

Subiaco Borehole Project

Convoy of Hope; Blessman International

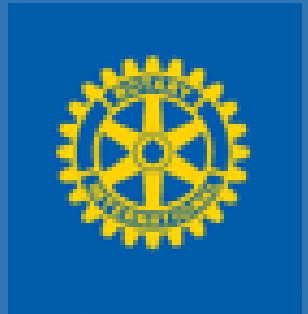
&

Rotary Club of Polokwane

District 9400, South Africa

February 2021

BLESSMAN
INTERNATIONAL

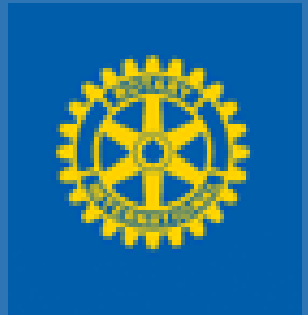


MAIN CONTRIBUTORS AND FUNDERS

- ❖ Convoy of Hope (COH) : USA
- ❖ Rotary Club of Polokwane
- ❖ Blessman International
- ❖ Contractor: Braam Pretorius (Twin Drilling and Testing)

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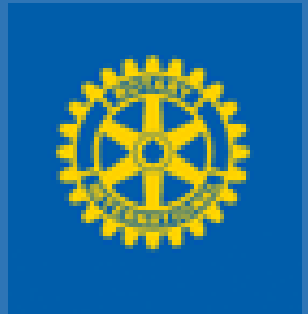


BACKGROUND

- Subiaco Catholic School is situated some 30 km SSE of Polokwane, Limpopo Province South Africa;
- The school is home to 3 000 male and female learners;
- Responsible persons at the school: Brother JJ and Father Dominique
- Scholars board at the school throughout the week and many return home over weekends;
- Bulk water supply from Ebenezer Dam is erratic and seldom reaches the school;
- The school has a back-up borehole supply which augments bulk supply;
- Pumping infrastructure is in poor condition, poorly maintained and is vulnerable to continual vandalism and theft;
- In addition, no yield and water potability data is available for the borehole.

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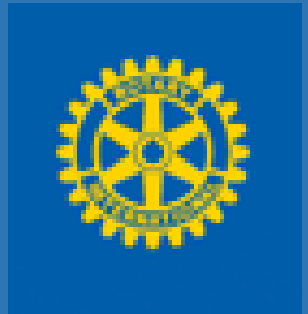


IMPLEMENTATION PLAN

- Initial site visit to school;
- Gather borehole & pumping infrastructure data (pipelines, electricity availability, storage tank capacity) and obtain quotations;
- Submit preliminary cost estimates for approval;
- Remove existing pump and yield test borehole;
- Design new pump based on flow rate and pumping pressures
- Mobilize contractor and construct new infrastructure;
- Cost Reconciliation, Commission & Closure

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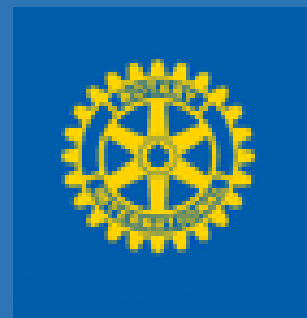
INTERNATIONAL



REGIONAL LOCATION



PROVINCIAL LOCATION



EXISTING PUMP HOUSE



PIPELINE OUTLET



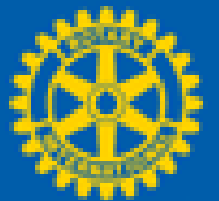
ELECTRICAL CONNECTIONS



EXISTING PUMP AND MOTOR



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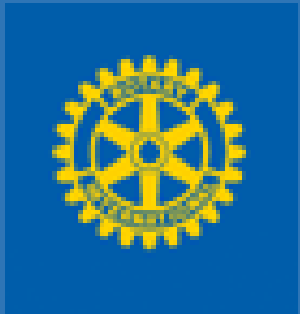


THAT WAS THE PAST

NOW THE PRESENT

- Borehole Elevation (1 238 m amsl), Tanks (1 321 m amsl)
- Head pressure 9.5 Bar (at the pump) total head pressure;
- Pipeline 1 335 meter HDPE 63 mm dia (recently constructed);
- Pump specs ~ Franklin 380V;
- New electrical switchgear, starters, phase failure & lightening arrestors;
- Pump set at 35 m bgl (Ashirvad 50mm x 3 m), 20 Bar rating;
- New secure precast concrete pumphouse & floor;
- New inlet pipework at tanks

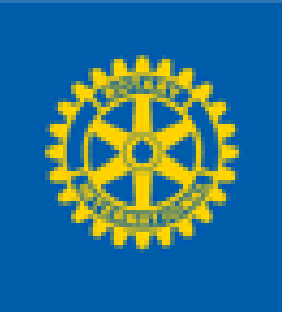
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INFRASTRUCTURE LAYOUT



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NEW PRE CAST CONCRETE PUMP HOUSE



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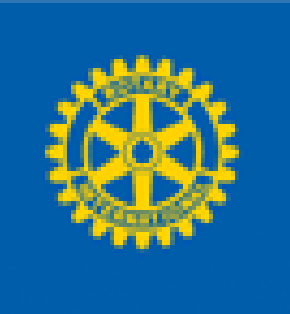


ELECTRICAL SWITCHGEAR AND PUMP PROTECTION



NEW INLET FITTINGS AT JoJo TANKS

NEW PUMP



**“Thousands have lived without
not one without**



W. H. Auden

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