



REPUBLIC OF KENYA



COUNTY GOVERNMENT OF NYANDARUA

DEPARTMENT OF TRANSPORT, ENERGY & PUBLIC WORKS

DRAINAGE WORKS-RURII, KAIMBAGA (CAPTAIN) AND KANJUIRI
(TUMAINI)

FOR

DEPARTMENT OF LANDS, PHYSICAL PLANNING AND URBAN
DEVELOPMENT

BILLS OF QUANTITIES

ARCHITECT,
COUNTY ARCHITECT,
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 701-20303,
OL KALOU

QUANTITY SURVEYOR,
COUNTY QUANTITY SURVEYOR,
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 701-20303,
OL KALOU

ELEC/MECH ENGINEER
COUNTY ELEC / MECH. ENGINEER,
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 701-20303,
OL KALOU

STRUCTURAL ENGINEER,
COUNTY ENGINEER - STRUCTURAL
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 701-20303,
OL KALOU

AUGUST, 2024

DRAINAGE WORKS-RURII, KAIMBAGA (CAPTAIN) AND KANJUURI (TUMAINI)

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
A	<p><u>ELEMENT NO. 01 - PRELIMINARIES</u></p> <p>The Contractor is to allow for all Preliminaries including site offices and stores, transport of workmen to and from site, transport of materials, supply, setting out, servicing, fueling of the plant and equipment, provision of plant operator, insurance for the works shall be the sole responsibility of the contractor and all other preliminaries incidental to these works</p> <p>Allow for all Preliminaries associated with the works</p>	Item	1		
	<p>Element 01</p> <p>PRELIMINARIES</p>			KSHS	CARRIED TO SUMMARY

DRAINAGE WORKS-RURII

BILL NO. 2 - DRAINAGE WORKS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
<u>ELEMENT NO. 01 - ALL ITEMS</u>					
A	Excavate to form open drain width 1050mm width by (1000mm high) with sides set sloping, level and compact bottoms to receive base concrete.	CM	414		
B	Cart away excavated materials and spread on site around the drains as directed	CM	414		
C	200mm thick (1:3:6) mass concrete in trench bases well compacted	SM	204		
D	Construct 150mm thick thick natural stone side walls (set sloping) jointed in (1:3) cement sand mortar and not exceeding 1000mm high as directed by the Engineer.	SM	165		
E	Construct concrete scouring checks in accordance to specifications and as directed by the site Engineer	NO	2		
	Element 01				
	DRAINAGE	CARRIED TO SUMMA		KSHS	

DRAINAGE WORKS-RURII

BILL NO. 4 - CULVERTS & HEADWALLS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	<u>ELEMENT NO. 01 - ALL ITEMS</u>				
	<u>Excavation</u>				
A	Excavate trench for 600mm diameter culvert, apron and wing-walls to detail (50) 5318 starting from ground level to a depth not exceeding 1.25m	CM	25		
	<u>Blinding concrete (1:4:8) in:</u>				
B	50mm thick blinding to bottoms of excavation	SM	21		
	<u>Vibrated concrete Class 20/20 (1:2:4) including all necessary formwork in:</u>				
C	Concrete surround and bedding	CM	9		
D	Aprons	CM	2		
E	Headwalls and wingwalls	CM	2		
	<u>Fabric Mesh Reinforcement to B. S. 4483:2005</u>				
F	B.R.C. Mesh type A65; Ø4mm; 180x180mm openings; 1.11kg/m ²	SM	32		
	<u>Pre-cast concrete pipes</u>				
G	Provide, lay and joint 600mm diameter pre-cast concrete pipes on concrete bedding to correct falls	LM	12		
	<u>Filling and carting away</u>				
H	Return, fill and ram with approved granular material around installed culverts	CM	9		
I	Load and cart away extra excavated material from site to approved County Government dump site	CM	26		
	Element 01				
	CULVERTS & HEADWALLS		CARRIED TO SUMMARY	KSHS	

DRAINAGE WORKS- Captain

BILL NO. 2 - DRAINAGE WORKS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	<u>ELEMENT NO. 01 - ALL ITEMS</u>				
A	Excavate to form open drain width 1050mm width by (1000mm high) with sides set sloping, level and compact bottoms to receive base concrete.	CM	217		
B	Cart away excavated materials and spread on site around the drains as directed	CM	217		
C	200mm thick (1:3:6) mass concrete in trench bases well compacted	SM	363		
D	Construct 150mm thick thick natural stone side walls (set sloping) jointed in (1:3) cement sand mortar and not exceeding 1000mm high as directed by the Engineer.	SM	146		
E	Construct concrete scouring checks in accordance to specifications and as directed by the site Engineer	NO	6		
	Element 01				
	DRAINAGE CARRIED TO SUMMARY			KSHS	

DRAINAGE WORKS- Tumaini

BILL NO. 4 - CULVERTS & HEADWALLS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	<u>ELEMENT NO. 01 - ALL ITEMS</u>				
	<u>Excavation</u>				
A	Excavate trench for 600mm diameter culvert, apron and wing-walls to detail (50) 5318 starting from ground level to a depth not exceeding 1.25m	CM	25		
	<u>Blinding concrete (1:4:8) in:</u>				
B	50mm thick blinding to bottoms of excavation	SM	21		
	<u>Vibrated concrete Class 20/20 (1:2:4) including all necessary formwork in:</u>				
C	Concrete surround and bedding	CM	10		
D	Aprons	CM	2		
E	Headwalls and wingwalls	CM	2		
	<u>Fabric Mesh Reinforcement to B. S. 4483:2005</u>				
F	B.R.C. Mesh type A65; Ø4mm; 180x180mm openings; 1.11kg/m ²	SM	32		
	<u>Pre-cast concrete pipes</u>				
G	Provide, lay and joint 600mm diameter pre-cast concrete pipes on concrete bedding to correct falls	LM	12		
	<u>Filling and carting away</u>				
H	Return, fill and ram with approved granular material around installed culverts	CM	5		
I	Load and cart away extra excavated material from site to approved County Government dump site	CM	13		
	<u>slabs</u>				
	150mm thick reinforced with BRC Mesh A65; Ø4mm; 180x180mm concrete access slabs in C20/20 as will be directed by the engineer on site	CM	1		
F	B.R.C. Mesh type A65; Ø4mm; 180x180mm openings; 1.11kg/m ²	SM	10		
	Element 01				
	CULVERTS & HEADWALLS			KSHS	
	CARRIED TO SUMMARY				

DRAINAGE WORKS- Tumaini

BILL NO. 2 - DRAINAGE WORKS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	<u>ELEMENT NO. 01 - ALL ITEMS</u>				
A	Excavate to form open drain width 1050mm width by (1000mm high) with sides set sloping, level and compact bottoms to receive base concrete.	CM	257		
B	Cart away excavated materials and spread on site around the drains as directed	CM	257		
C	200mm thick (1:3:6) mass concrete in trench bases well compacted	SM	322		
D	Construct 150mm thick thick natural stone side walls (set sloping) jointed in (1:3) cement sand mortar and not exceeding 1000mm high as directed by the Engineer.	SM	246		
E	Construct concrete scouring checks in accordance to specifications and as directed by the site Engineer	NO	3		
	Element 01				
	DRAINAGE	CARRIED TO SUMMARY		KSHS	

DRAINAGE WORKS- Tumaini

BILL NO. 4 - CULVERTS & HEADWALLS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	<u>ELEMENT NO. 01 - ALL ITEMS</u>				
	<u>Excavation</u>				
A	Excavate trench for 600mm diameter culvert, apron and wing-walls to detail (50) 5318 starting from ground level to a depth not exceeding 1.25m	CM	25		
	<u>Blinding concrete (1:4:8) in:</u>				
B	50mm thick blinding to bottoms of excavation	SM	21		
	<u>Vibrated concrete Class 20/20 (1:2:4) including all necessary formwork in:</u>				
C	Concrete surround and bedding	CM	9		
D	Aprons	CM	2		
E	Headwalls and wingwalls	CM	2		
	<u>Fabric Mesh Reinforcement to B. S. 4483:2005</u>				
F	B.R.C. Mesh type A65; Ø4mm; 180x180mm openings; 1.11kg/m ²	SM	32		
	<u>Pre-cast concrete pipes</u>				
G	Provide, lay and joint 600mm diameter pre-cast concrete pipes on concrete bedding to correct falls	LM	11		
	<u>Filling and carting away</u>				
H	Return, fill and ram with approved granular material around installed culverts	CM	9		
I	Load and cart away extra excavated material from site to approved County Government dump site	CM	26		
	<u>slabs</u>				
	150mm thick reinforced with BRC Mesh A65; Ø4mm; 180x180mm concrete access slabs in C20/20 as will be directed by the engineer on site	CM	2		
F	B.R.C. Mesh type A65; Ø4mm; 180x180mm openings; 1.11kg/m ²	SM	25		
	Element 01				
	CULVERTS & HEADWALLS			KSHS	
				CARRIED TO SUMMARY	

PROPOSED DEVELOPMENT OF DRAINAGE SYSTEMS IN OLKALOU

BILL NO. 5 - PROVISIONAL SUMS

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
B	<p><u>ELEMENT NO. 01 - ALL ELEMENTS</u></p> <p><u>The following provisional sums are to be measured on completion and priced in accordance with the rates contained in these bills of quantities or prorata thereto or deducted in whole if not required</u></p> <p>Allow a Provisional Sum of Kenya Shillings One Hundred Thousand (Kshs. 100,000.00) only for Project Supervisory Expenses to be deducted in whole or in part as directed by the Project Manager</p>		ITEM		
	Element 01				
	PROVISIONAL SUMS		CARRIED TO SUMMARY	KSHS	

PROPOSED DEVELOPMENT OF DRAINAGE SYSTEMS IN OLKALOU

GRAND SUMMARY

ITEM	DESCRIPTION	Page No.	FOR OFFICIAL USE ONLY	FOR TENDERER USE ONLY
			KSHS.	KSHS.
A	Preliminaries	DW/1		
A	Drainage Works	DW/1		
B	Culvert Works	PW/2		
C	Provisional Sums	PS/1		
	SUB-TOTAL			
	ADD 1% PROJECT MANAGEMENT PAYABLE TO COUNTY REVENUE ACCOUNT			
TOTAL CARRIED TO FORM OF TENDER INCLUSIVE OF 16% V.A.T.				

Amount in words. Kenya shillings

.....

.....Cents

Tenderer's Signature and stamp.....

Address

.....

Date

Witness Signature

Address

.....

Date