

RESTRICTED

APPROXIMATE ESTIMATE

PART-I

Jammu and Kashmir
Sampark
110 RCC/G1 BRTF

SSR 2016, Zone "D"

CONSTRUCTION OF 130.00 MTR LONG PSC BALANCED CANTILEVER BRIDGE OVER KHURD NALLAH AT KM
53.300 ON REASI-ARNAS-MAHORE ROAD UNDER PROJECT SAMPARK IN J&K UT.

SN	Particulars	Bridge work	LA	Fmn	Pmt	Surf	Total	G/Total
A WORK ASSESSED AS PER DGBR SSR 2016 & DGBR BRIDGE SSR 2019								
1	Cost of works			63,07,412.00	63,86,464.00	15,18,130.00	1,42,12,006.00	1,42,12,006.00
2	Road lift charges							
3	Extra Tpt Charges			70,001.00	6,67,214.00	65,976.00	8,03,191.00	8,03,191.00
4	Credit for GREF trades men			6,01,539.00	3,42,918.00	22,422.00	9,66,879.00	9,66,879.00
5	Credit for retrieved stones			4,03,296.00	6,98,051.00	25,215.00	11,26,562.00	11,26,562.00
	Total (A)			66,76,666.00	10,91,204.00	2,41,421.00	13,32,625.00	13,32,625.00
6	Add escalation for 2020-21 @ 15.44%				66,07,341.00	13,39,892.00	1,35,22,889.00	1,35,22,889.00
	Total (B)			10,16,281.00	8,65,773.00	2,06,879.00	20,87,933.00	20,87,933.00
	Total (A+B)			75,90,937.00	64,73,114.00	15,46,771.00	1,56,10,822.00	1,56,10,822.00
C Add Following Charges								
1	Add Road side Accn @ 2%							
2	Add 15% for Physical Contingencies for Br only & 5 % for remaining wks							
3	Add 1% for QC Charges							
4	Add Labour Cess @ 1%			3,79,547.00	3,23,656.00	77,339.00	7,80,542.00	7,80,542.00
	Total (C)			75,909.00	64,731.00	15,468.00	1,56,108.00	1,56,108.00
	Total (A+B+C)			5,31,365.00	4,53,118.00	1,08,275.00	10,92,758.00	10,92,758.00
D Cost of Contract (Bridge)								
1	Add cost of contract	12,72,70,000.00						
2	Add physical contingency charges @ 0.5% (1% for upto 10 Cr 0.5% for >10 Cr)	6,36,350.00						
3	Add Quality Control charges @ 1%	12,72,700.00						
	Total (D)	12,91,79,050.00		2,49,312.00	1,34,783.00	8,550.00	2,13,28,506.00	2,13,28,506.00
E Royalty Charges								
	Total (A+B+C+D+E)	12,91,79,050.00		83,71,614.00	70,61,015.00	58,95,877.00	15,05,07,556.00	15,05,07,556.00
							Say in Lakh	1505.08

Station C/A 56 APO

Dated 10 Dec 2020

(Aditya Puri)

Lt Col

Officer Commanding

RESTRICTED

**RESTRICTED
APPROXIMATE ESTIMATE
PART II**

Name of State : Jammu and Kashmir
 Name of RCC/TF/Project : 110 RCC/31 TF/Sampark
 Name of work : CONSTRUCTION OF 130.00 MTR LONG PSC BALANCED CANTILEVER BRIDGE OVER KHURD NALLAH AT KM 53.300 ON REASI-ARNAS-MAHORE ROAD UNDER PROJECT SAMPARK IN J&K UT.
 SSR 2016, Zone "D",

SN	SSR Item No	Item of work	A/U	Qty	Rate	Amount
A		BRIDGE WORK (THROUGH EXECUTION CONTRACT)-				
1	RA	Design and construction of 130 Mtr Major Pmt Bridge	Mtr	130.00	979000.00	12,72,70,000.00
		Total				12,72,70,000.00
B		APPROACH ROAD				
I	LA/FC	Amount involve for additional land acquisition of forest land of 990.00 Sqm (110.00m x 9.00m) towards hill side for construction of approaches of bridge	Sqm	990.00		
II		Formation works (Through departmental Execution)-				
1	F-403	Rough excavation in hard rock by drilling with compressor, blasting and getting out including stacking of serviceable material & disposal of unserviceable material lead upto 6m and not exceeding 1.5m deep (75% by machine and 25% by manual labour)	Cum	18677.50	254.28	47,49,315.00
2	F-702	Earth work in embankment incl excavation of earth and filling with earth work free from roots etc spreading in layers not exceeding 1.5 m above the base in plain area and for approaches to bridge in ordinary soil excluding cost of soil. (By manual means)	Cum	4986.23	312.48	15,58,097.00
		Total				63,07,412.00
		Road lift charges				70,001.00
		Extra Tpt Charges				6,01,539.00
		Credit for GREF trades men				-4,03,298.00
		Royalty Charges				2,49,312.00
III		Permanent Works (Through departmental Execution)-				
1	P-101	Excavation in trenches not exceeding 1.2m width and 1.5m depth in soil/soil mixed with boulders (SMB), including dressing bottom and sides getting out and disposing all excavated material lead up to 6m and lift upto 1.5m (by manual means)	Cum	860.83	248.90	2,14,261.00
2	P-202	Plain Cement Concrete 1:4:8 (1 cement : 4 sand : 8 stone aggregate of size 4 cm graded downwards) in foundation or elsewhere (excluding the cost of centering/shuttering)	Cum	265.91	2564.79	6,82,003.00
3	P-203	Plain Cement Concrete 1:3:6 (1 cement : 3 sand : 6 stone aggregate of size 4 cm graded downwards) in foundation or elsewhere (excluding the cost of centering/shuttering)	Cum	40.57	2715.86	1,10,182.00
4	P-204	Plain Cement Concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate of size 4 cm graded downwards) in foundation or elsewhere (excluding the cost of centering/shuttering)	Cum	58.94	4404.59	2,59,607.00
5	P-209	Centering/Shuttering (Steel) including strutting, propping and removal of formwork (considering 10 times to be used)	10 Sqm	11.91	3933.17	46,880.00
6	P-505	Random/Polygonal rubble walling in cement mortar (1:6) brought to course 45 cm high, well bonded (material and labour)	Cum	1338.94	2610.07	34,94,727.00
7	P-601	Filling of stones/selected material in layers well packed behind retaining walls, breast walls, abutment / wing walls of bridges	Cum	493.56	736.01	3,63,265.00
8	T-003	Providing & erection of "W" beam crash barrier comprising 3 mm thick corrugated sheet metal beam rail, 70cm above road/ground level, fixed on ICMC serieschannel vertical post, 150x75x5mm spaced 2 mtr centre-to-centre, 1.80 mtr high, 1.10 mtr below ground level/ road level, all steel parts and fittings to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with spacer of channel section 150x75x5mm, 330mm long complete as per clause 810 of MoSRT&H specifications.	Mtr	276.00	4404.20	12,15,559.00
		Total				63,86,464.00

Contd P/02-

SN	SSR Item No	Item of work	A/U	Qty	Rate	Amount
		Road lift charges				6,67,214.00
		Extra Tpt Charges				3,42,918.00
		Credit for GREF trades men				-6,98,051.00
		Credit for retrieved stones				-10,91,204.00
		Royalty Charges				1,34,783.00
IV		Surfacing Works (Through departmental execution):-				
1	S-108	Providing, laying, spreading and compacting graded stone aggregate grading-1 and satisfying the physical reqmt as per table No. 400-1 of MORT&H specifications for road and bridge works for GSB 10cm thick (compacted) with stone aggregate including supply of material, watering and compaction all complete.	10 Sqm	521.64	2424.24	12,64,581.00
2	F-702	Earth work in embankment incl excavation of earth and filling with earth work free from roots etc spreading in layers not exceeding 1.5 m above the base in plain area and for approaches to bridge in ordinary soil excluding cost of soil. (By manual means).	Cum	644.00	378.10	2,43,496.00
3	MP-38	Provision of cat eyes	Nos	54.00	186.17	10,053.00
		Total				15,18,130.00
		Road lift charges				65,976.00
		Extra Tpt Charges				22,422.00
		Credit for GREF trades men				-25,215.00
		Credit for retrieved stones				-2,41,421.00
		Royalty Charges				8,550.00
V		Surfacing Works (Through Execution contract):-				
1	S-404	Providing, laying, spreading and compacting graded stone aggregate grading as per Table-400-11 and satisfying the physical reqmt as per table No. 400-10 of MORT&H specifications for WMM specifications to a thickness of 75 mm including premixing the material with water to OMC in mechanical mix (Pug Mill) laying in uniform layers in sub base/base course on a well prepared base and compacting with power vibratory roller to achieve the desired density including grading	10 Sqm	753.48	2180.53	16,42,986.00
2	S-511	Providing and laying 50 mm thick DBM layer, precoated stone aggregate physical requirements/grading/mix composition requirement as per Table-500-8/9/10 respectively of MORT&H specifications for road and bridge works with 4.25% asphalt VG-10 penetration grade as per MoSRT&H data book and rolled to the required specification	10 Sqm	241.50	5501.71	13,28,663.00
3	S-512A	Providing and laying 30 mm thick BC on bituminous macedadam layer with precoated stone chips grading conforming to table 500-18 and mix satisfying the requirement of table 500-19 of MORT&H specifications, mixed with 5% binder asphalt VG-10 penetration grade by weight of total mix and 2% cement by weight of mix (for filler) all as specified as per MoSRT&H data book	10 Sqm	241.50	3903.60	9,42,720.00
4	S-809	Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer @ 7.50kg per 10 sqm (using BPD with manual labour)	10 Sqm	241.50	536.24	1,29,502.00
5	S-815	Providing and applying tack coat with bitumen VG-10 using bitumen pressure distributor @ 2.5 Kg/10 Sqm on prepared bituminous/granular surface cleaned with mechanical broom, all complete as per clause 503 of MoSRT&H specifications	10 Sqm	483.00	129.75	62,669.00
6	P-802A	Road marking with thermoplastic paint (2.5 mm thick) conforming to MOST: 803.2 incl prep of surface & application	10 Sqm	8.05	5311.24	42,755.00
		Total cost of Surf Works (through Execution Contract):-				41,49,295.00
		Total cost of Surf Works through departmental & Execution Contract				56,67,425.00

Station:-C/o 56 APO

Dated:- 06 Dec 2020

(Aditya Puri)

Lt Col

Officer Commanding

R-11-11-11

**RESTRICTED
APPROXIMATE ESTIMATE
PART-I**

Name of station
Name of project
Name of Unit/TF
Name of work

Jammu and Kashmir
Sampark
110 RCC/31 BRTF

SSR 2016, Zone "D"

DESIGN AND CONSTRUCTION OF 85.00 MTR SPAN STEEL TRUSS (THROUGH TYPE) BRIDGE OVER MALAI NALLAH AT KM 55.05 ON ROAD REASI-ARNAS-MAHORE UNDER PROJECT SAMPARK IN J&K-UT.

SN	Particulars	Bridge work	Approach Road works					G/Tota
			LA	Fmn	Pmt	Surf	Total	
A	WORK ASSESSED AS PER DGBR SSR 2016 & DGBR BRIDGE SSR 2019							
1	Cost of works	-	-	52,54,945.00	81,13,996.00	13,59,078.00	1,47,28,019.00	1,47,28,019.00
2	Road lift charges	-	-	62,157.00	8,98,298.00	59,855.00	10,20,310.00	10,20,310.00
3	Extra Tpit Charges	-	-	7,85,260.00	4,13,947.00	22,562.00	12,21,769.00	12,21,769.00
4	Credit for GREFF trades men	-	-	(3,37,767.00)	(7,73,105.00)	(22,800.00)	(11,33,672.00)	(11,33,672.00)
5	Credit for retrieved stones	-	-	-	(11,62,314.00)	(2,15,930.00)	(13,78,244.00)	(13,78,244.00)
	Total (A)	-	-	57,64,595.00	74,90,822.00	12,02,765.00	1,44,58,182.00	1,44,58,182.00
B	Escalation Charges							
6	Add escalation for 2020-21 @ 15.44%	-	-	8,90,053.00	11,56,583.00	1,85,707.00	22,32,343.00	22,32,343.00
	Total (B)	-	-	8,90,053.00	11,56,583.00	1,85,707.00	22,32,343.00	22,32,343.00
	Total (A+B)	-	-	66,54,648.00	86,47,405.00	13,88,472.00	1,66,90,525.00	1,66,90,525.00
C	Add Following Charges							
1	Add Road side Accn @ 2%	-	-	-	-	-	-	-
2	Add 15% for Physical Contingencies for Br only & 5 % for remaining wks	-	-	3,32,732.00	4,32,370.00	69,424.00	8,34,526.00	8,34,526.00
3	Add 1% for QC Charges	-	-	66,546.00	86,474.00	13,885.00	1,66,905.00	1,66,905.00
4	Add Labour Cess @ 1%	-	-	66,546.00	86,474.00	13,885.00	1,66,905.00	1,66,905.00
	Total (C)	-	-	4,65,824.00	6,05,318.00	97,194.00	11,68,336.00	11,68,336.00
	Total (A+B+C)	-	-	71,20,472.00	92,52,723.00	14,85,666.00	1,78,58,861.00	1,78,58,861.00
D	Cost of Contract (Bridge)							
1	Add cost of contract	11,81,500.00	-	-	-	37,11,171.00	37,11,171.00	12,18,611.00
2	Add physical contingency charges @ 0.5% (1% for upto 10 Cr, 0.5% for >10 Cr)	5,90,750.00	-	-	-	37,112.00	37,112.00	6,27,862.00
2	Add Quality Control charges @ 1%	11,81,500.00	-	-	-	37,112.00	37,112.00	12,18,612.00
	Total (D)	11,99,22,250.00	-	-	-	37,85,395.00	37,85,395.00	12,37,07,645.00
E	Royalty Charges							
	Total (A+B+C+D+E)	11,99,22,250.00	-	74,09,766.00	93,96,496.00	52,78,708.00	2,20,84,970.00	14,20,07,210.00
							Say in Lakh	1420.07

Station: C/o 56 APO

Dated:- Dec 2020

(Aditya Puri)
Lt Col
Officer Commanding

RESTRICTED
Page 1 of 1

**APPROXIMATE ESTIMATE
PART II**

Name of State : Jammu and Kashmir
Name of RCC/TF/Project : 110 RCC/31 TF/Sampark

Name of work : **DESIGN AND CONSTRUCTION OF 85.00 MTR SPAN STEEL TRUSS (THROUGH TYPE) BRIDGE OVER MALAI NALLAH AT KM 55.05 ON ROAD REAS-
ARNAS-MAHORE UNDER PROJECT SAMPARK IN J&K-UT.**

SSR 2016, Zone "D"

SN	SSR Item No.	Item of work	A/U	Qty	Rate	Amount
A		BRIDGE WORK (THROUGH EXECUTION CONTRACT)-				
I	RA	Design and construction of 85 Mtr Major Pmt Bridge	Mtr	85.00	1390000.00	11,81,50,000.00
B		APPROACH ROAD				
I	LA/FC	Amount involve for additional land acquisition of forest land of 1620.00 Sqm (180.00m x 9.00m) towards hill side for construction of approaches of bridge	Sqm	1620.00		11,81,50,000.00
II		Formation works (Through departmental Execution)-				
1	F-401	Rough excavation in soil/soil mixed with small boulders, getting out and disposing all excavated material lead up to 6m and upto 1.5m deep (75% by machine and 25% by manual labour)	Cum	663.25	115.25	76,442.00
2	F-403	Rough excavation in hard rock by drilling with compressor, blasting and getting out including stacking of serviceable material & disposal of unserviceable material lead upto 6m and not exceeding 1.5m deep (75% by machine and 25% by manual labour)	Cum	12440.15	254.28	31,83,231.00
3	F-702	Earth work in embankment incl excavation of earth and filling with earth work free from roots etc spreading in layers not exceeding 1.5 m above the base in plain area and for approaches to bridge in ordinary soil excluding cost of soil (By manual means)	Cum	6449.13	312.48	20,15,214.00
III		Permanent Works (Through departmental Execution)-				
1	P-101	Excavation in trenches not exceeding 1.2m width and 1.5m depth in soil/soil mixed with boulders (SM3), including dressing bottom and sides getting out and disposing all excavated material lead up to 6m and upto 1.5m (by manual means)	Cum	1015.34	248.90	2,52,718.00
2	P-202	Plain Cement Concrete 1:4:8 (1 cement : 4 sand : 8 stone aggregate of size 4 cm graded downwards) in foundation or elsewhere (excluding the cost of centering/shuttering)	Cum	265.19	2564.79	6,80,157.00
3	P-203	Plain Cement Concrete 1:3:6 (1 cement : 3 sand : 6 stone aggregate of size 4 cm graded downwards) in foundation or elsewhere (excluding the cost of centering/shuttering)	Cum	36.29	2715.86	98,559.00
4	P-204	Plain Cement Concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate of size 4 cm graded downwards) in foundation or elsewhere (excluding the cost of centering/shuttering)	Cum	64.39	4404.59	2,83,612.00
5	P-209	Centering/Shuttering (Steel) including strutting, propping and removal of formwork (considering 10 times to be used)	10 Sqm	10.66	3833.17	41,912.00
6	P-501	Random/Polygonal rubble walling in cement mortar (1:6) brought to course 45 cm high, well bonded (material and labour)	Cum	1476.55	2610.07	38,53,899.00
7	P-601	Filling of stones/selected material in layers well packed behind retaining walls, breast walls, abutment / wing walls of bridges	Cum	497.71	736.01	3,66,370.00
8	T-003	Providing & erection of "W" beam crash barrier comprising 3 mm thick corrugated sheet metal beam rail, 70cm above road/ground level, fixed on ICMC seneschannel vertical post, 150x75x5mm spaced 2 mtr centre-to-centre, 1.80 mtr high, 1.10 mtr below ground level/ road level, all steel parts and fittings to be galvanised by hot dip process, all fittings to conform to IS 1367 and IS 1364, metal beam rail to be fixed on the vertical post with spacer of channel section 150x75x5mm, 330mm long complete as per clause 810 of MoSR1&H specifications	Mtr	576.00	4404.20	25,36,519.00
		Total				81,13,996.00