

### EXCAVATION AND EARTHWORK

Item	Description	Qty.	Unit	Unit Price US.\$.	Total Price US.\$.
	<u>cutting of paved road .Excavation to any depth in any type of material, sand bedding and surrounds for pipes .backfilling of trench including compaction and testing with suitable material supply and install Below rain pipes installation complete as specified; invert levels as required; include all clean outs sleeves, fittings and accessories;disposal; .warning tape type of pipes sn4 dim 400 mm</u>	350	l.m		
	<u>cutting of paved road .Excavation to any depth in any type of material, sand bedding and surrounds for pipes .backfilling of trench including compaction and testing with suitable material supply and install Below rain pipes installation complete as specified; invert levels as required; include all clean outs sleeves, fittings and accessories;disposal; .warning tape type of pipes sn4 dim 250 mm ( conected gutter to manhole )</u>	80	l.m		
	Cast in place concrete and concreting as specified and detailed, installed complete; Including formwork and shuttering, rebates, chamfers, grooves, mortices, block-outs, openings and the like; reglets, ties, waterstops and otherinserts; expansion, control and construction joints; basic formed finishes and unformed surface finishes; and all other related ancillaries as indicated or required				

<b>SURFACE WATER MANHOLES</b>					
	Rain water manhole complete as specified; invert levels as required; include covers, channels, fittings and accessories as required, include excavation disposal and all civil work.				
	casting reinforcement concrete manhole dim min 1.5m * 1.5m * .... M with heavy duty frame and cover dim 80cm* 80 cm with cement 400kg/m3 <u>according to dw</u>	9	nb		
	<b>BOX CULVERT</b>				
	Reinforced concrete; Class A sulphate resisting cement of thickening 20cm for footing and 20cm for wall with reinforcement steel as per drawings;	5	l.m		
	Rain water interceptor complete as dw; invert levels as required; include covers, channels, fittings and accessories as required, include excavation disposal and all civil work.casting channels with cement 400kg/m3 and 20 cm thickness with reinforcement steel 12 mm both way Steel trench cover grill width 50 cm	210	l.m		
	rehabilitation existing gutter dim 18m * 0.7 with all needed reinforcement concrete - new steel for gutter	18	l.m		
	connection storm pipes to existing manholes	2	l.s		
	<b>Reinstatement</b>				
	<b>Asphalt</b> : Supply and place for the trench paving to the existing asphalt level all necessary material, labor and equipment. The works shall include but not limited to the following: 1- Excavation to the sub grade level, remove excess material, level and compact sub grade. 2- Spread and compact aggregate base coarse to 98% of Maximum proctor density of 20cm.Coarse backfill material shall be the specified gravel or crushed rock material 3- Apply of MC70 prime coat as specified. 4- Supply, spread and compact 10 cm of bituminous material. 5-The finished surface of the new pavement shall conform to the grade, crown and slope of the existing pavement.	550	m2		
	<b>SUM TOTAL</b>				