

COUNTY GOVERNMENT OF MOMBASA



DEPARTMENT OF TRANSPORT AND INFRASTRUCTURE

BIDDING FOR RATES

FOR

BIENNIAL CONTRACTS FOR ROADS AND OTHER CIVIL WORKS CONTRACTS FOR THE PERIOD 2020/2021 & 2021/2022

**TENDER NO. CGM/PRO/T/7/2020-2021– BIENNIAL CONTRACT FOR ROAD AND OTHER
CIVIL WORKS IN CHANGAMWE & JOMVU SUBCOUNTY (MAINLAND WEST ZONE**

AUGUST, 2020

SECTION VIII - STANDARD FORMS

FORM OF TENDER

TENDER NO. CGM/PRO/T/7/2020-2021– BIENNIAL CONTRACT FOR ROAD AND OTHER CIVIL WORKS IN CHANGAMWE & JOMVU SUBCOUNTY (MAINLAND WEST ZONE)

TO:

[Name of Employer) _____ [Date] _____
_____ [Name of Contract]

Dear Sir,

In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of Kshs. _____ [Amount in figures] Kenya

Shillings _____
_____ [Amount in words]

We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.

We agree to abide by this tender until _____ [Insert date], and it shall remain binding upon us and may be accepted at any time before that date.

Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20_____

Signature _____ in the capacity of _____

duly authorized to sign tenders for and on behalf of

_____ [Name of Employer]

of _____ [Address of Employer]

Witness; Name _____

Address _____

Signature _____

Date _____

FORM OF TENDER SECURITY

TENDER NO. CGM/PRO/T/4/2020-2021 – BIENNIAL CONTRACT FOR ROAD AND OTHER CIVIL WORKS IN CHANGAMWE & JOMVU SUBCOUNTY (MAILAND WEST ZONE)

BY THIS SECURITY WE (Hereinafter called “The Tenderer”) and

.....

(Bank) whose registered office is at

.....(hereinafter called “the Surety”) are held and firmly bound unto County Government of Mombasa (hereinafter called “the Authority”) in the sum of Kenya Shillings Two Hundred and Fifty Thousand (KShs 250,000.00) for the payment of which sum the Tenderer and Surety bind themselves, their successors and assigns jointly and severally by these presents.

Sealed with our respective seals and dated thisday of 2016.

WHEREAS

The Authority has invited the Tenderer and other persons to complete Tenders in similar terms for the **BIENNIAL CONTRACT FOR ROAD AND OTHER CIVIL WORKS IN CHANGAMWE & JOMVU SUBCOUNTY (MAINLAND WEST)** (hereinafter called “the Works”) and submit the same for consideration by the Authority.

The tenderer proposes to submit to the Authority a Tender (hereinafter called “the Tender”) in accordance with such invitation and by the above written Security, to provide security for the due performance by him of the undertakings and obligations in the Tender on his part contained.

NOW THE CONDITIONS of the above-written Security are such that:

If the Tenderer withdraws his Tender during the period of validity specified in the Form of Tender; or,

If the Tenderer refuses to accept the correction of errors in his Tender; or,

If the Tenderer having been notified of the acceptance of his Tender by the Authority during the period of Tender validity;

Fails to execute the Contract Agreement

Fails to furnish the Performance Security or Guarantee, in accordance with the Contract, within the time limits set in the Instructions to Tenderers,

we undertake to pay the Authority an amount not exceeding the sum stated above on receipt of its first written demand, without the Authority having to substantiate its demand.

This guarantee will remain in force up to and including thirty (30) calendar days after the period of Tender validity including any extensions thereof, and any demand in respect thereof should reach the Surety not later than the above stated date.

The common seal of(the Tenderer) was hereunto affixed
in the presence of:

Signature.....

Name.....

In the capacity of.....

The common seal of(the Surety) was hereunto
affixed in the presence of:

Signature.....

Name.....

In the capacity of.....

FORM OF PERFORMANCE SECURITY

(To be filled by successful Tenderer Only)

BIENNIAL CONTRACT FOR ROAD AND OTHER CIVIL WORKS IN CHANGAMWE & JOMVU SUBCOUNTY (MAINLAND WEST ZONE)

TENDER NO. CGM/PRO/T/7/2020-2021

TO: County Government of Mombasa
P. O. BOX 90440-80100
M O M BASA.

Dear Sir(s)

With reference to your Agreement with

For the BIENNIAL CONTRACT FOR ROADS

(TENDER NO. CGM/PRO/T/7/2020-2021) dated and at their request we hereby undertake to hold at your disposal the sum of up to KShs

.....
.....(in words) Only, which we shall pay to you without any reference to, and in spite of any contestation by the said
Messrs.....

immediately on your demand being made to us in writing by ordinary or registered post or by hand at our offices , stating that Messrshave not fulfilled the terms and conditions of their above mentioned contract and you claim payment under this Security. Any claim under this Security should be received by us on or before theafter which date our aforesaid Security shall cease and be of no effect and must be returned to us

Signed Sealed and Delivered by the said _____

In the presence of: _____

Date: _____

**BIENNIAL UNIT RATE FOR ROADS AND OTHER CIVIL WORKS:CHANGAMWE & JOMVU
SUBCOUNTY (MAINLAND WEST ZONE)- CONTRACT NO. CGM/PRO/7/2020-2021**

Item Code	Description	Unit	Technology	Quantity	Rate (Kshs)
Activity Group: - GENERAL: OFFICE ADMINISTRATION AND OVERHEADS/ PRELIMINARIES					
Bill No. 1					
01-50-001	Allow a prime cost sum for the REs miscellaneous account	PC SUM	LB-MB	1	
	Extra over 01-50-001 for profits and overheads	%	LB-MB	1	
01-50-003	Watchman	MD		1	
	Extra over 01-50-003 for profits and overheads	%			
01-50-004	Allow a prime cost for attendance to the RE,s supervisory staff including overtime	PC SUM	LB-MB	1	
	Extra over 01-50-004 for profits and overheads	%			
01-60-001	Miscellaneous And other Charges	KS	LB-MB	1	
01-60-009	Publicity Sign Boards	KS	LB-MB	1	
01-61-001	Materials Investigation &Testing	PC SUM	LB-MB	1	
01-61-002	Survey Works	KS	LB-MB	1	
01-61-003	Consultancy services	PC SUM	LB-MB		
01-70-001	Allow a PC sum for Engineers Office furniture and laboratory equipment as instructed by the Engineer	PC SUM	LB-MB	1	
	Extra over item 01-90-001 for contractors overheads and profits	%		10	
1-70-002	Maintenance: Temp. Build/Camps	PC SUM	LB-MB	1	

	Extra over item 01-70-002 for contractors overheads and profits	%	LB-MB	10	
01-80-026	Allow a prime cost sum for the REs miscellaneous account	PC SUM	LB-MB	1	
01-80-031	Include percentage of PC sum in item 01-80-030 for contractors overhead and profit	%	LB-MB	10	
01-90-001	Provide fuel and maintain with drivers c for exclusive use by the Engineer inclusive of the first 4,000km per vehicle month. Ownership to revert to the client at the end of the project	V/ Months	LB-MB	1	
Activity Group:-SITE CLEARANCE					
Bill No. 4					
04-50-001	Mechanical mowing	M ²	MB	1	
04-50-002	Grass cutting (Manual)	M ²	LM	1	
04-50-003	Heavy Bush Clearance	M ²	LB	1	
04-50-004	Light Bush Clearing	M ²	LB	1	
04-50-005	Pruning of Tree Branches	NO	LB	1	
04-50-006	Tree cutting and stump removal (200 -450 mm)	NO	LB	1	
04-50-007	Tree cutting and stump removal (>450 mm)	NO	LB	1	
04-50-008	Clearing obstructions (boulders & debris)	PC SUM	LB	1	
04-50-009	Rock removal	PC SUM	LB	1	
04-50-010	Stripping and Grubbing	KMS	LB	1	
04-50-010	Excavate remove & disposal of concrete structures	KS	LB	1	
04-60-011	Clear site on road reserve including removal of trees, hedges, bushes and other vegetation or deteriorous organic material, grub up roots and back fill to 100% MDD (AASHTO T99) with approved material in accordance with the	Ha	LB-MB	1	

	specification				
04-60-012	Remove top soil to maximum depth of 200mm as directed by the Engineer stockpile good material for later top soiling of slide slopes and landscaping of quarries and borrow pits	M ²	LB-MB	1	
Activity Group:- EARTHWORKS					
Bill No. 5					
05-50-001	Fill in soft material and compact	M ³	LB	1	
05-50-002	Fill in hard material and compact	M ³	MB	1	
05-50-003	Haulage of Material				
05-50-004	Cut to spoil in Soft	M ³	LB	1	
05-50-005	Cut to spoil in Hard	M ³	MB	1	
05-50-006	Filter to swamp under, over and around rock fill	M ²	MB	1	
05-60-001	Compaction of existing ground under embankments to 95% MDD (AASHTO T99) in layers of 150mm	M ³	LB-MB	1	
05-60-003	E.O. item 05-60-002 for compaction of the top 300mm to BS497 in fill areas	M ³	LB-MB	1	
05-60-004	Fill in hard material (rock fill on selected sections)	M ³	LB-MB	1	
05-60-005	Compaction of top 300mm below formation in cuts and fills to 100% ^MDD	M ³	LB-MB	1	
05-50-006	Excavation & spread in hard material and compact	M ³		1	
05-50-007	Spreading & Compaction Camber Formation	M ²	LB	1	
05-70-001	Grassing	M ²	LB	1	
05-70-002	Back slope / Slope Maintenance	M ²	LB	1	
Activity Group:- EXCAVATION AND FILLING					

FOR STRUCTURES					
Bill No. 7					
07-50-001	Excavate for structure in soft material	M ³	LB/MB	1	
07-50-002	Excavate for structure in hard material	M ³	MB	1	
07-50-003	River training in soft material	M ³	LB	1	
07-50-005	Porous filter material	M ³	LB	1	
07-50-006	Provide and place selected granular fill material	M ³	MB		
07-60-002	Provide and place gabion boxes and mattresses as specified or as directed by the Engineer	M ³	LB-MB	1	
07-60-003	Provide and place rock fill to gabions and mattresses	M ³	LB-MB	1	
07-60-005	Provide and place 200mm thick stone pitching including grouting to aprons upstream and downstream of bridges and culverts as detailed in the drawing or as directed by the Engineer	KMS	LB-MB	1	
Activity Group:- CULVERT AND DRAINAGE WORKS					
Bill No. 8					
08-50-001	Ditch Cleaning- Mechanical	MT	M	1	
08-50-002	Ditch Cleaning- Manual	MT	LB	1	
08-50-003	Ditch/Mitre drain /catch water drain excavation- earth fill in ditches	M ³	LB	1	
08-50-004	Ditch works- Rock fill in ditches	M ³	LB	1	
08-50-006	Open lined drain cleaning	MT	LB	1	
08-50-007	Open lined drain repairs	MT	LB	1	
08-50-008	Covered (slotted) lined drain construction	MT	LB	1	
08-50-009	Covered (slotted) lined drain Cleaning	MT	LB	1	
08-50-010	Covered (slotted) lined drain repairs	MT	LB	1	

08-50-011	Construction of a Canalized drain (RC)	MT	LB	1	
08-50-012	Cleaning of a Canalized drain (RC)	MT	LB	1	
08-50-013	Provide all materials and repair canalized drain	MT	LB	1	
08-50-014	Provide all materials and lay lining to drain	MT	LB	1	
08-50-015	Gulley pot construction	NO	LB	1	
08-50-016	Gulley pot cleaning	NO	LB	1	
08-50-017	Gulley pot repairs	NO	LB	1	
08-50-018	Gulley pot covers replacement	NO	LB	1	
08-50-019	Gulley pot frames replacement	NO	LB	1	
08-50-020	Open Drain Construction (Half Round)	MT	LB	1	
08-50-021	Open Drain (Half Round) Repairs/Replacement	MT	LB	1	
08-50-022	Laying of Side Slabs	M ²	LB	1	
08-50-023	Repair of side slabs	M ²	LB	1	
08-50-024	Manhole Construction	NO	LB	1	
08-50-025	Manhole Cleaning	NO	LB	1	
08-50-026	Manhole repairs	NO	LB	1	
08-50-027	Replacement of manholes chamber rings	NO	LB	1	
08-50-028	Replacing concrete haunching	M ²	LB	1	
08-50-029	Replacement of manhole cover frames	NO	LB	1	
08-50-029	Manhole covers construction/replacement	NO	LB	1	
08-50-029	Manhole Cover repairs	NO	LB	1	
08-60-001	Culvert Cleaning- Partially blocked - 300mm	MT	LB	1	
08-60-002	Culvert Cleaning- Partially blocked - 450mm	MT	LB	1	
08-60-003	Culvert Cleaning- Partially blocked - 600mm	MT	LB	1	

08-60-004	Culvert Cleaning- Partially blocked - 900mm	MT	LB	1	
08-60-005	Culvert Cleaning- Partially blocked - 1200mm	MT	LB	1	
08-60-006	Culvert Cleaning- Fully Blocked - 300mm	MT	LB	1	
08-60-007	Culvert Cleaning- Fully Blocked - 450mm	MT	LB	1	
08-60-008	Culvert Cleaning- Fully Blocked - 600mm	MT	LB	1	
08-60-009	Culvert Cleaning- Fully Blocked - 900mm	MT	LB	1	
08-60-010	Culvert Cleaning- Fully Blocked - 1000mm	MT	LB	1	
08-60-011	Culvert Cleaning- Fully Blocked - 1200mm	MT	LB	1	
08-60-012	Culvert Repair/Replacement - 300mm.	MT	LB	1	
08-60-013	Culvert Repair/Replacement - 450mm.	MT	LB	1	
08-60-014	Culvert Repair/Replacement - 600mm.	MT	LB	1	
08-60-015	Culvert Repair/Replacement - 900mm.	MT	LB	1	
08-60-016	Culvert Repair/Replacement - 1000mm.	MT	LB	1	
08-60-017	Culvert Repair/Replacement - 1200mm.	MT	LB	1	
08-60-018	New Culvert Installation 300 mm with surround	MT	LB	1	
08-60-019	New Culvert Installation 300 mm without surround	MT	LB	1	
08-60-020	New Culvert Installation 450 mm with surround	MT	LB	1	
08-60-021	New Culvert Installation 450 mm without surround	MT	LB	1	
08-60-022	New Culvert Installation-600mm haunched	MT	LB	1	
08-60-023	New Culvert Installation-600mm Unhaunched	MT	LB	1	

08-60-024	New Culvert Installation 600 mm with surround	MT	LB	1	
08-60-025	New Culvert Installation 900 mm without surround	MT	LB	1	
08-60-026	New Culvert Installation 1000 mm without surround	MT	LB	1	
08-60-027	New Culvert Installation 1200 mm with surround	MT	LB	1	
08-60-028	Excavate in soft material for culverts	M ³	LB	1	
08-70-003	Headwall construction-Masonry	M ³	LB	1	
08-70-004	Headwall construction-Concrete	M ³	LB	1	
08-60-035	Provide, place and compact class 15/20 concrete	M ³	LB	1	
08-60-036	Provide, place and compact class 20/25 concrete	M ³	LB	1	
08-60-037	Provide, place and compact class 25/30 concrete	M ³	LB	1	
08-60-038	Provide and place A65 fabric mesh reinforcement	M ²	LB	1	
08-60-039	Provide and place A142 fabric mesh reinforcement	M ²	LB	1	
08-80-002	Gabion Installation (1MX1MX1M)	NO	LB	1	
08-80-003	Rock fill to Gabions	M ³	LB	1	
08-70-005	Provide and place class 20/20 concrete scour checks as directed by the Engineer	NO.	LB-MB	1	
08-70-006	Construction of scour checks (masonry)	NO	LB	1	
08-70-009	Scour check repair -Concrete	NO	LB	1	
08-90-002	Excavate for inlet, out fall, catch water drains, mire and cut-off drains in hard material	M ³	LB-MB	1	
08-90-008	Provide and place class 15/20 concrete to beds	M ³	LB-MB	1	

08-90-009	Provide and place class 25/20 concrete to headwalls, wing walls, aprons, sorrounds to walls, inlets and outlets to ipe culverts including formwork	M ³	LB-MB	1	
08-90-011	Provide and place Invert block drains with single side slabs 600mm diameter	M ³	LB-MB	1	
Activity Group:- PASSAGE OF TRAFFIC					
Bill No. 9					
09-50-001	Construct and maintain 3m wide deviation	KM	MB	1	
09-50-002	Maintain existing public road	KM	MB	1	
09-60-001	Allow for the passage of traffic through the works	LS SUM	LB-MB	1	
09-60-002	Construct, gravel, water, compact and maintain deviation roads in maximum lengths of 5km. Allow for minimum width of 6.5m, thickness of gravel 150mm with minimum CBR 20.	KMS	LB-MB	1	
Activity Group:- GRADING AND GRAVELLING WORKS					
Bill No. 10					
10-50-001	Heavy grading without watering and compaction	M ²	MB	1	
10-50-002	Heavy grading with watering and compaction	M ²	MB	1	
10-50-003	Heavy grading with no compaction	M ²	MB	1	
10-50-004	Carriageway grading -Light grading	M ²	MB	1	
10-50-006	Light Manual Reshaping (Grub edge, Fill gullies and reshape carriageway)	M ²	LB	1	
10-60-001	Gravel Patching	M ³	MB	1	
10-70-001	Re-gravelling	M ³	MB	1	
10-70-002	Gravelling	M ³	MB	1	
Activity Group:- PAVED ROADS - SHOULDER					

MAINTENANCE AND REPAIRS					
Bill No. 11					
11-50-001	Shoulder grading	M ²	MB	1	
11-50-002	Provide, place and compact natural gravel to shoulders accesses and bus bays	M ³	MB	1	
11-50-003	Shoulder rebuilding	M ²	MB	1	
Activity Group:- NATURAL MATERIAL BASES AND SUBBASE					
Bill No. 12					
12-50-001	Hand packed stone paving	M ³	LB	1	
12-50-002	Provide, place, spread and compact natural gravel for sub-base	KMS	MB	1	
12-50-003	Provide, place, spread and compact natural gravel for base	KMS	MB	1	
12-60-001	Base Repair - Hand Packed Stone	KMS	LB-MB	1	
12-60-003	Base Repair - Neat Gravel	M ³	MB	1	
12-70-001	In situ process of existing pavement layers (including surfacing) as subbase with additional subbase gravel (measured separately) to specified density and (150mm) extended to the shoulders	KMS	LB-MB	1	
12-70-002	Excavation and spoiling of the existing bituminous layers to any distance where directed by the Engineer	M ³	LB-MB	1	
12-70-003	Scarify the existing pavement layer and compact as specified and directed by the engineer	M ³	MB	1	
Activity Group:- CEMENT AND LIME TREATED SUBGRADE,SUBBASE AND BASE					
Bill No. 14					
14-50-001	Provide, transport, spread, mix and curing cement on natural material or GCS material	KMS	MB	1	

14-50-002	Provide, transport, spread, mix and curing lime on natural material or GCS material	KMS	MB	1	
14-50-003	Mixing in cement/lime into natural gravel or GCS	M ³	MB	1	
14-50-004	Curing and protection of treated layers	M ²	LB	1	
Activity Group:- BITUMINOUS MIXES					
Bill No. 15					
15-70-001	Prime coat	L	LB	1	
15-70-002	Tack coat	L	MB	1	
15-70-003	Provide, spread and roll 3/6 mm precoated chipping	M ³	MB	1	
15-70-004	Provide, spread and roll 6/10 mm precoated chipping	M ³	MB	1	
15-70-005	Provide, spread and roll 10/14 mm precoated chipping	M ³	MB	1	
15-70-006	Provide, spread and roll 14/20 mm precoated chipping	M ³	MB	1	
15-70-007	Seal coat	LT	MB	1	
15-70-008	Slurry Sealing	M ²	MB	1	
15-70-009	Sanding/Dusting	M2	MB	1	
15-70-010	Recarpeting	M ³	MB	1	
15-91-002	Otta seal Double seal	M ²	MB	1	
15-92-001	Spray MC 30 cut-back bitumen as prime coat to carriageway, shoulders, busbays and junctions at 0.8-1.2 lts/m ²	KMS	LB-MB	1	
15-50-001	Pothole Patching - hot mix	M ³	LB/MB	1	
15-50-001	Pothole Patching - hot mix	M ³	LB/MB	1	
15-50-001	Pothole Patching –stabilized gravel	M ³	LB/MB	1	

15-60-001	Provide all materials and Spot seal - Asphaltic concrete (AC) for surfacing	M ³	MB	1	
15-60-002	Provide all materials and crack seal	M ³	LB	1	
15-70-001	Prime Coat	M ³	LB/MB	1	
15-70-002	Tack Coat	M ³	LB/MB	1	
15-70-003	Chippings 3/6mm	M ³	LB/MB	1	
15-70-004	Chippings 6/10mm	M ³	LB/MB	1	
15-70-005	Chippings 10/14mm	M ³	LB/MB	1	
15-70-006	Chippings 14/20mm	M ³	LB/MB	1	
15-70-007	Seal coat	M ³	LB/MB	1	
15-70-008	Slurry Sealing	M ³	LB/MB	1	
15-70-009	Sanding/Dusting	M ³	LB/MB	1	
15-70-010	Recarpeting	M ³	LB/MB	1	
15-80-001	Base Repair - Graded Crushed Stone	M ³	LB/MB	1	
15-80-002	Base Repair - Dense Bitumen Macadam	M ³	LB/MB	1	
15-80-003	Base Repair - Hand Packed Stone	M ³	LB/MB	1	
15-80-004	Base Repair - Stabilised Gravel	M ³	LB/MB	1	
15-80-005	Base Repair - Neat Gravel	M ³	LB/MB	1	
15-90-001	Speed bump construction (with AC)	M ³	LB/MB	1	
15-91-002	Otta seal Double seal	M ²	MB	1	
15-92-001	Spray MC 30 cut-back bitumen as prime coat to carriageway, shoulders, busbays and junctions at 0.8-1.2 lts/m ²	KMS	LB-MB	1	
16-70-002	Dense bitumen macadam (DBM) for base	M ³	MB	1	
16-80-001	Provide, lay and roll asphalt concrete type 1 as directed by the Engineer	KMS	LB-MB	1	
16-80-002	Provide, lay and roll Dense Bitumen Macadam (80mm thick) to carriageway, extending to the shoulders	M ³	LB-MB	1	

16-80-003	Provide and spray K-160 as tack coat at a rate of 0.3-1.0 L/sq metre for the whole road as directed by the Engineer	LITRES	LB-MB	1	
16-80-004	Clearing and cutting of potholes and failed areas	M ³	LB	1	
Activity Group:- CONCRETE WORKS (Major Structures)					
Bill No. 17	Provide all materials and construct as instructed the following				
17-50-001	Bridge Cleaning -Deck	M2	LB/MB	1	
17-50-002	Bridge Cleaning-Riverbed	M ³	LB/MB	1	
17-50-003	Handrail Repair/ Installation	MT	LB/MB	1	
17-50-004	Bridge Painting	M2	LB/MB	1	
17-50-005	Bridge Deck Repair-Timber	M2	LB/MB	1	
17-50-006	Bridge Deck Replacement-Timber	M ³	LB/MB	1	
17-50-007	Bridge Deck Replacement-Steel	M ³	LB/MB	1	
17-50-008	Bridge Deck Replacement-Concrete(Class 25)	M ³	LB/MB	1	
17-50-009	Bridge Abutment repair – concrete(class 25)	M ³	LB/MB	1	
17-50-010	Bridge Abutment repair - masonry	M ³	LB/MB	1	
17-60-001	Excavation	M ³	LB/MB	1	
17-60-002	Diversion of Water	M ³	LB/MB	1	
17-60-003	Blinding	M ³	LB/MB	1	
17-60-004	Footing construction (Class 25)	M ³	LB/MB	1	
17-60-005	Bed including toe beams(class 25)	M ³	LB/MB	1	
17-60-006	Culvert pipes: 450mm. dia. - 1200mm. dia.	M ³	LB/MB	1	
17-60-007	Headwalls	M ³	LB/MB	1	
17-60-008	Base Construction	M ³	LB/MB	1	
17-60-009	Wall Construction for bridges or drifts	M ³	LB/MB	1	

17-60-010	Abutment Construction	M ³	LB/MB	1	
17-60-011	Pier Construction	M ³	LB/MB	1	
17-60-012	Top slab Construction	M ³	LB/MB	1	
17-60-013	Superstructure and Deck Construction	M ³	LB/MB	1	
17-60-014	Backfilling	M ³	LB/MB	1	
17-60-015	Ancilliary Works	PC SUM	LB/MB	1	
17-60-016	Reinforcement <16mm diameter	TON	LB/MB	1	
17-60-017	Reinforcement ≥16mm diameter	TON	LB/MB	1	
17-70-001	Drift Construction by Contract	PC SUM	LB/MB	1	
17-70-001	Bridge Construction by contract	PC SUM	LB/MB	1	
17-60-001	Provide place and compact concrete class 15/20 for blinding	M ³	LB/MB	1	
17-60-002	Provide place and compact concrete class 20/25 concrete	M ³	MB	1	
17-60-003	Vertical framework class F2 finish	M ²	MB	1	
17-60-004	Horizontal framework class F2 finish	M ²	LB	1	
17-80-001	Provide and place 50mm thick class 15/20 concrete binding to structures	M ³	LB-MB	1	
17-80-003	Provide and place class 30/20 concrete for bridge decks, beams and piers	LITRES	LB-MB	1	
17-80-004	Provide, cut, bend and fix steel reinforcement of diameter greater, equal to or less than 16 per the drawing or as instructed by the Engineer	TON	LB-MB	1	
17-80-005	Provide, cut, bend and fix steel reinforcement of diameter greater, equal to or less than 16 per the drawing or as instructed by the Engineer	TON	LB-MB	1	
Activity Group:- ROAD FURNITURE REPAIR					

AND MAINTENANCE					
Bill No. 20					
20-50-001	Traffic signs maintenance	NO	LB	1	
20-50-002	Traffic signs replacement	NO	LB	1	
20-50-003	Street Decoration (banner, flags etc)	NO	LB	1	
20-50-004	Marker posts replacements	NO	LB	1	
20-50-005	Marker posts maintenance	NO	LB	1	
20-50-006	Sign Cleaning and painting	NO	LB	1	
20-60-001	Road Marking- Mechanical	MT	LB	1	
20-60-002	Road Marking- Manual	MT	LB	1	
20-60-003	Reflective Stud Installation	NO	LB	1	
20-60-004	Road Marking- Machine	MT	M		
20-60-005	Road Marking- Machine	MS	M		
20-70-001	Guard Rail Repair	MT	LB	1	
20-70-002	Guard Rail Replacement	MT	LB	1	
20-70-003	Guardrail installation (as per the drawing specifications)	MT	LB	1	
20-70-004	Fencing (chainlink fence with concrete posts)	MT	LB	1	
20-70-005	Pedestrian barriers along roads and streets	MT	LB	1	
20-70-006	Boundary wall construction using dressed natural stone 225mmx150mmx450mm	MS	LB	1	
20-70-007	Boundary wall construction using undressed natural stone 225mmx100mmx450mm	MS	LB	1	
20-70-008	Boundary wall construction using coral blocks 225mmx150mmx450mm	MS	LB	1	

20-70-009	Boundary wall construction using coral blocks 225mmx100mmx450mm	MS	LB	1	
20-80-010	Street lights repairs	NO	LB	1	
20-80-011	Traffic signs rehabilitation	NO	LB-MB	1	
20-80-012	Street light installation (pole and fittings)	NO	LB-MB	1	
20-80-013	Traffic Lights installation per four arm junction.	NO	LB-MB	1	
20-80-010	Micro-tunneling for a 150mm dia. PVC duct.	MT	LB-MB	1	
20-80-011	Supply & erection of poles - 3.8m	NO	LB	1	
20-80-012	Supply & erection of poles - 4.4m	NO	LB	1	
20-80-013	Supply & Installation of pole covers	NO	LB	1	
20-80-014	Supply & Installation of pole connectors	NO	LB	1	
20-80-015	Supply & Installation of pole caps	NO	LB	1	
20-80-016	Supply & laying Cables- 7x1.5mm ²	MT	LB	1	
20-80-017	Supply & laying Cables- 3x1.5mm ²	MT	LB	1	
20-80-018	Supply & laying Cables-12x1.5mm ²	MT	LB	1	
20-80-019	Supply & Installation of T.S. Head-200mm	NO	LB	1	
20-80-020	Supply & Installation of T.S. Head-300mm	NO	LB	1	
20-80-021	Supply & Installation of P.S. Head-200mm	NO	LB	1	
20-80-022	Supply & Installation of P.S. Head-300mm	NO	LB	1	
20-80-023	Cable Termination	NO	LB	1	
20-80-024	Controller Installation	NO	LB	1	
20-80-024	Supply & erection of plastic poles 3inch diameter 3m high for road signs	NO	LB	1	
20-80-070	Supply & delivery ; street lighting	PC	LB-MB	1	

	testing equipment.	SUM			
20-80-071	Digging of holes for 7.6m column	NO	LB	1	
20-80-072	Digging of holes for 10m column	NO	LB	1	
20-80-073	Digging of holes for control pillar base	NO	LB	1	
20-80-074	Trenches for 2 core 4mm ² armored T cable	NO	LB	1	
20-80-075	Concreting and erection for 7.6m column	NO	LB-MB	1	
20-80-076	Concreting and erection for 10m column	NO	LB-MB	1	
20-80-077	Concreting and erection for control pillar	NO	LB-MB	1	
20-80-078	Backfilling & compacting 7.6 column hole	NO	LB	1	
20-80-079	Concreting and erection for control pillar	NO	LB-MB	1	
20-80-080	Backfilling & compacting: 7.6m column hole	NO	LB	1	
20-80-081	Tiling for cable trenches	NO	LB	1	
20-80-082	Installation: 15mm dia. 1.8m earth electrode	NO	LB	1	
20-90-001	Replacement of Kerbs and Channels	MT	LB	1	
20-50-006	Roads markings - CENTRELINE as directed by the Engineer	KMS	LB-MB	1	
20-50-007	Roads markings - EDGE MARKING as directed by the Engineer	KMS	LB-MB	1	
20-50-012	Roads markings- Kerbs as directed by the Engineer	MT	LB	1	
20-50-020	Traffic signs maintenance	NO	LB	1	
20-60-049	Sup.&del.: 150W SON-T lamp(screw type)	NO	LB-MB	1	
20-60-051	Supply and delivery of 160W ML lamp(BC)	NO	LB-MB	1	
20-70-002	Provide and erect warning type signs 750mm size	NO.	LB-MB	1	

20-70-006	Provide and erect Non-Standard informatory signs: (a) Less than 1m2	NO.	LB-MB	1	
20-70-010	Paint 0.1m wide yellow centreline on the road as specified	M ²	LB-MB	1	
20-70-011	Paint 0.1m wide white lines on road	M ²	LB-MB	1	
20-70-012	Paint 0.2m wide busbays separation marking	M ²	LB-MB	1	
20-70-013	Paint 0.4m wide giveway lines at junctions	M ²	LB-MB	1	
20-70-014	Paint 0.2m wide pedestrian crossing marking	M ²	LB-MB	1	
20-70-016	Excavate for, provide and place 250*125mm precast concrete kerbs in support to carriageway, busbays and junctions as directed by the Engineer (1) Straight Kerbs	MT	LB	1	
20-70-017	Excavate for, provide and place 250*125mm precast concrete kerbs in support to carriageway, busbays and junctions as directed by the Engineer (1) Straight Kerbs	MT	LB	1	
20-70-023	Provide and install flexbeam guardrails and 50mm diameter pipe rails as directed by the Engineer	MT	LB-MB	1	
20-70-024	Provide and paint white reflective paint every alternate sections of the existing guardrail as directed by the Engineer	MT	LB-MB	1	
20-70-025	Provide and install pedestrian barriers made of 50mm diameter/square pipe rails as directed by the Engineer	MT	LB-MB	1	
20-70-026	Provide and place yellow reflecting road studs (cat eyes) to road pavement to visually reinforce a yellow centre/no- passing line	NO	LB	1	
20-70-027	Provide and place red reflecting road studs (cat eyes) along the hard shoulder of motorways, dual carriageways, as well as the highway road edges	NO	LB	1	

Activity Group:- MISCELLANEOUS BRIDGE/DRIFT WORKS					
Bill No. 21					
21-60-001	Bridge Painting	M ²		1	
21-60-005	Pipe handrails to bridges	MT	LB	1	
21-60-008	weep holes	NO	LB	1	
Activity Group:- DAYWORKS					
Bill No. 22	Labour				
22-50-001	Support Staff (Male)	PD	LB	1	
22-50-002	Support Staff (Female)	PD	LB	1	
22-50-003	Unskilled Labour (Male)	PD	LB	1	
22-50-004	Unskilled Labour (Female)	PD	LB	1	
22-50-005	Watchmen	PD	LB	1	
22-50-006	Artisans Grade I (Male)	PD	LB	1	
22-50-007	Artisans Grade I (Female)	PD	LB	1	
22-50-008	Artisans Grade II (Male)	PD	LB	1	
22-50-009	Artisans Grade II (Female)	PD	LB	1	
22-50-010	Artisans Grade III (Male)	PD	LB	1	
22-50-011	Artisans Grade III (Female)	PD	LB	1	
22-50-012	Skilled Labour : Overseer	PD	LB	1	
22-50-013	Skilled Labour : Inspector	PD	LB	1	
22-60-001	Truck Flat bed : 2.5 - 5 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 5 - 7 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 7 - 8 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 8 - 12 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 15 Tonnes	EH	LB-MB	1	
22-60-001	Truck Flat bed : 20 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 5 - 7 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 7 - 8 Tonnes	EH	LB-MB	1	

22-60-001	Truck, Tipper : 15 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 20 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 25 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 25 - 35 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 25 - 35 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 35 - 50 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 35 - 50 Tonnes	EH	LB-MB	1	
22-62-014	Water Tanker : 5000 - 6000 Lt.	KM	LB-MB	1	
22-62-015	Water Tanker : 5000 - 6000 Lt.	HR	LB-MB	1	
22-62-016	Water Tanker : 6000 - 8000 Lt.	HR	LB-MB	1	
22-62-017	Water Tanker : 6000 - 8000 Lt.	KM	LB-MB	1	
22-62-018	Trailer, Water/Fuel: 2000 - 2500 Lt.	KG	LB-MB	1	
22-62-019	Trailer, Water/Fuel: 3000 - 4500 Lt.	KG	LB-MB	1	
22-62-020	Trailer, Water/Fuel: 5000 - 6500 Lt.	KG	LB-MB	1	
22-62-021	Fuel Tanker : 5000 - 6000 Lt.	MT	LB-MB	1	
22-62-022	Fuel Tanker : 5000 - 6000 Lt.	MT	LB-MB	1	
22-62-023	Fuel Tanker : 6000 - 8000 Lt.	MT	LB-MB	1	
22-62-024	Fuel Tanker : 6000 - 8000 Lt.	M ³	LB-MB	1	
22-62-025	Semi Trailer, Water: 35 - 50 Tonnes	M ³	LB-MB	1	
22-62-026	Semi Trailer, Fuel : 35 - 50 Tonnes	M ³	LB-MB	1	
22-63-001	Ag. Tractor (no implement): 4x2, 40HP	M ³	LB-MB	1	
22-63-002	Ag. Tractor (no implement): 4x2, 50HP	M ³	LB-MB	1	
22-63-003	Ag. Tractor (no implement): 4x2, 60HP	M ³	LB-MB	1	
22-63-004	Ag. Tractor (no implement): 4x2, 70HP	M ³	LB-MB	1	
22-63-005	Ag. Tractor (no implement): 4x4, 70HP	LT	LB-MB	1	

22-63-006	Ag. Tractor (no implement): 4x4, 80HP	LT	LB-MB	1	
22-63-007	Ag. Tractor (no implement): 4x4, 90HP	LT	LB-MB	1	
22-63-008	Crawler Tractor (e.g. D4/D5) : 90 - 100 HP	LT	LB-MB	1	
22-63-009	Crawler Tractor (e.g. D6) : 140 - 160 HP	KG	LB-MB	1	
22-63-010	Crawler Tractor (e.g. D7) : 200 - 220 HP	Hr	LB-MB	1	
22-63-011	Crawler Tractor (e.g. D8) : 250 - 325 HP	Hr	LB-MB	1	
22-63-012	Crawler Tractor (e.g. D9) : 400 - 450 HP	Hr	LB-MB	1	
22-63-013	Motor Grader (e.g. CAT 112F): 100 - 130 HP	Hr	LB-MB	1	
22-63-014	Motor Grader (e.g. CAT 120H): 131 - 155 HP	Hr	LB-MB	1	
22-63-015	Motor Grader (e.g. CAT 140H): 156 - 200 HP	Hr	LB-MB	1	
22-63-016	Front Wheel Loader, < 115 HP: 90 - 105 HP	Hr	LB-MB	1	
22-63-017	Front Wheel Loader, : 105 - 125 HP	Hr	LB-MB	1	
22-63-018	Loader + Backhoe : 140 HP	Hr	LB-MB	1	
22-63-019	Excavator : 140 HP	Hr	LB-MB	1	
22-64-001	Pedestrian Roller: 700-1000kg		LB-MB	1	
22-64-002	Roller: 3-4 tonnes	Hr	LB-MB	1	
22-64-003	Double drum steel Vibrator roller: 9-10T, 100 HP	Hr	LB-MB	1	
22-64-004	Single drum steel Vibrator roller: 9-10T, 130 HP	Hr	LB-MB	1	
22-64-005	Pneumatic Roller: 10T, 130 HP	Hr	LB-MB	1	
22-64-006	Towed Roller, steel wheel : 4 Tonnes	Hr	LB-MB	1	
22-64-007	Towed Roller, sheepfoot: 4 Tonnes	M ²	LB-MB	1	
22-65-001	Concrete Mixer : 200 - 300 L	Hr	LB-MB	1	

22-65-002	Concrete Mixer : 300 - 450 L		LB-MB	1	
22-65-003	Generator Stat : 20 Kva	Hr	LB-MB	1	
22-65-004	Generator Stat : 45 Kva	Hr	LB-MB	1	
22-65-005	Generator Stat : 200 Kva	Hr	LB-MB	1	
22-65-006	Air Compressor, 125 cfm : < 4250 LPM	Hr	LB-MB	1	
22-65-007	Air Compressor, 175 cfm : > 4250 LPM	Hr	LB-MB	1	
22-66-001	Road Marking Machine	Hr	LB-MB	1	
22-66-002	Pump Water/Mud: 25 mm.	Hr	LB-MB	1	
22-66-003	Pump Water/Mud: 50 mm.	Hr	LB-MB	1	
22-66-004	Pump Water/Mud: 100 mm.	Hr	LB-MB	1	
22-66-001	Bitumen H/Decanter : 2500 Lt.	Hr	LB-MB	1	
22-66-002	Bitumen H/Decanter : 6500 Lt.	Hr	LB-MB	1	
22-66-003	Bitumen H/Decanter : 8000 Lt.	Hr	LB-MB	1	
22-66-004	Bitumen Sprayer H/Operated	Hr	LB-MB	1	
22-66-005	Vibrator P/Tamper	Hr	LB-MB	1	
22-66-006	Concrete P/vibrator	Hr	LB-MB	1	
22-66-007	Road Broom	Hr	LB-MB	1	
22-66-008	Chip Spreader	Hr	LB-MB	1	
22-66-009	Concrete Screed Vibrator	Hr	LB-MB	1	
22-66-010	Grass Cutter	Hr	LB-MB	1	
22-68-001	Trailer, Non-tipping : 3 - 4 Tonnes	Hr	LB-MB	1	
22-68-002	Trailer, Tipping : 3 - 4 Tonnes	Hr	LB-MB	1	
22-68-003	Trailer, Lowbed : 20 - 35 tonnes	Hr	LB-MB	1	
22-68-004	Trailer, Lowbed : 35 - 50 tonnes	Hr	LB-MB	1	
22-68-005	Semi Trailer, F/Bed : 40 ft.	Hr	LB-MB	1	
22-68-006	Semi Trailer, Dumper: 35 - 50 Tonnes	Hr	LB-MB	1	

22-68-007	Drawbar Trailer : 15 - 20 Tonnes	Hr	LB-MB	1	
	Materials				
22-70-001	Fine aggregates(sand)	M3	LB-MB	1	
22-70-002	Fine aggregates(stone dust)	M3	LB-MB	1	
22-70-003	Graded aggregates (ballast)	M3	LB-MB	1	
22-70-004	Water	M3	LB-MB	1	
22-70-005	Cement (ordinary portland)	TON	LB-MB	1	
22-70-006	Hydrated lime	TON	LB-MB	1	
22-70-007	Waterproof cement	TON	LB-MB	1	
22-70-008	Shuttering timber class F1 finish	M ²	LB-MB	1	
22-70-009	Shuttering timber class F2 finish	M ²	LB-MB	1	
22-70-0010	Shuttering timber class F3 finish	M ²	LB-MB	1	
22-70-0011	Timber (wrot/ planed)	M ²	LB-MB	1	
22-70-012	Timber (unwrot/ unplaned)	M ²	LB-MB	1	
22-71-001	Round Bars 6mm	MT	LB-MB	1	
22-71-002	Round Bars 8mm	MT	LB-MB	1	
22-71-003	Round Bars 10mm	MT	LB-MB	1	
22-71-004	Round Bars 12mm	MT	LB-MB	1	
22-71-005	Round bars 16mm	MT	LB-MB	1	
22-71-006	Round bars 20mm	MT	LB-MB	1	
22-71-007	Round bars 25mm	MT	LB-MB	1	
22-71-008	Round bars 32mm	MT	LB-MB	1	
22-71-009	Round bars 40mm	MT	LB-MB	1	
22-71-010	Square twisted bars 8mm	MT	LB-MB	1	
22-71-011	Square twisted bars 10mm	MT	LB-MB	1	
22-71-012	Square twisted bars 12mm	MT	LB-MB	1	
22-71-013	Square twisted bars 16mm	MT	LB-MB	1	
22-71-014	Square twisted bars 20mm	MT	LB-MB	1	

22-71-015	Square twisted bars 25mm	MT	LB-MB	1	
22-71-016	Square twisted bars 32mm	MT	LB-MB	1	
22-71-017	Square twisted bars 40mm	MT	LB-MB	1	
22-71-001	Precast concrete culvert - 300mm	MT	LB-MB	1	
22-72-002	Precast concrete culvert - 450mm	MT	LB-MB	1	
22-72-003	Precast concrete culvert - 600mm	MT	LB-MB	1	
22-72-004	Precast concrete culvert - 900mm	MT	LB-MB	1	
22-72-005	Precast concrete culvert - 900mm		LB-MB	1	
22-72-006	Precast concrete culvert - 1200mm	MT	LB-MB	1	
22-72-007	Culvert moulds 300 mm	NO	LB-MB	1	
22-72-008	Culvert moulds 450 mm	NO	LB-MB	1	
22-72-009	Culvert moulds 600 mm	NO	LB-MB	1	
22-72-010	Culvert moulds 900 mm	NO	LB-MB	1	
22-72-011	Culvert moulds 1200 mm	NO	LB-MB	1	
22-72-012	Concrete Block - 225x100x450mm	NO	LB-MB	1	
22-72-013	Concrete Block - 225x150x450mm	NO	LB-MB	1	
22-72-014	Concrete Block - 225x225x450mm	NO	LB-MB	1	
22-72-015	Natural stones 4" x 9" - dressed	FT	LB-MB	1	
22-72-016	Natural stones 6" x 9" - dressed	FT	LB-MB	1	
22-72-017	Natural stones 9" x 9" - dressed	FT	LB-MB	1	
22-72-018	Natural coral blocks 225x100x450mm	FT	LB-MB	1	
22-72-019	Natural coral blocks 225x150x450mm	FT	LB-MB	1	
22-72-020	Coarse aggregates(chippings) - 3/6mm	M3	LB-MB	1	
22-72-021	Coarse aggregates(chippings) - 6/10mm	M3	LB-MB	1	
22-72-022	Coarse aggregates(chippings) - 10/14mm	M3	LB-MB	1	
22-72-023	Coarse aggregates(chippings) - 14/20mm	M3	LB-MB	1	
22-72-024	Stone dust	M3	LB-MB	1	
22-72-025	Gravel material (murrum)	M3	LB-MB	1	

22-72-026	Hardcore	M3	LB-MB	1	
22-72-027	Crusher run material (Graded crushed stone)	M3	LB-MB	1	
22-72-028	Quarry waste material	M3	LB-MB	1	
22-73-001	Premix - AC Type II (hot)	M3	LB-MB	1	
22-73-002	Premix - AC Type II (cold)	M3	LB-MB	1	
22-73-003	Premix - AC Type I (cold)	M3	LB-MB	1	
22-73-004	Premix - AC Type I (hot)	M3	LB-MB	1	
22-73-005	Dense Bitumen Macadam	M3	LB-MB	1	
22-73-006	Dense Emulsion Macadam	M3	LB-MB	1	
22-73-007	Bituminus sealant	TON	LB-MB	1	
22-73-008	Bitumen K3	M3	LB-MB	1	
22-73-009	Bitumen A3	M3	LB-MB	1	
22-73-010	Bitumen K160	M3	LB-MB	1	
22-73-011	Bitumen K170	M3	LB-MB	1	
22-73-012	MC 30 Bitumen	M3	LB-MB	1	
22-73-013	MC 3000 Bitumen	M3	LB-MB	1	
22-73-014	80/100 Pen grade bitumen	M3	LB-MB	1	
22-76-22	Hand saw 20"	NO	LB-MB	1	
22-76-23	Hand saw 24"	NO	LB-MB	1	
22-76-24	Jembe handle	NO	LB-MB	1	
22-76-25	Broom handle	KG	LB-MB	1	
22-76-26	Hose pipe rubber 0.5" (specifiy length)	NO	LB-MB	1	
22-76-27	Hose pipe rubber 3/4"	NO	LB-MB	1	
22-76-28	Hose pipe rubber 1"	NO	LB-MB	1	
22-76-29	Slashers	NO	LB-MB	1	
22-76-30	Drums empty 210 lts	NO	LB-MB	1	
22-76-31	Buckets metal 20 lts	NO	LB-MB	1	
22-76-32	Buckets plastic 20lts	NO	LB-MB	1	

22-76-33	Wheel barrow	NO	LB-MB	1	
22-76-34	Mops	NO	LB-MB	1	
22-76-35	Hard brooms	NO	LB-MB	1	
22-76-36	Soft brooms	NO	LB-MB	1	
22-77-001	Mesh wire 8' x 4' gauge 24	M ²	LB-MB	1	
22-77-002	Mesh wire 8' x 4' gauge 18	M ²	LB-MB	1	
22-77-003	Weldmesh BRC A65	M ²	LB-MB	1	
22-77-004	Weldmesh BRC A98	M ²	LB-MB	1	
22-77-005	Weldmesh BRC A142	M ²	LB-MB	1	
22-77-006	Binding wire	KG	LB-MB	1	
22-77-007	Hoop iron	KG	LB-MB	1	
22-77-008	Chain link wire 4ft - roll (specify length)	NO	LB-MB	1	
22-77-009	Chain link wire 5ft - roll	NO	LB-MB	1	
22-77-010	Chain link wire 6ft - roll	NO	LB-MB	1	
22-77-011	Chain link wire 8ft - roll	NO	LB-MB	1	
22-77-012	Fencing wire barbed G. 16 - roll	NO	LB-MB	1	
22-78-007	DPC dump proof course - 100mm wide	NO	LB-MB	1	
22-78-008	DPC dump proof course - 150mm wide	NO	LB-MB	1	
22-78-009	DPC dump proof course - 200mm wide	NO	LB-MB	1	
22-78-010	Boss white	KG	LB-MB	1	
22-78-011	White wash	KG	LB-MB	1	
22-78-012	Sisal twine	NO	LB-MB	1	
22-78-013	Road marking paint yellow	LT	LB-MB	1	
22-78-014	Road marking paint white	LT	LB-MB	1	
22-78-015	Thermoplastic paint yellow	LT	LB-MB	1	
22-78-016	Thermoplastic paint white	LT	LB-MB	1	

Activity Group:- PAVED SURFACES					
BILL 23					
23-50-001	Pre-cast concrete paving blocks				
23-50-001	50mm thick light strength 32 N/mm square to KS 02-827 including 30mm thick sand layer	M ²	LB-MB	1	
23-50-001	50mm thick light strength 32 N/mm square to KS 02-827 including 30mm thick sand layer but coloured	M ²	LB-MB	1	
23-50-001	60mm thick medium strength 49 N/mm square to KS 02-827 including 30mm thick sand layer	M ²	LB-MB	1	
23-50-001	60mm thick medium strength 49 N/mm square to KS 02-827 including 30mm thick sand layer but coloured	M ²	LB-MB	1	
23-50-001	80mm thick medium strength 49 N/mm square to KS 02-827 including 30mm thick sand layer	M ²	LB-MB	1	
23-50-001	80mm thick High strength 49 N/mm square to KS 02-827 including 30mm thick sand layer	M ²	LB-MB	1	
	<i>All Rates Are Inclusive of VAT</i>				
Item Code	Description	Unit	Technology	Quantity	Rate (Kshs)
Activity Group: - GENERAL: OFFICE ADMINISTRATION AND OVERHEADS/ PRELIMINARIES					
Bill No. 1					
01-50-001	Allow a prime cost sum for the REs miscellaneous account	PC SUM	LB-MB	1	
	Extra over 01-50-001 for profits and overheads	%	LB-MB	1	
01-50-003	Watchman	MD		1	
	Extra over 01-50-003 for profits and overheads	%			

01-50-004	Allow a prime cost for attendance to the RE,s supervisory staff including overtime	PC SUM	LB-MB	1	
	Extra over 01-50-004 for profits and overheads	%			
01-60-001	Miscellaneous And other Charges	KS	LB-MB	1	
01-60-009	Publicity Sign Boards	KS	LB-MB	1	
01-61-001	Materials Investigation &Testing	PC SUM	LB-MB	1	
01-61-002	Survey Works	KS	LB-MB	1	
01-61-003	Consultancy services	PC SUM	LB-MB		
01-70-001	Allow a PC sum for Engineers Office furniture and laboratory equipment as instructed by the Engineer	PC SUM	LB-MB	1	
	Extra over item 01-90-001 for contractors overheads and profits	%		10	
1-70-002	Maintenance: Temp. Build/Camps	PC SUM	LB-MB	1	
	Extra over item 01-70-002 for contractors overheads and profits	%	LB-MB	10	
01-80-026	Allow a prime cost sum for the REs miscellaneous account	PC SUM	LB-MB	1	
01-80-031	Include percentage of PC sum in item 01-80-030 for contractors overhead and profit	%	LB-MB	10	
01-90-001	Provide fuel and maintain with drivers c for exclusive use by the Engineer inclusive of the first 4,000km per vehicle month. Ownership to revert to the client at the end of the project	V/ Months	LB-MB	1	
Activity Group:-SITE CLEARANCE					
Bill No. 4					
04-50-001	Mechanical mowing	M2	MB	1	
04-50-002	Grass cutting (Manual)	M2	LM	1	

04-50-003	Heavy Bush Clearance	M2	LB	1	
04-50-004	Light Bush Clearing	M ²	LB	1	
04-50-005	Pruning of Tree Branches	NO	LB	1	
04-50-006	Tree cutting and stump removal (200 -450 mm)	NO	LB	1	
04-50-007	Tree cutting and stump removal (>450 mm)	NO	LB	1	
04-50-008	Clearing obstructions (boulders & debris)	PC SUM	LB	1	
04-50-009	Rock removal	PC SUM	LB	1	
04-50-010	Stripping and Grubbing	KMS	LB	1	
04-50-010	Excavate remove & disposal of concrete structures	KS	LB	1	
04-60-011	Clear site on road reserve including removal of trees, hedges, bushes and other vegetation or detrious organic material, grub up roots and back fill to 100% MDD (AASHTO T99) with approved material in accordance with the specification	Ha	LB-MB	1	
04-60-012	Remove top soil to maximum depth of 200mm as directed by the Engineer stockpile good material for later top soiling of slide slopes and landscaping of quarries and borrow pits	M ²	LB-MB	1	
Activity Group:- EARTHWORKS					
Bill No. 5					
05-50-001	Fill in soft material and compact	M ³	LB	1	
05-50-002	Fill in hard material and compact	M ³	MB	1	
05-50-003	Haulage of Material				
05-50-004	Cut to spoil in Soft	M ³	LB	1	
05-50-005	Cut to spoil in Hard	M ³	MB	1	
05-50-006	Filter to swamp under, over and around	M ²	MB	1	

	rock fill				
05-60-001	Compaction of existing ground under embankments to 95% MDD (AASHTO T99) in layers of 150mm	M ³	LB-MB	1	
05-60-003	E.O. item 05-60-002 for compaction of the top 300mm to BS497 in fill areas	M ³	LB-MB	1	
05-60-004	Fill in hard material (rock fill on selected sections)	M ³	LB-MB	1	
05-60-005	Compaction of top 300mm below formation in cuts and fills to 100% ^MDD	M ³	LB-MB	1	
05-50-006	Excavation & spread in hard material and compact	M ³		1	
05-50-007	Spreading & Compaction Camber Formation	M ²	LB	1	
05-70-001	Grassing	M ²	LB	1	
05-70-002	Back slope / Slope Maintenance	M ²	LB	1	
Activity Group:- EXCAVATION AND FILLING FOR STRUCTURES					
Bill No. 7					
07-50-001	Excavate for structure in soft material	M ³	LB/MB	1	
07-50-002	Excavate for structure in hard material	M ³	MB	1	
07-50-003	River training in soft material	M ³	LB	1	
07-50-005	Porous filter material	M ³	LB	1	
07-50-006	Provide and place selected granular fill material	M ³	MB		
07-60-002	Provide and place gabion boxes and mattresses as specified or as directed by the Engineer	M ³	LB-MB	1	
07-60-003	Provide and place rock fill to gabions and mattresses	M ³	LB-MB	1	
07-60-005	Provide and place 200mm thick stone pitching including grouting to aprons upstream and downstream of bridges and culverts as detailed in the drawing or as	KMS	LB-MB	1	

	directed by the Engineer				
Activity Group:- CULVERT AND DRAINAGE WORKS					
Bill No. 8					
08-50-001	Ditch Cleaning- Mechanical	MT	M	1	
08-50-002	Ditch Cleaning- Manual	MT	LB	1	
08-50-003	Ditch/Mitre drain /catch water drain excavation- earth fill in ditches	M ³	LB	1	
08-50-004	Ditch works- Rock fill in ditches	M ³	LB	1	
08-50-006	Open lined drain cleaning	MT	LB	1	
08-50-007	Open lined drain repairs	MT	LB	1	
08-50-008	Covered (slotted) lined drain construction	MT	LB	1	
08-50-009	Covered (slotted) lined drain Cleaning	MT	LB	1	
08-50-010	Covered (slotted) lined drain repairs	MT	LB	1	
08-50-011	Construction of a Canalized drain (RC)	MT	LB	1	
08-50-012	Cleaning of a Canalized drain (RC)	MT	LB	1	
08-50-013	Provide all materials and repair canalized drain	MT	LB	1	
08-50-014	Provide all materials and lay lining to drain	MT	LB	1	
08-50-015	Gulley pot construction	NO	LB	1	
08-50-016	Gulley pot cleaning	NO	LB	1	
08-50-017	Gulley pot repairs	NO	LB	1	
08-50-018	Gulley pot covers replacement	NO	LB	1	
08-50-019	Gulley pot frames replacement	NO	LB	1	
08-50-020	Open Drain Construction (Half Round)	MT	LB	1	
08-50-021	Open Drain (Half Round) Repairs/Replacement	MT	LB	1	

08-50-022	Laying of Side Slabs	M ²	LB	1	
08-50-023	Repair of side slabs	M ²	LB	1	
08-50-024	Manhole Construction	NO	LB	1	
08-50-025	Manhole Cleaning	NO	LB	1	
08-50-026	Manhole repairs	NO	LB	1	
08-50-027	Replacement of manholes chamber rings	NO	LB	1	
08-50-028	Replacing concrete haunching	M ²	LB	1	
08-50-029	Replacement of manhole cover frames	NO	LB	1	
08-50-029	Manhole covers construction/replacement	NO	LB	1	
08-50-029	Manhole Cover repairs	NO	LB	1	
08-60-001	Culvert Cleaning- Partially blocked - 300mm	MT	LB	1	
08-60-002	Culvert Cleaning- Partially blocked - 450mm	MT	LB	1	
08-60-003	Culvert Cleaning- Partially blocked - 600mm	MT	LB	1	
08-60-004	Culvert Cleaning- Partially blocked - 900mm	MT	LB	1	
08-60-005	Culvert Cleaning- Partially blocked - 1200mm	MT	LB	1	
08-60-006	Culvert Cleaning- Fully Blocked - 300mm	MT	LB	1	
08-60-007	Culvert Cleaning- Fully Blocked - 450mm	MT	LB	1	
08-60-008	Culvert Cleaning- Fully Blocked - 600mm	MT	LB	1	
08-60-009	Culvert Cleaning- Fully Blocked - 900mm	MT	LB	1	
08-60-010	Culvert Cleaning- Fully Blocked - 1200mm	MT	LB	1	
08-60-011	Culvert Repair/Replacement - 300mm.	MT	LB	1	

08-60-012	Culvert Repair/Replacement - 450mm.	MT	LB	1	
08-60-013	Culvert Repair/Replacement - 600mm.	MT	LB	1	
08-60-014	Culvert Repair/Replacement - 900mm.	MT	LB	1	
08-60-015	Culvert Repair/Replacement - 1200mm.	MT	LB	1	
08-60-016	New Culvert Installation 300 mm with surround	MT	LB	1	
08-60-017	New Culvert Installation 300 mm without surround	MT	LB	1	
08-60-018	New Culvert Installation 450 mm with surround	MT	LB	1	
08-60-019	New Culvert Installation 450 mm without surround	MT	LB	1	
08-60-020	New Culvert Installation-600mm haunched	MT	LB	1	
08-60-021	New Culvert Installation-600mmUnhaunched	MT	LB	1	
08-60-022	New Culvert Installation 600 mm with surround	MT	LB	1	
08-60-023	New Culvert Installation 900 mm without surround	MT	LB	1	
08-60-024	New Culvert Installation 1200 mm with surround	MT	LB	1	
08-60-025	New Culvert Installation 1200 mm without surround	MT	LB	1	
08-60-030	Excavate in soft material for culverts	M ³	LB	1	
08-70-003	Headwall construction-Masonry	M ³	LB	1	
08-70-004	Headwall construction-Concrete	M ³	LB	1	
08-60-035	Provide, place and compact class 15/20 concrete	M ³	LB	1	
08-60-036	Provide, place and compact class 20/25 concrete	M ³	LB	1	

08-60-037	Provide and place A142 fabric mesh reinforcement	M ²	LB	1	
08-80-002	Gabion Installation (1MX1MX1M)	NO	LB	1	
08-80-003	Rock fill to Gabions	M ³	LB	1	
08-70-005	Provide and place class 20/20 concrete scour checks as directed by the Engineer	NO.	LB-MB	1	
08-70-006	Construction of scour checks (masonry)	NO	LB	1	
08-70-009	Scour check repair -Concrete	NO	LB	1	
08-90-002	Excavate for inlet, out fall, catch water drains, mire and cut-off drains in hard material	M ³	LB-MB	1	
08-90-008	Provide and place class 15/20 concrete to beds	M ³	LB-MB	1	
08-90-009	Provide and place class 25/20 concrete to headwalls, wing walls, aprons, sorrounds to walls, inlets and outlets to ipe culverts including formwork	M ³	LB-MB	1	
08-90-011	Provide and place Invert block drains with single side slabs 600mm diameter	M ³	LB-MB	1	
Activity Group:- PASSAGE OF TRAFFIC					
Bill No. 9					
09-50-001	Construct and maintain 3m wide deviation	KM	MB	1	
09-50-002	Maintain existing public road	KM	MB	1	
09-60-001	Allow for the passage of traffic through the works	LS SUM	LB-MB	1	
09-60-002	Construct, gravel, water, compact and maintain deviation roads in maximum lengths of 5km. Allow for minimum width of 6.5m, thickness of gravel 150mm with minimum CBR 20.	KMS	LB-MB	1	
Activity Group:- GRADING AND GRAVELLING WORKS					
Bill No. 10					

10-50-001	Heavy grading without watering and compaction	M ²	MB	1	
10-50-002	Heavy grading with watering and compaction	M ²	MB	1	
10-50-003	Heavy grading with no compaction	M ²	MB	1	
10-50-004	Carriageway grading -Light grading	M ²	MB	1	
10-50-006	Light Manual Reshaping (Grub edge, Fill gullies and reshape carriageway)	M ²	LB	1	
10-60-001	Gravel Patching	M ³	MB	1	
10-70-001	Re-gravelling	M ³	MB	1	
10-70-002	Gravelling	M ³	MB	1	
Activity Group:- PAVED ROADS - SHOULDER MAINTENANCE AND REPAIRS					
Bill No. 11					
11-50-001	Shoulder grading	M ²	MB	1	
11-50-002	Provide, place and compact natural gravel to shoulders accesses and bus bays	M ³	MB	1	
11-50-003	Shoulder rebuilding	M2	MB	1	
Activity Group:- NATURAL MATERIAL BASES AND SUBBASE					
Bill No. 12					
12-50-001	Hand packed stone paving	M ³	LB	1	
12-50-002	Provide, place, spread and compact natural gravel for sub-base	KMS	MB	1	
12-50-003	Provide, place, spread and compact natural gravel for base	KMS	MB	1	
12-60-001	Base Repair - Hand Packed Stone	KMS	LB-MB	1	
12-60-003	Base Repair - Neat Gravel	M ³	MB	1	
12-70-001	In situ process of existing pavement layers (including surfacing) as subbase with additional subbase gravel (measured	KMS	LB-MB	1	

	separately) to specified density and (150mm) extended to the shoulders				
12-70-002	Excavation and spoiling of the existing bituminous layers to any distance where directed by the Engineer	M ³	LB-MB	1	
12-70-003	Scarify the existing pavement layer and compact as specified and directed by the engineer	M ³	MB	1	
Activity Group:- CEMENT AND LIME TREATED SUBGRADE,SUBBASE AND BASE					
Bill No. 14					
14-50-001	Provide, transport, spread, mix and curing cement on natural material or GCS material	KMS	MB	1	
14-50-002	Provide, transport, spread, mix and curing lime on natural material or GCS material	KMS	MB	1	
14-50-003	Mixing in cement/lime into natural gravel or GCS	M ³	MB	1	
14-50-004	Curing and protection of treated layers	M ²	LB	1	
Activity Group:- BITUMINOUS MIXES					
Bill No. 15					
15-70-001	Prime coat	L	LB	1	
15-70-002	Tack coat	L	MB	1	
15-70-003	Provide, spread and roll 3/6 mm precoated chipping	M ³	MB	1	
15-70-004	Provide, spread and roll 6/10 mm precoated chipping	M ³	MB	1	
15-70-005	Provide, spread and roll 10/14 mm precoated chipping	M ³	MB	1	
15-70-006	Provide, spread and roll 14/20 mm precoated chipping				
15-70-007	Seal coat	LT	MB	1	

15-70-008	Slurry Sealing	M ²	MB	1	
15-70-009	Sanding/Dusting	M ²	MB	1	
15-70-010	Recarpeting	M ³	MB	1	
15-91-002	Otta seal Double seal	M ²	MB	1	
15-92-001	Spray MC 30 cut-back bitumen as prime coat to carriageway, shoulders, busbays and junctions at 0.8-1.2 lts/m ²	KMS	LB-MB	1	
15-50-001	Pothole Patching - hot mix	M ³	LB/MB	1	
15-50-001	Pothole Patching - hot mix	M ³	LB/MB		
15-50-001	Pothole Patching –stabilized gravel	M ³	LB/MB		
15-60-001	Provide all materials and Spot seal - Asphaltic concrete (AC) for surfacing	M ³	MB	1	
15-60-002	Provide all materials and crack seal	M ³	LB	1	
15-70-001	Prime Coat	M ³	LB/MB	1	
15-70-002	Tack Coat	M ³	LB/MB	1	
15-70-003	Chippings 3/6mm	M ³	LB/MB	1	
15-70-004	Chippings 6/10mm	M ³	LB/MB	1	
15-70-005	Chippings 10/14mm	M ³	LB/MB	1	
15-70-006	Chippings 14/20mm	M ³	LB/MB	1	
15-70-007	Seal coat	M ³	LB/MB	1	
15-70-008	Slurry Sealing	M ³	LB/MB	1	
15-70-009	Sanding/Dusting	M ³	LB/MB	1	
15-70-010	Recarpeting	M ³	LB/MB	1	
15-80-001	Base Repair - Graded Crushed Stone	M ³	LB/MB	1	
15-80-002	Base Repair - Dense Bitumen Macadam	M ³	LB/MB	1	
15-80-003	Base Repair - Hand Packed Stone	M ³	LB/MB	1	
15-80-004	Base Repair - Stabilised Gravel	M ³	LB/MB	1	

15-80-005	Base Repair - Neat Gravel	M ³	LB/MB	1	
15-90-001	Speed bump construction (with AC)	M ³	LB/MB	1	
15-91-002	Otta seal Double seal	M ²	MB	1	
15-92-001	Spray MC 30 cut-back bitumen as prime coat to carriageway, shoulders, busbays and junctions at 0.8-1.2 lts/m ²	KMS	LB-MB	1	
16-70-002	Dense bitumen macadam (DBM) for base	M ³	MB	1	
16-80-001	Provide, lay and roll asphalt concrete type 1 as directed by the Engineer	KMS	LB-MB	1	
16-80-002	Provide, lay and roll Dense Bitumen Macadam (80mm thick) to carriageway, extending to the shoulders	M ³	LB-MB	1	
16-80-003	Provide and spray K-160 as tack coat at a rate of 0.3-1.0 L/sq metre for the whole road as directed by the Engineer	LITRES	LB-MB	1	
16-80-004	Clearing and cutting of potholes and failed areas	M ³	LB	1	
Activity Group:- CONCRETE WORKS (Major Structures)					
Bill No. 17	Provide all materials and construct as instructed the following				
17-50-001	Bridge Cleaning -Deck	M2	LB/MB	1	
17-50-002	Bridge Cleaning-Riverbed	M ³	LB/MB	1	
17-50-003	Handrail Repair/ Installation	MT	LB/MB	1	
17-50-004	Bridge Painting	M2	LB/MB	1	
17-50-005	Bridge Deck Repair-Timber	M2	LB/MB	1	
17-50-006	Bridge Deck Replacement-Timber	M ³	LB/MB	1	
17-50-007	Bridge Deck Replacement-Steel	M ³	LB/MB	1	
17-50-008	Bridge Deck Replacement-Concrete(Class 25)	M ³	LB/MB	1	
17-50-009	Bridge Abutment repair – concrete(class	M ³	LB/MB	1	

	25)				
17-50-010	Bridge Abutment repair - masonry	M ³	LB/MB	1	
17-60-001	Excavation	M ³	LB/MB	1	
17-60-002	Diversion of Water	M ³	LB/MB	1	
17-60-003	Blinding	M ³	LB/MB	1	
17-60-004	Footing construction (Class 25)	M ³	LB/MB	1	
17-60-005	Bed including toe beams(class 25)	M ³	LB/MB	1	
17-60-006	Culvert pipes: 450mm. dia. - 1200mm. dia.	M ³	LB/MB	1	
17-60-007	Headwalls	M ³	LB/MB	1	
17-60-008	Base Construction	M ³	LB/MB	1	
17-60-009	Wall Construction for bridges or drifts	M ³	LB/MB	1	
17-60-010	Abutment Construction	M ³	LB/MB	1	
17-60-011	Pier Construction	M ³	LB/MB	1	
17-60-012	Top slab Construction	M ³	LB/MB	1	
17-60-013	Superstructure and Deck Construction	M ³	LB/MB	1	
17-60-014	Backfilling	M ³	LB/MB	1	
17-60-015	Ancilliary Works	PC SUM	LB/MB	1	
17-60-016	Reinforcement <16mm diameter	TON	LB/MB	1	
17-60-017	Reinforcement>=16mm diameter	TON	LB/MB	1	
17-70-001	Drift Construction by Contract	PC SUM	LB/MB	1	
17-70-001	Bridge Construction by contract	PC SUM	LB/MB	1	
17-60-001	Provide place and compact concrete class 15/20 for blinding	M ³	LB/MB	1	
17-60-002	Provide place and compact concrete	M ³	MB	1	

	class 20/25 concrete				
17-60-003	Vertical framework class F2 finish	M ²	MB	1	
17-60-004	Horizontal framework class F2 finish	M ²	LB	1	
17-80-001	Provide and place 50mm thick class 15/20 concrete binding to structures	M ³	LB-MB	1	
17-80-003	Provide and place class 30/20 concrete for bridge decks, beams and piers	LITRES	LB-MB	1	
17-80-004	Provide, cut, bend and fix steel reinforcement of diameter greater, equal to or less than 16 per the drawing or as instructed by the Engineer	TON	LB-MB	1	
17-80-005	Provide, cut, bend and fix steel reinforcement of diameter greater, equal to or less than 16 per the drawing or as instructed by the Engineer	TON	LB-MB	1	
Activity Group:- ROAD FURNITURE REPAIR AND MAINTENANCE					
Bill No. 20					
20-50-001	Traffic signs maintenance	NO	LB	1	
20-50-002	Traffic signs replacement	NO	LB	1	
20-50-003	Street Decoration (banner, flags etc)	NO	LB	1	
20-50-004	Marker posts replacements	NO	LB	1	
20-50-005	Marker posts maintenance	NO	LB	1	
20-50-006	Sign Cleaning and painting	NO	LB	1	
20-60-001	Road Marking- Mechanical	MT	LB	1	
20-60-001	Road Marking- Manual	MT	LB	1	
20-60-001	Reflective Stud Installation	NO	LB	1	
20-70-001	Guard Rail Repair	MT	LB	1	
20-70-002	Guard Rail Replacement	MT	LB	1	
20-70-003	Guard Rail Replacement	MT	LB	1	

20-70-004	Guardrail installation (as per the drawing specifications)	MT	LB	1	
20-70-005	Fencing (chainlink fence with concrete posts)	MT	LB	1	
20-70-006	Pedestrian barriers along roads and streets	MT	LB	1	
20-70-007	Boundary wall construction using dressed natural stone 225mmx150mmx450mm	MS	LB	1	
20-70-008	Boundary wall construction using undressed natural stone 225mmx100mmx450mm	MS	LB	1	
20-70-009	Boundary wall construction using coral blocks 225mmx150mmx450mm	MS	LB	1	
20-70-010	Boundary wall construction using coral blocks 225mmx100mmx450mm	MS	LB	1	
20-80-011	Street lights repairs	NO	LB	1	
20-80-012	Traffic signs rehabilitation	NO	LB-MB	1	
20-80-013	Street light installation (pole and fittings)	NO	LB-MB	1	
20-80-014	Traffic Lights installation per four arm junction.	NO	LB-MB	1	
20-80-010	Micro-tunneling for a 150mm dia. PVC duct.	MT	LB-MB	1	
20-80-011	Supply & erection of poles - 3.8m	NO	LB	1	
20-80-012	Supply & erection of poles - 4.4m	NO	LB	1	
20-80-013	Supply & Installation of pole covers	NO	LB	1	
20-80-014	Supply & Installation of pole connectors	NO	LB	1	
20-80-015	Supply & Installation of pole caps	NO	LB	1	
20-80-016	Supply & laying Cables- 7x1.5mm ²	MT	LB	1	
20-80-017	Supply & laying Cables- 3x1.5mm ²	MT	LB	1	
20-80-018	Supply & laying Cables-12x1.5mm ²	MT	LB	1	
20-80-019	Supply & Installation of T.S. Head-	NO	LB	1	

	200mm				
20-80-020	Supply & Installation of T.S. Head-300mm	NO	LB	1	
20-80-021	Supply & Installation of P.S. Head-200mm	NO	LB	1	
20-80-022	Supply & Installation of P.S. Head-300mm	NO	LB	1	
20-80-023	Cable Termination	NO	LB	1	
20-80-024	Controller Installation	NO	LB	1	
20-80-070	Supply & delivery ; street lighting testing equipment.	PC SUM	LB-MB	1	
20-80-071	Digging of holes for 7.6m column	NO	LB	1	
20-80-072	Digging of holes for 10m column	NO	LB	1	
20-80-073	Digging of holes for control pillar base	NO	LB	1	
20-80-074	Trenches for 2 core 4mm ² armored Tcable	NO	LB	1	
20-80-075	Concreting and erection for 7.6m column	NO	LB-MB	1	
20-80-076	Concreting and erection for 10m column	NO	LB-MB	1	
20-80-077	Concreting and erection for control pillar	NO	LB-MB	1	
20-80-078	Backfilling & compacting 7.6 column hole	NO	LB	1	
20-80-079	Concreting and erection for control pillar	NO	LB-MB	1	
20-80-080	Backfilling & compacting: 7.6m column hole	NO	LB	1	
20-80-081	Tiling for cable trenches	NO	LB	1	
20-80-082	Installation: 15mm dia. 1.8m earth electrode	NO	LB	1	
20-90-001	Replacement of Kerbs and Channels	MT	LB	1	
20-50-006	Roads markings - CENTRELINE as directed by the Engineer	KMS	LB-MB	1	

20-50-007	Roads markings - EDGE MARKING as directed by the Engineer	KMS	LB-MB	1	
20-50-012	Roads markings- Kerbs as directed by the Engineer	MT	LB	1	
20-50-020	Traffic signs maintenance	NO	LB	1	
20-60049	Sup.&del.:150W SON-T lamp(screw type)	NO	LB-MB	1	
20-60-051	Supply and delivery of 160W ML lamp(BC)	NO	LB-MB	1	
20-70-002	Provide and erect warning type signs 750mm size	NO.	LB-MB	1	
20-70-006	Provide and erect Non-Standard informatory signs: (a) Less than 1m2	NO.	LB-MB	1	
20-70-010	Paint 0.1m wide yellow centreline on the road as specified	M ²	LB-MB	1	
20-70-011	Paint 0.1m wide white lines on road	M ²	LB-MB	1	
20-70-012	Paint 0.2m wide busbays separation marking	M ²	LB-MB	1	
20-70-013	Paint 0.4m wide giveway lines at junctions	M ²	LB-MB	1	
20-70-014	Paint 0.2m wide pedestrian crossing marking	M ²	LB-MB	1	
20-70-016	Excavate for, provide and place 250*125mm precast concrete kerbs in support to carriageway, busbays and junctions as directed by the Engineer (1) Straight Kerbs	MT	LB	1	
20-70-017	Excavate for, provide and place 250*125mm precast concrete kerbs in suport to carriageway, busbays and junctions as directed by the Engineer (1) Straight Kerbs	MT	LB	1	
20-70-023	Provide and install flexbeam guardrails and 50mm diameter pipe rails as directed by the Engineer	MT	LB-MB	1	
20-70-024	Provide and paint white reflective paint every alternate sections of the existing	MT	LB-MB	1	

	guardrail as directed by the Engineer				
20-70-025	Provide and install pedestrian barriers made of 50mm diameter/square pipe rails as directed by the Engineer	MT	LB-MB	1	
20-70-026	Provide and place yellow reflecting road studs (cat eyes) to road pavement to visually reinforce a yellow centre/no-passing line	NO	LB	1	
20-70-027	Provide and place red reflecting road studs (cat eyes) along the hard shoulder of motorways, dual carriageways, as well as the highway road edges	NO	LB	1	
Activity Group:- MISCELLANEOUS BRIDGE/DRIFT WORKS					
Bill No. 21					
21-60-001	Bridge Painting	M ²		1	
21-60-005	Pipe handrails to bridges	MT	LB	1	
21-60-008	weepholes	NO	LB	1	
Activity Group:- DAYWORKS					
Bill No. 22	Labour				
22-50-001	Support Staff (Male)	PD	LB	1	
22-50-002	Support Staff (Female)	PD	LB	1	
22-50-003	Unskilled Labour (Male)	PD	LB	1	
22-50-004	Unskilled Labour (Female)	PD	LB	1	
22-50-005	Watchmen	PD	LB	1	
22-50-006	Artisans Grade I (Male)	PD	LB	1	
22-50-007	Artisans Grade I (Female)	PD	LB	1	
22-50-008	Artisans Grade II (Male)	PD	LB	1	
22-50-009	Artisans Grade II (Female)	PD	LB	1	
22-50-010	Artisans Grade III (Male)	PD	LB	1	
22-50-011	Artisans Grade III (Female)	PD	LB	1	

22-50-012	Skilled Labour : Overseer	PD	LB	1	
22-50-013	Skilled Labour : Inspector	PD	LB	1	
22-60-001	Truck Flat bed : 2.5 - 5 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 5 - 7 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 7 - 8 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 8 - 12 Tonnes	KM	LB-MB	1	
22-60-001	Truck Flat bed : 15 Tonnes	EH	LB-MB	1	
22-60-001	Truck Flat bed : 20 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 5 - 7 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 7 - 8 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 15 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 20 Tonnes	EH	LB-MB	1	
22-60-001	Truck, Tipper : 25 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 25 - 35 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 25 - 35 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 35 - 50 Tonnes	EH	LB-MB	1	
22-60-001	Prime Mover (no attachment): 35 - 50 Tonnes	EH	LB-MB	1	
22-62-014	Water Tanker : 5000 - 6000 Lt.	KM	LB-MB	1	
22-62-015	Water Tanker : 5000 - 6000 Lt.	HR	LB-MB	1	
22-62-016	Water Tanker : 6000 - 8000 Lt.	HR	LB-MB	1	
22-62-017	Water Tanker : 6000 - 8000 Lt.	KM	LB-MB	1	
22-62-018	Trailer, Water/Fuel: 2000 - 2500 Lt.	KG	LB-MB	1	
22-62-019	Trailer, Water/Fuel: 3000 - 4500 Lt.	KG	LB-MB	1	
22-62-020	Trailer, Water/Fuel: 5000 - 6500 Lt.	KG	LB-MB	1	
22-62-021	Fuel Tanker : 5000 - 6000 Lt.	MT	LB-MB	1	

22-62-022	Fuel Tanker : 5000 - 6000 Lt.	MT	LB-MB	1	
22-62-023	Fuel Tanker : 6000 - 8000 Lt.	MT	LB-MB	1	
22-62-024	Fuel Tanker : 6000 - 8000 Lt.	M ³	LB-MB	1	
22-62-025	Semi Trailer, Water: 35 - 50 Tonnes	M ³	LB-MB	1	
22-62-026	Semi Trailer, Fuel : 35 - 50 Tonnes	M ³	LB-MB	1	
22-63-001	Ag. Tractor (no implement): 4x2, 40HP	M ³	LB-MB	1	
22-63-002	Ag. Tractor (no implement): 4x2, 50HP	M ³	LB-MB	1	
22-63-003	Ag. Tractor (no implement): 4x2, 60HP	M ³	LB-MB	1	
22-63-004	Ag. Tractor (no implement): 4x2, 70HP	M ³	LB-MB	1	
22-63-005	Ag. Tractor (no implement): 4x4, 70HP	LT	LB-MB	1	
22-63-006	Ag. Tractor (no implement): 4x4, 80HP	LT	LB-MB	1	
22-63-007	Ag. Tractor (no implement): 4x4, 90HP	LT	LB-MB	1	
22-63-008	Crawler Tractor (e.g. D4/D5) : 90 - 100 HP	LT	LB-MB	1	
22-63-009	Crawler Tractor (e.g. D6) : 140 - 160 HP	KG	LB-MB	1	
22-63-010	Crawler Tractor (e.g. D7) : 200 - 220 HP	Hr	LB-MB	1	
22-63-011	Crawler Tractor (e.g. D8) : 250 - 325 HP	Hr	LB-MB	1	
22-63-012	Crawler Tractor (e.g. D9) : 400 - 450 HP	Hr	LB-MB	1	
22-63-013	Motor Grader (e.g. CAT 112F): 100 - 130 HP	Hr	LB-MB	1	
22-63-014	Motor Grader (e.g. CAT 120H): 131 - 155 HP	Hr	LB-MB	1	
22-63-015	Motor Grader (e.g. CAT 140H): 156 - 200 HP	Hr	LB-MB	1	
22-63-016	Front Wheel Loader, < 115 HP: 90 - 105 HP	Hr	LB-MB	1	
22-63-017	Front Wheel Loader, : 105 - 125 HP	Hr	LB-MB	1	
22-63-018	Loader + Backhoe : 140 HP	Hr	LB-MB	1	
22-63-019	Excavator : 140 HP	Hr	LB-MB	1	
22-64-001	Pedestrian Roller: 700-1000kg		LB-MB	1	

22-64-002	Roller: 3-4 tonnes	Hr	LB-MB	1	
22-64-003	Double drum steel Vibrator roller: 9-10T, 100 HP	Hr	LB-MB	1	
22-64-004	Single drum steel Vibrator roller: 9-10T, 130 HP	Hr	LB-MB	1	
22-64-005	Pneumatic Roller: 10T, 130 HP	Hr	LB-MB	1	
22-64-006	Towed Roller, steel wheel : 4 Tonnes	Hr	LB-MB	1	
22-64-007	Towed Roller, sheepfoot: 4 Tonnes	M ²	LB-MB	1	
22-65-001	Concrete Mixer : 200 - 300 L	Hr	LB-MB	1	
22-65-002	Concrete Mixer : 300 - 450 L		LB-MB	1	
22-65-003	Generator Stat : 20 Kva	Hr	LB-MB	1	
22-65-004	Generator Stat : 45 Kva	Hr	LB-MB	1	
22-65-005	Generator Stat : 200 Kva	Hr	LB-MB	1	
22-65-006	Air Compressor, 125 cfm : < 4250 LPM	Hr	LB-MB	1	
22-65-007	Air Compressor, 175 cfm : > 4250 LPM	Hr	LB-MB	1	
22-66-001	Road Marking Machine	Hr	LB-MB	1	
22-66-002	Pump Water/Mud: 25 mm.	Hr	LB-MB	1	
22-66-003	Pump Water/Mud: 50 mm.	Hr	LB-MB	1	
22-66-004	Pump Water/Mud: 100 mm.	Hr	LB-MB	1	
22-66-001	Bitumen H/Decanter : 2500 Lt.	Hr	LB-MB	1	
22-66-002	Bitumen H/Decanter : 6500 Lt.	Hr	LB-MB	1	
22-66-003	Bitumen H/Decanter : 8000 Lt.	Hr	LB-MB	1	
22-66-004	Bitumen Sprayer H/Operated	Hr	LB-MB	1	
22-66-005	Vibrator P/Tamper	Hr	LB-MB	1	
22-66-006	Concrete P/vibrator	Hr	LB-MB	1	
22-66-007	Road Broom	Hr	LB-MB	1	

22-66-008	Chip Spreader	Hr	LB-MB	1	
22-66-009	Concrete Screed Vibrator	Hr	LB-MB	1	
22-66-010	Grass Cutter	Hr	LB-MB	1	
22-68-001	Trailer, Non-tipping : 3 - 4 Tonnes	Hr	LB-MB	1	
22-68-002	Trailer, Tipping : 3 - 4 Tonnes	Hr	LB-MB	1	
22-68-003	Trailer, Lowbed : 20 - 35 tonnes	Hr	LB-MB	1	
22-68-004	Trailer, Lowbed : 35 - 50 tonnes	Hr	LB-MB	1	
22-68-005	Semi Trailer, F/Bed : 40 ft.	Hr	LB-MB	1	
22-68-006	Semi Trailer, Dumper: 35 - 50 Tonnes	Hr	LB-MB	1	
22-68-007	Drawbar Trailer : 15 - 20 Tonnes	Hr	LB-MB	1	
	Materials				
22-70-001	Fine aggregates(sand)	M3	LB-MB	1	
22-70-002	Fine aggregates(stone dust)	M3	LB-MB	1	
22-70-003	Graded aggregates (ballast)	M3	LB-MB	1	
22-70-004	Water	M3	LB-MB	1	
22-70-005	Cement (ordinary portland)	TON	LB-MB	1	
22-70-006	Hydrated lime	TON	LB-MB	1	
22-70-007	Waterproof cement	TON	LB-MB	1	
22-70-008	Shuttering timber class F1 finish	M2	LB-MB	1	
22-70-009	Shuttering timber class F2 finish	M2	LB-MB	1	
22-70-0010	Shuttering timber class F3 finish	M2	LB-MB	1	
22-70-0011	Timber (wrot/ planed)	M2	LB-MB	1	
22-70-012	Timber (unwrot/ unplaned)	M2	LB-MB	1	
22-71-001	Round Bars 6mm	MT	LB-MB	1	
22-71-002	Round Bars 8mm	MT	LB-MB	1	
22-71-003	Round Bars 10mm	MT	LB-MB	1	
22-71-004	Round Bars 12mm	MT	LB-MB	1	

22-71-005	Round bars 16mm	MT	LB-MB	1	
22-71-006	Round bars 20mm	MT	LB-MB	1	
22-71-007	Round bars 25mm	MT	LB-MB	1	
22-71-008	Round bars 32mm	MT	LB-MB	1	
22-71-009	Round bars 40mm	MT	LB-MB	1	
22-71-010	Square twisted bars 8mm	MT	LB-MB	1	
22-71-011	Square twisted bars 10mm	MT	LB-MB	1	
22-71-012	Square twisted bars 12mm	MT	LB-MB	1	
22-71-013	Square twisted bars 16mm	MT	LB-MB	1	
22-71-014	Square twisted bars 20mm	MT	LB-MB	1	
22-71-015	Square twisted bars 25mm	MT	LB-MB	1	
22-71-016	Square twisted bars 32mm	MT	LB-MB	1	
22-71-017	Square twisted bars 40mm	MT	LB-MB	1	
22-71-001	Precast concrete culvert - 300mm	MT	LB-MB	1	
22-72-002	Precast concrete culvert - 450mm	MT	LB-MB	1	
22-72-003	Precast concrete culvert - 600mm	MT	LB-MB	1	
22-72-004	Precast concrete culvert - 900mm	MT	LB-MB	1	
22-72-005	Precast concrete culvert - 900mm		LB-MB	1	
22-72-006	Precast concrete culvert - 1200mm	MT	LB-MB	1	
22-72-007	Culvert moulds 300 mm	NO	LB-MB	1	
22-72-008	Culvert moulds 450 mm	NO	LB-MB	1	
22-72-009	Culvert moulds 600 mm	NO	LB-MB	1	
22-72-010	Culvert moulds 900 mm	NO	LB-MB	1	
22-72-011	Culvert moulds 1200 mm	NO	LB-MB	1	
22-72-012	Concrete Block - 225x100x450mm	NO	LB-MB	1	
22-72-013	Concrete Block - 225x150x450mm	NO	LB-MB	1	
22-72-014	Concrete Block - 225x225x450mm	NO	LB-MB	1	
22-72-015	Natural stones 4" x 9" - dressed	FT	LB-MB	1	

22-72-016	Natural stones 6" x 9" - dressed	FT	LB-MB	1	
22-72-017	Natural stones 9" x 9" - dressed	FT	LB-MB	1	
22-72-018	Natural coral blocks 225x100x450mm		LB-MB	1	
22-72-019	Natural coral blocks 225x150x450mm		LB-MB	1	
22-72-020	Coarse aggregates(chippings) - 3/6mm	M3	LB-MB	1	
22-72-021	Coarse aggregates(chippings) - 6/10mm	M3	LB-MB	1	
22-72-022	Coarse aggregates(chippings) - 10/14mm	M3	LB-MB	1	
22-72-023	Coarse aggregates(chippings) - 14/20mm	M3	LB-MB	1	
22-72-024	Stone dust	M3	LB-MB	1	
22-72-025	Gravel material (murrum)	M3	LB-MB	1	
22-72-026	Hardcore	M3	LB-MB	1	
22-72-027	Crusher run material (Graded crushed stone)	M3	LB-MB	1	
22-72-028	Quarry waste material	M3	LB-MB	1	
22-73-001	Premix - AC Type II (hot)	M3	LB-MB	1	
22-73-002	Premix - AC Type II (cold)	M3	LB-MB	1	
22-73-003	Premix - AC Type I (cold)	M3	LB-MB	1	
22-73-004	Premix - AC Type I (hot)	M3	LB-MB	1	
22-73-005	Dense Bitumen Macadam	M3	LB-MB	1	
22-73-006	Dense Emulsion Macadam	M3	LB-MB	1	
22-73-007	Bituminus sealant	TON	LB-MB	1	
22-73-008	Bitumen K3	M3	LB-MB	1	
22-73-009	Bitumen A3	M3	LB-MB	1	
22-73-010	Bitumen K160	M3	LB-MB	1	
22-73-011	Bitumen K170	M3	LB-MB	1	
22-73-012	MC 30 Bitumen	M3	LB-MB	1	
22-73-013	MC 3000 Bitumen	M3	LB-MB	1	
22-73-014	80/100 Pen grade bitumen	M3	LB-MB	1	
22-76-22	Hand saw 20"	NO	LB-MB	1	

22-76-23	Hand saw 24"	NO	LB-MB	1	
22-76-24	Jembe handle	NO	LB-MB	1	
22-76-25	Broom handle	KG	LB-MB	1	
22-76-26	Hose pipe rubber 0.5" (specify length)	NO	LB-MB	1	
22-76-27	Hose pipe rubber 3/4"	NO	LB-MB	1	
22-76-28	Hose pipe rubber 1"	NO	LB-MB	1	
22-76-29	Slashers	NO	LB-MB	1	
22-76-30	Drums empty 210 lts	NO	LB-MB	1	
22-76-31	Buckets metal 20 lts	NO	LB-MB	1	
22-76-32	Buckets plastic 20lts	NO	LB-MB	1	
22-76-33	Wheel barrow	NO	LB-MB	1	
22-76-34	Mops	NO	LB-MB	1	
22-76-35	Hard brooms	NO	LB-MB	1	
22-76-36	Soft brooms	NO	LB-MB	1	
22-77-001	Mesh wire 8' x 4' gauge 24	M2	LB-MB	1	
22-77-002	Mesh wire 8' x 4' gauge 18	M2	LB-MB	1	
22-77-003	Weldmesh BRC A65	M2	LB-MB	1	
22-77-004	Weldmesh BRC A98	M2	LB-MB	1	
22-77-005	Weldmesh BRC A142	M2	LB-MB	1	
22-77-006	Binding wire	KG	LB-MB	1	
22-77-007	Hoop iron	KG	LB-MB	1	
22-77-008	Chain link wire 4ft - roll (specify length)	NO	LB-MB	1	
22-77-009	Chain link wire 5ft - roll	NO	LB-MB	1	
22-77-010	Chain link wire 6ft - roll	NO	LB-MB	1	
22-77-011	Chain link wire 8ft - roll	NO	LB-MB	1	
22-77-012	Fencing wire barbed G. 16 - roll	NO	LB-MB	1	

22-78-007	DPC dump proof course - 100mm wide	NO	LB-MB	1	
22-78-008	DPC dump proof course - 150mm wide	NO	LB-MB	1	
22-78-009	DPC dump proof course - 200mm wide	NO	LB-MB	1	
22-78-010	Boss white	KG	LB-MB	1	
22-78-011	White wash	KG	LB-MB	1	
22-78-012	Sisal twine	NO	LB-MB	1	
22-78-013	Road marking paint yellow	LT	LB-MB	1	
22-78-014	Road marking paint white	LT	LB-MB	1	
22-78-015	Thermoplastic paint yellow	LT	LB-MB	1	
22-78-016	Thermoplastic paint white	LT	LB-MB	1	
Activity Group:- PAVED SURFACES					
BILL 23					
23-50-001	Pre-cast concrete paving blocks				
23-50-001	50mm thick light strength 32 N/mm square to KS 02-827 including 30mm thick sand layer	m ²	LB-MB	1	
23-50-001	50mm thick light strength 32 N/mm square to KS 02-827 including 30mm thick sand layer but coloured	m ²	LB-MB	1	
23-50-001	60mm thick medium strength 49 N/mm square to KS 02-827 including 30mm thick sand layer	m ²	LB-MB	1	
23-50-001	60mm thick medium strength 49 N/mm square to KS 02-827 including 30mm thick sand layer but coloured	m ²	LB-MB	1	
23-50-001	80mm thick medium strength 49 N/mm square to KS 02-827 including 30mm thick sand layer	m ²	LB-MB	1	
23-50-001	80mm thick High strength 49 N/mm square to KS 02-827 including 30mm thick sand layer	m ²	LB-MB	1	
	All Rates Are Inclusive of VAT				