

JUSTIFICATION/COMPARATIVE STATEMENT									
Name of Work:-Re-construction of Culvert at Km. 4/940 on NH-907A in the State of Himachal Pradesh.									
Sl.No	Description of Work / Item(s)	Qty	Units	Rate	Amount	Partap Singh (BID ID-3236208)		Shravan Kumar (BID ID-3237847)	
						Rate	Amount	Rate	Amount
1	Dismantling of Structures Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead by all modes of transportation as per the direction by the Engineer-in-charge.	101.287	Cum.	1101.50	111568.00	550.75	55784.00	1000.00	101287.00
2	Earth work in excavation of foundation of structures as per drawing and technical specification as per clause 304 of Morth Specification (latest revision), including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom,backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary Soil Manual Means , stacking the useful materials and disposal of unserviceable materials in all leads & lifts . Any loss to public /private property during course of excavation shall be the whole responsibility of the contractor including carriage of materials and equipment in all leads and lifts by all modes of transportation as per the direction by the Engineer-in-charge. (For culvert portion)	52.980	Cum.	152.65	8087.00	114.49	6066.00	150.00	7947.00
3	Providing and laying Plain Cement Concrete / Reinforced cement concrete in M15 Grade (minimum 5.50 bags of cement per cum of concrete) in open Foundation complete as per Drawing and technical specifications clause 1500,1700,2100 , including all leads, lifts and carriage of materials as per the direction and entire satisfaction of the Engineer-in-charge .	45.580	Cum.	6067.60	276561.00	4429.35	201890.00	5500.00	250690.00
4	Providing and laying Plain Cement Concrete / Reinforced cement concrete in PCC M20 Grade (minimum 6.88 bags of cement per cum of concrete) in open Foundation complete as per Drawing and technical specifications clause 1500,1700,2100 , in all leads, lifts and carriage of materials by all means of transport etc. as per direction of the Engineer-in-Charge.	195.772	Cum.	6613.60	1294758.00	4774.00	934616.00	6000.00	1174632.00
5	Providing and laying Plain Cement Concrete / Reinforced cement concrete in M35 Grade (minimum 8.44 bags of cement per cum of concrete) in open Foundation complete as per Drawing and technical specifications clause 1200,1500 & 1700 , in all leads, lifts and carriage of materials by all means of transport etc. as per direction of the Engineer-in-Charge.	198.360	Cum.	7804.15	1548031.00	5737.56	1138102.00	7204.00	1428985.00
6	Drainage Spouts complete as per drawing and Technical Specification as per clause 2705 of Morth Specification (Latest revision) including all leads, lifts and carriage of materials as per the direction and entire satisfaction of the Engineer-in-charge.	4.000	Nos.	1250.30	5001.00	1250.30	5001.00	1100.00	4400.00

7	Construction of RCC railing of M30 Grade in situ with 20 mm nominal size aggregate, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications as per clause No. 2703, 1500, 1600 & 1700 including all leads, lifts and carriage of materials as per the direction and entire satisfaction of the Engineer-in-charge.	12.280	Rm.	2149.95	26401.00	1719.96	21121.00	2550.00	31314.00
8	Supplying, fitting and placing HYSD bar reinforcement in super-structure including cutting, straightening, bending, binding with mild steel binding bar complete as per drawing and technical specifications as per clause No. 1600 including in all respects and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport.	19.109	Per Tonne	85115.75	1626477.00	74476.28	1423167.00	72000.00	1375848.00
9	Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 710.1.4 of IRC:78 & 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition simultaneously with the laying of fill material compacted thoroughly to the requirements of table 300-2 as per clause 305.4 of Morth specification (latest revision) (Filter media shall be paid only for thickness of not more than 600mm and backfilling if any will be measured and paid for separately) complete as per drawing and Technical Specification including all leads, lifts and carriage of materials as per the direction and entire satisfaction of the Engineer-in-charge.	57.960	Cum.	1855.40	107539.00	1372.60	79556.00	1650.00	95634.00
10	Excavation for roadwork in soil with hydraulic excavator including cutting and loading in tipper, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead complete as per drawing and Technical Specifications as per clause 301 of Morth specification (latest Revision). Any loss to public/private property during course of excavation shall be the whole responsibility of the contractor including carriage of materials and equipment in all leads and lifts by all modes of transportation as per the direction by the Engineer-in-charge.	156.000	Cum.	156.30	24383.00	100.00	15600.00	156.00	24336.00
11	Providing weep holes in Brick masonry/plain /reinforced concrete abutment, wing wall/return wall with 100 mm dia.AC pipe extending through the full width of the structure with slop of 1V : 20 H towards drawing complete as per drawing and Technical Specifications as per clause 2706 & 2200 of Morth specification book (latest Revision) as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc..	81.000	Nos.	214.15	17346.00	160.47	12998.00	200.00	16200.00
12	Construction of granular sub-base by providing granular material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with front end loader at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 of Morth Specification (latest Revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	24.000	Cum.	2973.10	71354.00	2230.00	53520.00	2700.00	64800.00

13	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density as per clause 406 of Morth Specification (latest Revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	24.000	Cum.	3188.90	76534.00	2387.00	57288.00	3000.00	72000.00
14	Providing and applying primer coat with SS1 grade bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 kg/sum using mechanical means as per clause 502 of Morth Specification (latest Revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	160.000	Sqm	51.20	8192.00	51.20	8192.00	45.00	7200.00
15	Providing and applying tack coat with bitumen emulsion RS-I using emulsion pressure distributor at the rate of 0.250 kg per sqm on the prepared bituminous/granular surface cleaned with mechanical broom and as per clause 503 of Morth Specification (latest revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	637.680	Sqm	18.70	11925.00	18.70	11925.00	16.50	10522.00
16	Dense Graded Bituminous Macadam Grading -II(including profile corrective course) with higher capacity batch type HMP using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5Percent by weight of total mix and filler, transporting the hot mix to work site; laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	8.000	Cum.	11255.95	90048.00	10000.00	80000.00	8500.00	68000.00
17	Providing and laying 40mm thick Bituminous Concrete Grading -II Providing and laying bituminous concrete with higher capacity batch type hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 Percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 507 complete in all respects and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	12.707	Cum.	13019.55	165439.00	12019.00	152725.00	13000.00	165191.00
18	Providing and laying of hot applied thermoplastic compound 2.5mm thick including reflectorizing glass beads @250 grams per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level uniform and free from streaks holes and as per drawing and Technical Specifications as per clause 803 of Morth Specification (latest Revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	9.359	Sqm	334.85	3134.00	334.85	3134.00	320.00	2995.00

19	Providing and fixing cat eyes made out of ABS 3M plastic of size 100x100x20mm without nail having 50 mm stern of ABS. The Pavement marker shall be installed with suitable epoxy ABS including carriage of material and equipment in all leads and lifts with all mode of transportation and as per direction of Engineer-in-Charge.	26.740	Nos.	171.05	4574.00	171.05	4574.00	170.00	4546.00
20	Supplying and installation of delineators(road way indicators, hazard markers,object markers) 80-100 cm high above ground level painted black and white in 15cm wide strips fitted with 80x100mm rectangular or 75mm dia circular reflectorized panels at the top buried or pressed into the ground and conforming to IRC-79 and as per clause 805 of Morth Specification (Latest Revision) as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	15.000	Nos.	491.20	7368.00	491.20	7368.00	450.00	6750.00
21	Providing and laying Plain cement concrete /reinforced cement concrete P.C.C grade M 10 (Ten) (minimum 4.60 bags of cement per cum of concrete) in open foundations complete as per drawings and technical specifications as per Clause 2100 of Morth Specification (latest Revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	5.000	Cum.	5537.20	27686.00	5537.20	27686.00	5100.00	25500.00
22	Providing and laying Plain Cement Concrete / Reinforced cement concrete in RCC M20 Grade (minimum 6.94 bags of cement per cum of concrete) using batching plant transit mixer & manual placing in open Foundation complete as per Drawing and technical specifications as per clause no1500,1700,2100 , of Morth Specification (latest Revision) and as per direction of the Engineer-in-Charge in all leads and lifts and carriage of materials by all means of transport etc.	20.250	Cum.	6625.00	134156.00	4900.00	99225.00	6200.00	125550.00
					5646562.00		4399538.00		5064327.00
The rates quoted by Sh. Partap Singh Govt. Contractor are found the lowest one and his overall quoted rates are (-)22.08% (below) on the amount put to tender i.e. Rs.5646562.00/- and his overall amount works out to Rs.4399538.00/- only which are quite reasonable as per the Principal Secretary (PW) to the Government of Himachal Pradesh notification No. PBW(B) A(3)1/2020-I dated 07-10-2021 and 10.05.2023 & CPWD Manual & Procedure, the additional performance security amounting to Rupees.61594.00/- only and performance security amounting to Rupees.131986/- only have to be submitted by the contractor in the shape of BG before award of this work hence the tender is hereby approved please.									


Executive Engineer
NH Division
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