

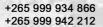


COMPANY PROFILE











#### INTRODUCTION

Willy and Partner Engineering Services (WPES) is a Malawi based engineering consultancy firm registered with the Registrar General of Malawi, National Construction Industry Council, Malawi Consultants and Contractors Board, and Association of Consulting Engineers in Malawi. The firm offers a wide range of consultancy services including water supply and sanitation, irrigation, roads, buildings, infrastructure development, rural development, human resources and institutional development. WPES has a permanent staff contingent of 10 professionals which includes engineers, agriculturalists and social scientists. In addition to our permanent staff, the firm maintains a large database of independent professionals working in various fields of engineering, economics, agriculture, physical planning, geology and mining, environmental sciences and other related fields, allowing us to quickly assemble teams with the exact skills and experience required for any particular assignment.

WPES has extensive experience in the design and implementation of rural and urban projects in Malawi and carrying out of feasibility studies for various sectors of development. Our clients have included the Ministry of Water Development, the European Development Fund, World Vision International, United Nations High Commission for Refugees, the World Bank, and various NGOs. Our international partners have included Lahmeyer International, Kampsax International, DHV/Royal Haskonig of Netherlands, NORPLAN/Multiconsult of Norway, DELCAN of Canada, DMG of Canada, Gibb Africa, IGIP and WAPCOS

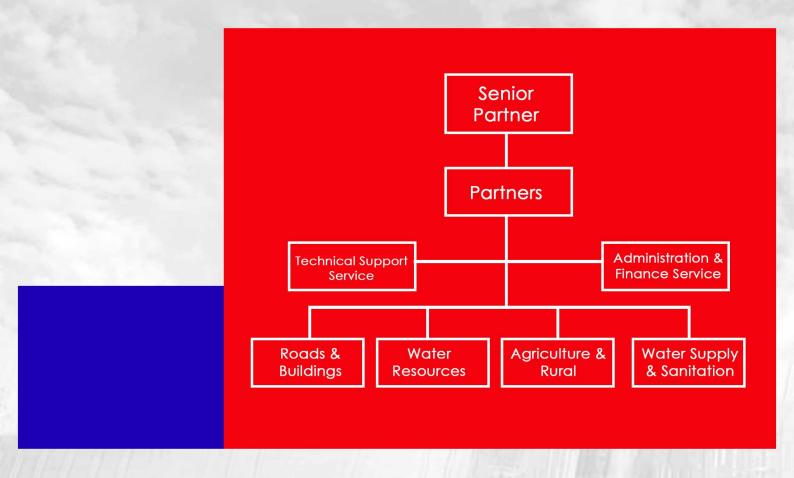
Willy and Partner Engineering Services P.O. Box 3384 Blantyre Telephone (+265) 999 934 866/ 999 942 212 E-Mail: admin@wpesmw.com

#### **LOCATION AND CONTACT ADDRESS**

WPES Blantyre office is located on the first floor of Amarsi Odhavji Plaza next to Malawi Congress of Trade Union and opposite New City Centre along Haile Selassie Road.

## ORGANISATIONAL STRUCTURE

The Organisational Structure of Willy and Partners Engineering Services is shown below. The structure has enabled the company to focus its activities in its area of concern thereby facilitating the teamwork, output control and sharing of common facilities.



# RANGE OF SERVICES

WPES offers services in the following specific areas

## **Water Supply Projects**

- Hydrological and hydrogeological studies
- Feasibility Studies on Water Resources and Water Supply Development
- GIS Mapping in water and sanitation projects
- Environmental Impact Assessment Studies
- Preliminary and Detailed Design of general water development schemes
- Tender document preparation and evaluation
- Project Appraisal
- Management of Operation and Maintenance of Water Supply Systems
- Construction Control and Commissioning
- Training and general institutional support and development

## **Environmental and Sanitation Projects**

- Feasibility Studies for Sanitation facilities development in urban and rural areas
- Environmental Impact Assessment
- Preliminary and Detailed Design of sanitation schemes with emphasis on appropriateness of technology
- Tender document preparation and evaluation
- Project Appraisal
- Management of Operation and Maintenance of Sanitation Schemes
- Construction control and commissioning
- Training and general institutional support and development

## Irrigation and Agriculture Projects

- Feasibility Studies on Water Resources for Irrigation and Agricultural Development
- Hydrological, hydrogeological and agronomical studies
- Environmental Impact Assessment Studies
- Tender document preparation and evaluation
- Project Appraisal
- Management of Operation and Maintenance of Irrigation Systems
- Construction Supervision, Cost Control and Commissioning
- Training and general institutional support and development.

## Roads and Transport Projects

- Feasibility Studies for transportation infrastructure
- Preliminary and detailed design engineering, survey and mapping for urban and rural roads and other transportation infrastructure
- National and Regional Transportation infrastructure development studies
- Feasibility Studies for road links
- Preliminary and detailed design engineering for roads and other transportation infrastructure
- Construction supervision and contract administration

## **Buildings and Institutional Projects**

- Feasibility Studies
- Building Structural Design
- Architectural, landscape, land use plan and general environmental design
- Quantity Surveying and development cost estimation
- Construction Supervision, Cost Control and Management

## Human Resources, Institutional Development and Capacity Building

- Institutional Training
- Training of client personnel
- Training of rural communities in use and maintenance of facilities



	SOME WPES AVAILABLE ENGINEERS AND EXPERTS					
	NAME	PROFESSION	QUALIFICATIONS	YEARS OF EXPERIENCE		
1	Eng Wellington Mandowa	Civil Engineer (Water/Irrigation)	B. Eng (Civil); Dip. Civil Eng.; R Eng	46		
2	Eng.Peter Maele	Civil Engineer (Water/Irrigation)	BSc (Civ. Eng); BSc (For. Eng); R.Eng	42		
34	Eng. Emmanuel Kadyankhundi	Civil Engineer (Water/roads/structu res/Project Management)	BSc (Civ Eng); MSc (Eng); Pr Eng. (RSA); R.Eng	20		
5	Everson Nkonya	(Water./Roads/Struct ures)	BSc. (Civ. Eng)	15		
6	Frank Khoka	Electro-Mechanical Engineer	BSc. (Mech. Eng)	24		
7	James Chimphamba	Environmental &Social Impact Assessment/Land Husbandry Expert	BSc. (Biology & Earth Sciences); MSc.(Land & Water Management)	44		
8	Andrew Matambo	Quantity Surveyor	BSc. (Quantity Surveying); MBA; MSIM	22		

# SELECTED PROJECT EXPERIENCE OF THE FIRM

Duration	Assignment name/& brief description of main deliverables/outputs	Name of Client & Country of Assignment	Approx. Contract value (in US\$ equivalent )/ Amount paid to your firm	Role on the Assignment
March 2013- Novemb er 2018	Structural /civil works design and construction of a three- storey shop/office complex and 2 warehouses at Ginnery Corner in Blantyre Involved: carrying out: Topographical Survey, Geotechnical investigations, structural design and construction supervision	Pamodzi Settlement Trust-Malawi	USD 15,000	Structural/Ci vil Engineers- Sole consultant



Duration	Assignment name/& brief description of main deliverables/outputs	Name of Client & Country of Assignment	Approx. Contract value (in US\$ equivalent )/ Amount paid to your firm	Role on the Assignment
May 2014-July 2018	Structural design and construction supervision of a 3-storey shop/office/apartm ent building at Maselema in Blantyre. Deliverables included: Topo survey  Geo-technical investigations  Structural design  Drainage design  Construction Supervision and quality control	Jupiter Properties- Malawi	USD9,000	Structural Engineers- Sole consultant



Duration	Assignment name/& brief description of main deliverables/outputs	Name of Client & Country of Assignment	Approx. Contract value (in U\$\$ equivalent )/ Amount paid to your firm	Role on the Assignment
	Structural design and construction ndsupervision for a 3-story shop/office building at Maselema in Blantyre. Deliverables included:  • Topo survey • Geo-technical investigations • Structural design • Drainage design Supervision and quality control	Natsons Ltd- Malawi	USD7,000	Structural Engineers- Sole consultant



Duration	Assignment name/& brief description of main deliverables/outputs	Name of Client & Country of Assignment	Approx. Contract value (in US\$ equivalent )/ Amount paid to your firm	Role on the Assignment
August 2016- October 2019	Sructural/civil works design and construction of 10 n0. 2 -storey town-houses at Mudi Estate in Blantyre Deliverables included	Mudi Villas/Pamod zi Settlement Trust -Malawi	USD18,000	Structural /Civil Engineers- Sole consultant



# DESIGN OF NEW WATER SOURCES/INTAKES AND CONVEYANCE SYSTEMS FOR RURAL GRAVITY FED PIPED WATER SUPPLY SCHEMES IN 24 DROUGHT AFFECTED DISTRICTS IN MALAWI

DESIGN OF NEW WATER SOURCES, INTAKES AND
CONVEYANCE SYSTEMS FOR 40 GRAVITY FED WATER SUPPLY SYSTEMS IN 24 DROUGHT AFFECTED
DISTRICTS IN MALAWI

Country: Malawi

Location within Country: Throughout Malawi	Profe

**Professional Staff Provided**: 5

Name of Client: Malawi Drought Recovery and Resilience Project

Number of Staff Provided: 10

Address of Client: P/ Bag A192, LILONGWE

Number of Staff Months: 26

Approximate Value of Services (in current US Dollars): WPES=US\$ 172,480 Total Contract= USD 626,770

Start Date: July 2018

Completion Date: November 2019

Name(s) of Associated Firm (s), if any: Ruo Consultants, EMD Consulting Engineers and I-DEV Engineering Associates

Number of Professional Staff Months Provided by

Associated Firm (s): 46

Name of Senior Staff involved and Function Performed: Wellington Mandowa as Team Leader, Elton Laisi as Hydrologist, Fabiano Kwaule as Community Development Specialist and Everson Nkonya as Design Engineer

#### Narrative Description of Project:

The objective of the project is to Design New Water Sources/ Intakes and Conveyance Systems for Existing Rural Gravity Fed Piped Water Supply Schemes in 24 drought affected districts in Malawi, taking into account the reduced water yields from the existing sources/intakes.

#### **Description of Actual Services Provided by our Staff:**

The scope of services provided during the consultancy included;

- Hydrological assessment of current water sources
- Investigation of other available sources within the area
- Determination of current and projected water demand up to the 20 year horizon
- Feasibility and technical assessment of alternative solutions and interventions. The interventions included relocation of intakes, construction of storage dams, augmentation with ground water and rain-water harvesting.
- Environmental and social impact assessment
- Preparation of reports; Bills of Quantities and tendering documents
- Community sensitisation in readiness for community management of the schemesby the communities themselves

CONSTRUCTION SUPERVISION OF UPGRADED KAMUZU BARRAGE AT LIWONDE			
Assignment name: Construction Supervision of the Upgraded Kamuzu Barrage	Approx. value of the services provided by your firm under the contract: USD 1,583;200 Associated firm: USD;3,,606,784		
Country: Malawi Location within country: Liwonde in Machinga and Balaka Districts on the Shire River	Total Nº of staff-months of the assignment: 196 staff-months		
Name of Client:  Ministry of Agriculture Irrigation and Water Development	Address: Private Bag 390, Lilongwe 3 Financing Agency: World Bank		
Start date (month/year): May, 2014  Completion date (month/year): January 2019	Nº of professional staff-months provided by associated Consultants: 247 staff-months		
Name of associated Consultants, if any: NORPLAN	Name of senior professional staff of your firm involved and functions performed:  Peter Maele – National Project Coordinator/Civil Engineer George Makungwa- Civil Engineer Everson Nkonya-Civil Engineer Daud Kara- Contracts Engineer Johnnie Somba-Quantity Surveyor Andrew Matambo-Quantity Surveyor Patricia Nayeja-Environmentalist/EHS Engineer		

The Kamuzu Barrage on the Shire River acts as the main control of the Shire River and Lake Malawi levels and water is released from this barrage for the operation of the five hydro-electric power plants which supply most of the power requirements for Malawi. This project was to ugrade the barrage by increasing the water storage capacity so that future demands can be sustained. In addition to this the barrage also acts as road bridge across the Shire River and it was required that the design should also look at harmonising the traffic flow since the intensity of traffic has increased drastically from the time the current structure was build, almost fifty years ago.

- Assist the main consultant in site supervision and project management
- Measurement of works and preliminary verification of Interim Payment Certificates (IPCs)
- Inspection and approval of materials
- Approving contractors work plans and methodology
- Ensuring that contractor is adhering to safety practices and procedures in carrying out the work
- Ensuring that the contractors is following the EMP and that safety practices and environmental are being followed

Assignment name:  Construction Supervision for the Integration and Expansion of the Salima Lakeshore Water Supply Schemes	Approx. value of the services provided by your firm under the contract: USD152,000
Country: Malawi Location within country: Salima Lakeshore (Senga Bay/Kambiri Point)	Total № of staff-months of the assignment: 21 staff-months
Name of Client: Central Region Water Board	Address: P/B 59, Lilongwe
Start date (month/year): November 2013 Completion date (month/year): December 2014	Nº of professional staff-months provided by associated Consultants: 10 staff-months
Name of associated Consultants, if any: WAPCOS of India	<ul> <li>Name of senior professional staff of your firm involved and functions performed:</li> <li>Peter Maele- Resident Engineer-Responsible for supervising the contractor</li> <li>Chimwemwe Mawaya-Environmental and Social Expert-responsible for drawing up and supervising the Environmental and Social Management Plan</li> <li>Everson Nkonya – Engineer Surveyor – Assisting the resident engineer in construction supervision and quality control</li> <li>Chiku Makwinja – Site Inspector – Inspection of works being carried out by the contractor</li> </ul>

The Central Region Water Board, through a loan from the World Bank are integrating the three small Salima Lakeshore water supply schemes that are supplying water to MAFCO, Parachute Battallion and Salima ADD into one large scheme that will supply the whole lakeshore area from Senga Bay to Kambiri Point and all the surrounding areas that host a number of hotels, lodges, beach —front cottages, schools and some villages. The work involves the construction of a new lake intake, a pumping main, treatment works, a transmission and distribution main, three reinforced concrete tanks, office block and staff housing.

- Design review of the original design and making recommendations for alterations
- Supervision of construction works and monitoring contractor's adherence to specifications, project costs and overall administration of the works contract. On behalf of the client.
- Community mobilization and training for Communal Water Point Committees

CONSULTANCY SERVICES TO CONDUCT FEASIBILITY STUDY TO REALISATION OF DEVELOPING MPIRA MINI DAM IN MACHINGA DISTRICT				
CARRYING OUT A FEASIBILITY STUDY FOR THE REALISATION OF THE PROPOSED MPIRA MULTIPURPOSE DAM, FUNDED BY GLOBAL ENVIRONMENTAL FUND (GEF) AND UNITED NATIONS DEVELOPMENT PROGRAM (UNDP)	Country: Malawi			
Location within Country: Machinga District	Professional Staff Provided: 8			
Name of Client: Machinga District Assembly,	Number of Staff Provided: 5			
Address of Client: P/ Bag 1, Machinga	Number of Staff Months: 4.5			
Approximate Value of Services (in current US Dollars): US\$ 31,600				
Start Date: May 2018	Completion Date: October 2018			
Name(s) of Associated Firm (s), if any: N/A	Number of Professional Staff Months Provided by Associated Firm (s):			

Name of Senior Staff involved and Function Performed: Wellington Mandowa as Team Leader/Dam Engineer, Dr. Vincent Msadala as Hydrologist, James Chimphamba as Environmental and Social Expert, Everson Nkonya as Surveyor/Design Engineer and Ashley Kanyoza as Geotechnical Engineer.

#### Narrative Description of Project:

The objective of the consultancy assignment was to conduct a feasibility study for the proposedMpira Mini Multipurpose Dam to en able the client to make an informed decision to the realization of developing the Mini Dam. The proposed multi-purpose dam is meant to be used for irrigation, water supply, fisheries development and environmental conservation.

#### **Description of Actual Services Provided by our Staff:**

The scope of services provided during the consultancy included;

- Review of relevant previous reports documents and field assessment
- Topographical survey of proposed dam site and alternative sites on Mpira River
- Hydrological analysis and modelling of river flows and sediment transport
- Carrying out geological and geo-technical surveys and analysis of associated risks
- Environmental and social impact assessment
- Preparation of reports and preliminary Bills of Quantities

Assignment name: Supervision of construction of Mangochi Town Water Scheme	Approx. value of the services provided by your firm under the contract: USD96,000	
Country: Malawi Location within country: Mangochi Town	Total № of staff-months of the assignment: 24 staff-months	
Name of Client: Southern Region Water Board	Address: P/B 72, Zomba	
Start date (month/year): November 2012 Completion date (month/year): October 2013	Nº of professional staff-months provided by associated Consultants: 12 staff-months	
Name of associated Consultants, if any: IGIP	<ul> <li>Name of senior professional staff of your firm involved and functions performed:</li> <li>Willy Mandowa as Resident Engineer Responsible for supervising contractors for Mangochi Water Scheme</li> <li>Everson Nkonya as site inspector responsible for site supervision, quality control and surveying work as and when necessary</li> </ul>	

SRWB are rehabilitating and augmenting Mangochi Water scheme with funding from World Bank. The works involves construction of an upgraded pumping station from the Shire River, a conventional water treatment plant that includes aerator, flocculator, clarifier, slow sand filters and clear water tanks. The works also cover elevated tanks and upgrading of pipelines.

- Supervision of construction works to ensure meeting specification
- Certifying contractor invoices
- Overall management of the schemes that includes monthly meetings and production of reports
- Community mobilization and training for Communal Water Point Committees

DESIGN AND TENDERING OF REHABILITATION SCHEMES IN MALAWI	WORKS FOR FLOOD DAMAGED IRRIGATION			
DESIGN AND TENDERING OF REHABILITATION WORKS FOR FLOOD DAMAGED IRRIGATION SCHEMES IN MALAWI- FUNDED BY WORLD BANK	Country: Malawi			
Location within Country: ZOMBA, MACHINGA, BALAKA, CHIRADZULU, MULANJE, THYOLO PHALOMBE AND BLANTYRE	Professional Staff Provided: 7			
Name of Client: Ministry of Agriculture, Irrigation and Water Development under the Malawi Flood Emergency Recovery Project (MFERP)	Number of Staff Provided: 12			
Address of Client: P/ Bag 390, Lilongwe	Number of Staff Months: 13			
Approximate Value of Services (in current US Dollars): US\$ 98,000				
Start Date: April 2017	Completion Date: August 2017			
Name(s) of Associated Firm (s), if any: Korea Rural Community Corporation/DASAN Consultants	Number of Professional Staff Months Provided by Associated Firm (s): 10			

**Name of Senior Staff involved and Function Performed:** Peter Maele as Coordinator, George Makungwa, Stearner Zuze and Kingsley Chimombo as Design Engineers, Meya Kalindekafe as Environmental/Social Expert,

## Narrative Description of Project:

.The objective of the consultancy assignment was to carry out an assessment of 13 flood-damaged irrigation schemes in 8 districts and design rehabilitation measures and works which would make the schemes more resilient to future flood damage and other potential climatic change related disasters. The proposed design and mitigation measures were supposed to be environmentally sensitive and user-friendly.

## **Description of Actual Services Provided by our Staff:**

The scope of construction supervision services included;

- · Review of documents and field assessment
- Design of civil, hydraulic and electro-mechanical interventions
- Carrying out topographical, hydrological and geo-technical surveys
- Preparation of an Environmental Management Plan
- Preparation of reports and tendering documents
- · Community mobilization, training and strengthening of WUA;s

CONSTRUCTION SUPERVISION OF REHABILITATION OF LIKANGALA AND LIMPHASA IRRIGATION SCHEMES	
<b>Assignment Name:</b> IRLAD- REHABILITATION OF LIKANGALA AND LIMPHASA SCHEMES	Country: Malawi
<b>Location within Country</b> : ZOMBA AND NKHATA BAY	Professional Staff Provided: 4
Name of Client: Ministry of Irrigation and Water Development	Number of Staff Provided: 4
Address of Client: P/ Bag 390, Lilongwe 3	Number of Staff Months: 48
Approximate Value of Services (in current US Dollars): US\$ 100,000.00	
Start Date: 18th July 2010	Completion Date: 15th May, 2012
Name(s) of Associated Firm (s), if any: Gibb	Number of Professional Staff Months Provided by Associated Firm (s): 24

Name of Senior Staff involved and Function Performed: Wellington Mandowa as Deputy Project Manager, Everson Nkonya, Lucius Dzimbiri and Robert Mwina as Supervising Irrigation Engineers

**Narrative Description of Project:** The specific objective of the consultancy assignment was to supervise, in a community participatory manner, the rehabilitation of the Likangala complex Irrigation Schemes in Zomba District and Limphasa irrigation Scheme in Nkhata Bay District.

CONSTRUCTION OF REHABILITATION AND EXPANSION ZOMBA CITY WATER SUPPLY	
Assignment name: Supervision of construction of Zomba Urban Water Scheme	Approx. value of the services provided by your firm under the contract: USD82,000
Country: Malawi Location within country: Zomba City	Address: P/B 72, Zomba
Name of Client: Southern Region Water Board	Total № of staff-months of the assignment: 24 staff-months
Start date (month/year): November 2013 Completion date (month/year): October 2014	Nº of professional staff-months provided by associated Consultants: 8 staff-months
Name of associated Consultants, if any: IGIP and WPES	<ul> <li>Name of senior professional staff of your firm involved and functions performed:</li> <li>Biggles Katenga as Assistant Resident Engineer responsible for overall supervision of the contractor, checking and verifying the quantities and scrutiny of the contractor's certificates fori Zomba Water Scheme</li> <li>Joseph Mphande as Site Inspector – responsible for site supervision, quality control and surveying work as and when necessary</li> </ul>

Southern Region Water Board were rehabilitating and augmenting Zomba Water scheme with funding from World Bank. In Zomba the works involved the rehabilitation of the treatment works, extension and upgrading of the pipe distribution network, and construction of booster stations.

- Supervision of construction works to ensure that specification are adhered to
- Certifying contractor's invoices
- Overall management of the construction contract that includes chairing of site meetings and production of reports