

BILL NO. 21: MISCELLANEOUS BRIDGE WORKS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (KSHS)	AMOUNT (KSHS)
	<p>Note: No separate payments shall be made for haulage to and from the site for any materials including spoil, and the cost of such shall be included in the rates and prices.</p> <p>Bridge works</p> <p>Bridge deck water proofing Provide and place waterproofing materials on bridge deck as per the drawings, clause 2101A.1&2 of the special specifications and directed by the Engineer.</p> <p>Bridge Bearings Supply, fit and fix in position true to line and level pot bearings complete with all accessories as per the drawings, specifications and directed by the Engineer.</p> <p>(a) Pot bearings fixed in position to support minimum vertical force 2500 KN and minimum horizontal force 300 KN under Serviceability Limit state.</p> <p>(b) Pot bearings movable (guided) in horizontal direction to support minimum vertical force 2500 KN under Serviceability Limit state.</p> <p>(c) Pot bearings fixed in position to support minimum vertical force 2000 KN and minimum horizontal force 300 KN under Serviceability Limit state.</p> <p>(d) Pot bearings movable (guided) in horizontal direction to support minimum vertical force 2000 KN under Serviceability Limit state.</p> <p>Crash Barrier Reinforced Cement Concrete crash barrier including cost of reinforcement, steel plates and pipes complete as per the drawings, specifications and directed by the Engineer.</p> <p>(i) Type A (Median)</p> <p>(ii) Type B (Bridge Edge)</p> <p>(iii) Type B (Retaining wall and Approaches)</p> <p>Movement Joints and sealant</p> <p>(i) Elastomeric</p> <p>(ii) Preformed compression seal joints</p> <p>(iii) 20mm Asphaltic plug joints</p> <p>(iv) Supply, fit and fix in position true to line and level elastomeric joint with metallic runners casting deck HA Type 6 or equivalent, approximate size 440mm wide, 40- 80mm deep, for 100mm joint width between the girders and movement not less than 50mm complete with all accessories as per the drawings, specifications and directed by the Engineer</p> <p>Bridge deck drainage system Provide and install bridge deck drainage system inclusive of piping, fixing brackets and scuppers as per the drawings, specifications and directed by the Engineer.</p> <p>(a) Piping inclusive of fixing brackets</p> <p>(b) Scuppers spouts</p> <p>Weep holes Provide weep holes in plain concrete / reinforced concrete abutment, wing wall / return wall complete as per the drawings, specifications and directed by the Engineer.</p> <p>Service ducts Provide and install 100mm diameter UPVC service duct as per the drawings, specifications and directed by the Engineer.</p> <p>(a) Light cable ducts UPVC 50mm diameter</p> <p>(b) Other cable ducts 100mm diameter</p>				
21.01		m ²	13,038		
21.02					
(a)		No	336		
(b)		No	5		
(c)		No	5		
(d)		No	5		
21.03					
		m	13,500		
		m	1,440		
		m	8,620		
21.04					
		m	253		
		m	163		
		m	216		
		m	350		
21.05					
(a)		m	1,662		
(b)		No.	40		
21.06		No.	8,614		
21.07					
(a)		m	1,083		
(b)		m	2,072		
	Total carried forward to next page				