to see phase one by September 2019 (please see page 8). The site visit revealed that local Sahkile elders had misinterpreted the projects timeline and have indeed increased the children 2019 intake to 70 children without the two classrooms in Phase 1 of the project being realised. The limited capacity of the existing ECD is further increasing tension with the parents in the community whose children are unable to enrol. The project timeline has since been clarified to Mable and Elijah and the prefabrication construction method being used to build the school further explained to ensure that the community understands that even though they may not physically see much activity on the school site, the structure is being built elsewhere and will be erected on site soon. This issue in has brought the consideration to have Phase 01 staggered in order to erect a classroom and toilet by May



## Site survey and information

A site survey was conducted to confirm the overall measurements of the site. Further measurements of the existing structures was done and the structure examined for structural integrity as it holds sentimental value to the community and the proposal is to incorporate it into overall masterplan of the project. Several drone shots were conducted to ensure good referencing of the site and its rural context and a short fundraising video is being created.

Some skills assessed to be available in the community include:

- basketry and mat weaving by a group of elderly women in Amazizi
- steel welding of two small businesses in the community
- brick making seemed to be popular among the youth and businesses in the community
- there seemed to be a lack of good carpentry skills in the community

In general there seems to be limited accommodation options in the area, with the closest to the further consecution site being; Tugela Falls Bed & Breakfast, Cannidales Accomodation Place and Tower of Pizza.



*some typical metal work in Amazizi village*





*Concrete block making in Amazizi village*



*A concrete block business owner in Amazizi village*



## Projected overall timeline

# Sakhile ECD& Eco-Tourism Centre

in partnership with Legacy of Grace - South Africa

KwaZulu Natal Province, uKhahlamba District

Obujanani Location - Amazizi Village

Site Location: 28°41'06.8"S 28°58'54.0"E ( google maps: <https://goo.gl/maps/SEumV/posjaT2>)

Overall Cost						Project Schedule			
Item Description	Quantity	Unit	Price	unit	Total	Oct 2018 - Sept 2019	Oct 2019 - Jun 2020	Jul 2020 - Feb 2021	Apr 2021- Oct 2021
<b>Learning Spaces</b>									
Learning Space 01 (6 - 36months)				2 x 6M containers	ZAR 130,000.00				
Learning space 02 (3 - 4 years)				2 x 6M containers	ZAR 130,000.00				
Learning space 03 (3 - 4 year old)				2 x 6M containers	ZAR 130,000.00				
Learning space 04 (4 - 5 year old)				2 x 6M containers	ZAR 130,000.00				
total carried forward					ZAR 520,000.00	ZAR 260,000.00		ZAR 130,000.00	ZAR 260,000.00
<b>Circulation spaces</b>									
Xhiba - Zulu Hut									
Main entrance									
Leopards Paw									
Outside learning spaces, walkways & corridors									
total carried forward					ZAR 160,000.00		ZAR 96,000.00	ZAR 32,000.00	ZAR 32,000.00
<b>Eco.Info - Centre</b>									
Revamp original building - Eco/Info Centre									
ECD Administration building				1 x 6M containers					
staff and visitors wc's									
total carried forward					ZAR 175,000.00		ZAR 140,000.00	ZAR 26,250.00	ZAR 8,750.00
<b>Multi-purpose Hall</b>									
Hall				2 x 6M containers					
outside spaces									
total carried forward					ZAR 250,000.00		ZAR 200,000.00	ZAR 37,500.00	ZAR 12,500.00
<b>Energy</b>									
Solar (including installation)									
Biogas (including installation)									
total carried forward					ZAR 100,000.00		ZAR 50,000.00	ZAR 25,000.00	ZAR 25,000.00
<b>Water Reticulation</b>									
Drinking water; storage tanks & piping , etc									
Rain water; gutters, downpipes, water tanks etc									
total carried forward					ZAR 75,000.00	ZAR 45,000.00	ZAR 7,500.00	ZAR 7,500.00	
<b>Drainage system</b>									
septic tanks and black water sytem									
soak-away pits - grey water rsystem									
total carried forward					ZAR 75,000.00	ZAR 37,500.00	ZAR 22,500.00	ZAR 7,500.00	ZAR 7,500.00
<b>Landscaping &amp; Greenery</b>									
fence (incorporating existing fence)									
trees									
garden									
total carried forward					ZAR 75,000.00	ZAR 37,500.00	ZAR 15,000.00	ZAR 15,000.00	ZAR7500.00
<b>site works</b>									
Jungle gyms									
Sports fields									
parking									
total carried forward					ZAR 100,000.00	ZAR 40,000.00	ZAR 20,000.00	ZAR 20,000.00	ZAR 10,000.00
<b>professional fees</b>									
participatory design + design-build									
Professional consultation; Architects & Engineer									
Civil, Structural, Mechanical & Electrical, Quantity Surveyor, etc)									
Municipal documentation and submissions									
total carried forward					ZAR 200,000.00	ZAR 120,000.00	ZAR 40,000.00	ZAR 30,000.00	ZAR 30,000.00
15% Contingency Sum					ZAR 222,000.00	ZAR 111,000.00	ZAR 44,400.00	ZAR 33,300.00	ZAR 33,300.00
<b>Grand Total</b>					<b>ZAR 1,952,000.00</b>	<b>ZAR 651,000.00</b>	<b>ZAR 635,400.00</b>	<b>ZAR 364,050.00</b>	<b>ZAR 426,550.00</b>

Professional Consultants Single Point Of Contact (SPOC)

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**INDALO world**  
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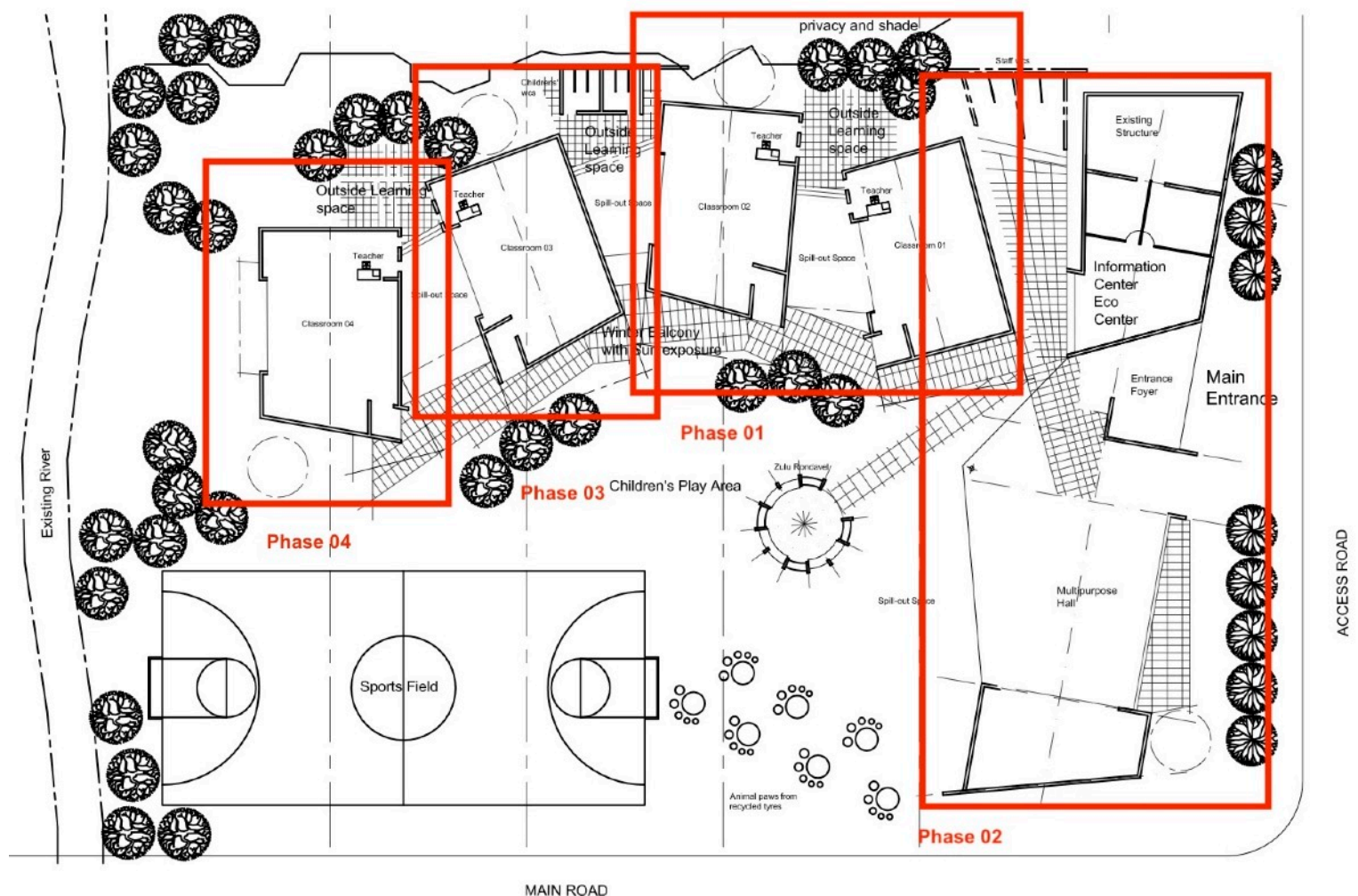
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Legacy of Grace: If you always give, you'll always have...

proposed timeline targets to complete Phase 01 by September 2019





*project phases in the masterplan*

Phase 01 of the project proposal for Sakhile ECD and Eco-Tourism Centre will see the realisation of two classrooms planned for completion by August 2019. This phases also see the incorporation and re-use of the existing structure as an admin area with a kitchen and outside eating area. This should be sufficient to begin the South African Department of Social Development approval process with the Phase 02 on stand by (the eco-center and multipurpose centre) if needed to assist the approval process.

Sakhile ECD programs have a good assurance from the main facilitator's (Zinhle Shabalala) level 5 accreditation as the minimal requirement is level 4. However it will require Thulisile Abigail Luthuli to attain a minimum of Level 2 ECD training while Mable Madonsela may require a short learning program on child / baby development. This process should take place in 2019 in order for Sakhile ECD to receive the government grant in 2020 as it is adequate to provide operational costs. Sakhile could then continue to develop its volunteerism base and use eco-tourism to further develop a unique eco-education curriculum while creating livelihoods for the local community.



## General project schedule and activities towards completion of Phase 01

Dec / Jan	Durban & Port Elizabeth	<ul style="list-style-type: none"> <li>- ground breaking ceremony</li> <li>- South African Construction industry shutdown</li> </ul>
February	Port Elizabeth	<ul style="list-style-type: none"> <li>- site visit, survey and assessment of skills available in locally</li> <li>- finalisation of design and revision of budget</li> <li>- various engineers inputs</li> <li>- assessment of availability of materials</li> <li>- preparation of workshop and capacity</li> <li>- logistics and management</li> </ul>
March	Port Elizabeth:	<ul style="list-style-type: none"> <li>- finalisation of construction / detailed drawings with all engineers inputs and options (alternatives)</li> <li>- finalisation of detailed budget</li> <li>- sourcing of shipping containers and building materials</li> </ul>
	Durban	<ul style="list-style-type: none"> <li>- general construction work of the shipping containers</li> <li>- preparation of plumbing work for mains water connection supply from local municipality to site</li> <li>- establishment of a three phase electrical connection with meter from Eskom to site</li> <li>- establishment of secure storage of equipment / tool on site</li> </ul>
April	Port Elizabeth	<ul style="list-style-type: none"> <li>- preparation of grey water system (underground tanks etc )</li> <li>- construction of prefabricated concrete footings</li> <li>- services and internal final finishes of shipping containers</li> <li>- external finishes of shipping container and all auxiliary</li> <li>- complete openings as attachments (doors, windows etc.)</li> </ul>
	Durban:	<ul style="list-style-type: none"> <li>- setting out site for classroom 01 and 02</li> <li>- start the weaving of mats &amp; blinds by the women of Amazizi</li> <li>- building concrete blocks for building for toilet block</li> <li>- preparing ground for grey water system</li> <li>- construction of new toilet block grey water reticulation</li> </ul>
May - June	Port Elizabeth Durban	<ul style="list-style-type: none"> <li>- construction of classroom 02</li> <li>- installation of grey water system</li> <li>- installation of rain water collection system</li> <li>- installation of solar system</li> </ul>
July - August	Durban	<ul style="list-style-type: none"> <li>- erection of classroom 01 and 02</li> <li>- installation of solar system for two classrooms</li> <li>- completion of installation for rain water harvesting</li> <li>- erection of wooden walkways and outside learning spaces</li> <li>- planting of trees connected to the grey water system</li> <li>- installation of Ixhiba (Zulu Hut) and Ingwe (leopard) paws</li> <li>- celebration of 2019</li> </ul>
September	Durban Port Elizabeth	<ul style="list-style-type: none"> <li>- planning and launch of Phase 02</li> <li>- sourcing of shipping containers and building materials</li> <li>- logistics and management</li> </ul>
Oct - Nov	Port Elizabeth	<ul style="list-style-type: none"> <li>- construction of Eco-Centre</li> <li>- construction Multipurpose hall</li> </ul>
Dec / Jan	Durban & Port Elizabeth	<ul style="list-style-type: none"> <li>- South African Construction industry shutdown</li> <li>- preparation for 2020 realisation</li> </ul>

*this timeline is indicative and will be updated according to prefabrication process and influenced by markets forces within the building construction and shipping / transportation industries*



*Building components that have been investigated and established include:*

- shipping containers:  
Several shipping companies have been consulted to find competitive prices. This includes consultation on transportation and logistics expertise.



*Shipping containers on standby for phase 01*

- Rain water harvesting;  
with water scarcity being an ever present South African issue, the project will have a rain water reticulation system which together with the great water system will save as much water as possible
- grey water system;  
Several green companies have been consulted to find competitive prices. This includes research into the most simple and affordable and easy to maintain system especially in a rural context
- PVC solar system;  
Several solar companies have been consulted to find competitive prices. This includes balancing between affordability and ensuring guarantees on a maintenance plan required to ensure that the systems longevity
- recyclable materials;  
several companies have been consulted and are on standby to provide recyclable materials for this project. This range from recycled glass, plastic and metal





*identified integrated solar and grey water system*



*identified recyclable materials on standby to be supplied for the project*



*identified recyclable structural wood to be used in internal finishes*





*recyclable metal sheeting awaits for re-use*



*recyclable metal structure to be used in the floor raised system*



*identified integrated solar and grey water system*

## Recommendation

- Continued communication of the correct project timeline to the Sakhile ECD & Eco-Centre and community via Elijah as community liaison is essential to meet the community expectation
- Several site visits will be conducted every second or third month (aligned to finalised project schedule of works) in order to assist manage the schools and local community's expectations. These site visit will be accommodated within the overall project execution plan.
- Due to the lengthy processes of the ECD registration grant by the Department of Social Development it is recommend that Sakhile ECD should start familiarising itself with the requirements from Department of Social Development
- Further development of community participatory activities beyond skills and weaving for the building process such as engagement with the elderly women to contribute to the education curriculum and teach the children and facilitator a dying traditional and cultural skill
- Strategically seek further community engagement and participation by the local community in Amazizi village through convincing the community to follow suit in a green brand presented in the form of the recycling in the buildings of the ECD. This is in order to encourage the community to better tackle plastic waste and other recyclable waste that is negatively impacting their environment. This will build a green brand for their community and village.
- There will be rigorous stage by stage reporting to Legacy for Grace - SA, its funders and the local community following the finalisation of the construction schedule with the construction work vs. stages vs. processes in the prefabrication in Port Elizabeth leading to the erection of the staggered Phase





*community liaison officer Elijah Hlanganani Mbonani*

## **Conclusion**

A further detailed construction schedule and timeline will be submitted on the 7th of March 2019 exclusively outlining the construction methods, the bills of quantities and streamlined timelines of Sakhile ECD & Eco-Tourism Center.