Volume-2

SECTION 6

BILL OF QUANTITIES

PREAMBLE

Bill of Quantities for Construction works:

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications and Drawings.
- 2. The quantities given in the Bill of Quantities are estimated and are given to provide a common basis for bidding. The Contractor to measure the work under the observation and control of the Engineer, which shall be valued at the rates provided in the priced Bill of Quantities, where applicable, and otherwise at such rates as the Engineer may fix within the terms of the Contract, which shall form the basis for payments to the Contractor.
- 3. The rates in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all construction plant, labour, supervision, materials, all temporary works and false works, erection, transportation, maintenance, insurance, administrative overheads, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract, and including remedy of any defects during the Defects Liability Period.
- 4. A rate shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates entered in the Bill of Quantities.
- 5. The costs of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities. Where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
- 6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering rates against each item in the priced Bill of Quantities.
- 7. The Bill of Quantities of the Work is comprised of the various Bills of construction activities. During execution, however, the items existing in any of the Bills can be made applicable for execution elsewhere also on the Works if considered appropriate and directed by the Engineer.
- 8. The method of measurement of completed work for payment shall be as per Specification.
- 9. Errors, if any, shall be corrected by Employer in terms of Clause 27 of ITB.

Execution of Structure (VUP), Approach roads (MCW), Reconstruction of structures (approaches), service roads, RCC drains, Supply & Installation of Lighting & fixtures, Road furniture & other miscellaneous items at Pune Solapur Section of NH 9 from Km 144+400 to Km 249+000 in the State of Maharashtra

Bill of Quantities

Sr No	Description	Unit	Quantity	Rate (Rs)	Amount (Rs)
	JCTURE (VUP)		•		
FOU	NDATION		<u>, </u>		
1	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By Mechanical Means) a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30%	cum	2019.89		
2	Excavation for foundation in hard murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30%	cum	1346.59		
3	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for foundation and bedding / steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centring will not be allowed.), with fully automatic microprocessor based PLC with SCADA enabled reversible	cum	133.19		

	Drum Type mixer/concrete Batch				
	mix plant (Pan mixer) etc.				
	complete. With fine aggregate				
<u></u>	(Crushed sand VSI Grade)				
	Providing and laying Cast in				
	situ/Ready Mix cement concrete M-				
	35 of trap / granite/quartzite/ gneiss				
	metal for R.C.C. work in foundations				
	like raft, strip foundations, grillage and				
	footings of R.C.C. columns and steel				
	stanchions etc. columns as per detailed				
	designs and drawing or as directed				
	including Steel centering, formwork,				
	cover blocks, laying/pumping,				
	compaction finishing the formed				
4	surfaces with cement mortar 1:3 of	cum	1,267.84		
	sufficient minimum thickness to give				
	a smooth and even surface or				
	roughening if special finish is to be				
	provided and curing etc. complete,				
	(Excluding reinforcement and structural				
	steel).with fully automatic				
	microprocessor based PLC with				
	SCADA enabled reversible Drum				
	Type mixer/ concrete Batch mix				
	plant (Pan mixer) etc. complete. With				
	fine aggregate (Crushed sand VSI Grade)				
	Providing, cutting, bending, hooking,				
	tying and laying in position TMT FE 500				
5	steel bars for reinforcement for all RCC	MT	152.10		
	works as per detailed drawings etc.	1111	152.10		
	complete.				
	compiete.	ТОТАТ	SUBSTR	HCTHDE	
	Providing and laying in situ / mady min	IUIAL	- SUDSIK	OCTURE	
	Providing and laying in situ / ready mix				
	M-35 cement concrete of trap				
	/granite/quartzite/ gneiss metal for cast in				
	citu R.C.C. solid piers, column etc.				
	including provision of V shaped false				
	joints to form suitable panels on the faces				
	to approve design with compacting by				
	vibrating and curing complete.				
6	Including plywood/steel formwork,	cum	485.46		
	centering (excluding dewatering by				
	means of pump) and including bailing out				
	water and including CM 1:3 curing				
	complete. a) Height upto 5 M. (With				
	Concrete Mixer)				
	i) Height up to 5 m, normal rate.				
	ii) Height 5 to 7.50 m, add 5 percent extra				
	over basic rate.				
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	I			T	
	iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise with fine				
	aggregates of required specifications (VSI sand finely washed etc)				
7	Providing, cutting, bending, hooking, tying and laying in position TMT FE 500 steel bars for reinforcement for all RCC works as per detailed drawings etc. complete.	MT	58.20	P. MICC	
		- SUPERS	STRUCTUE	Z & MISC	
8	Providing and laying in situ M35 controlled cement concrete of trap/granite/ quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic microprocessor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand)i) Height up to 5 m, normal rate. ii) Height 5 to 7.50 m, add 5 percent extra. iii) Height 7.50 to 10 m, 7.50 percent extra. iv) Over 10 m Height, add 10 percent extra for every 2.50m rise.	cum	1053.92		
9	Providing Reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures and medians, constructed with R.C.C. M 30 Grade concrete with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia, 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST circular No. RW/NH - 33022/1/94-DO III dated 24 June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer, all as specified etc. complete. Spec: MORT and H 2013 Cl 811 Page No 360	Rmt	144.97		
10	Providing 100mm diameter GI water spouts as per detailed drawings in RCC slab and wearing surface / kerb etc. complete.	Nos	15.00		

11	Providing and laying of RCC in M30 grade approach slab including reinforcement and formwork complete with fully automatic microprocessor PLC with SCADA enabled reversible drum type mixer/ concrete batch mix plant (pan mixer) as per drawings and technical specifications etc. complete with fine aggregates of required specifications (VSI sand finely washed etc)	cum	56.70	
12	BITUMINOUS CONCRETE: - Providing and laying bituminous concrete using crushed aggregates of grading 1, premixed with bituminous binder @ 5.20 per cent by weight of total mix and filler, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50 mm compacted thickness with specified grade of Bitumen, Excluding prime / tack coat. For Bitumen of specified grade USING Batch mix type hot mix plant with SCADA, Sensor Paver, Vibratory roller with Stone Dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)	cum	27.71	
13	Providing and laying 12 mm thick mastic asphalt wearing course on top of deck slab excluding prime coat with paving grade bitumen meeting the requirements given in table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface including providing antiskid surface with bitumen precoated fine grained hard stone chipping of 4.75 mm nominal size at the rate of 0.005 cum per 10 One Square Metre and at an approximate spacing of 10 cm centre to centre in both directions, pressed into surface when the temperature of surfaces not less than 100 deg C, protruding 1 mm to 4mm over mastic surface as per clause 515 etc. complete.	cum	554.14	

14	Providing and laying of a strip seal expansion joint catering to maximum horizontal movement upto 70 mm to be installed by the manufacturer / supplier to their authorized representative ensuring compliance to the manufacturers instruction for installation as per approved drawings and standard specifications etc. complete.	Rmt	54.00		
15	Providing, cutting, bending, hooking, tying and laying in position TMT FE 500 steel bars for reinforcement for all RCC works as per detailed drawings etc. complete.	МТ	126.40		
16	Providing and laying of filter media with granular materials/ stone crushed aggregates satisfying the requirements laid down in clause 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 as per drawing and technical specifications etc. complete.	cum	211.20		
2 4		OTAL-	STRUCTU:	RE (VUP)	
2. Ap	proach Roads_(MCW) Excavation for roadway in soil by				
17	mechanical means including cutting and pushing the earth to site of embankment upto a distance of 100 metres (average lead50 metres), including trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections.	cum	16,558.98		

18	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for foundation and bedding / steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centring will not be allowed.),with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) Construction of Reinforced Earth Wall in	cum	156.80	
19	M35 Block Facia by Providing and Laying CE marked Knitted and PVC coated Polyester Uniaxial Geogrid (Techgrid) of Tech fab India indigenously manufactured from selected high tenacity polyester yarn with high molecular weight(>25000g/mol),and low carboxyl end group (<30mmol/Kilogram) for Reinforced soil wall (extruded PP geogrids & Polyester strips & Geostrips, Steel Strips not allowed & not accepted) with granular fill of PHi-32degree (design is to be carried out in accordance with BS-8006/FHWA)with concrete block by M35 as facia, casting & erection of blocks with Tech grid, providing & laying levelling pad byM-15,providing and laying coping beam by M-35,providing and laying300mm thick filter media etc. completed as per necessary drawing and instruction of Engineer-in-charge. Excluding providing, laying and compacting selected backfill and retained fill behind the wall, excavation and ground improvement, if any. The reinforced earth wall and slope should have100% coverage of 5m width Knitted and PVC coated Polyester			

	Coord (Costing of Coord/Dainford			
	Geogrid.(Coating of Geogrid/Reinforcing			
	geosynthetic material with LDPE,			
	approved, Bitumen and any other coating			
	will not be allowed and will not be			
	accepted).(Specification:MORTHSection-			
	3100) with prior approval of concerned			
	Superintending Engineer.			
Α	RE wall Height 1 to 4m	Sqm	1977.10	
В	RE wall Height 4 to 6m	Sqm	3555.58	
C	RE wall Height 6 to 8m	Sqm	5178.76	
	Providing and laying Cast in			
20	situ/Ready Mix cement concrete M-40 of trap / granite/quartzite/ gneiss metal for R.C.C. work in crash barrier and friction slabs per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch	cum	2150.40	
	mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) Providing, cutting, bending, hooking, tying and laying in position TMT FE 500			
21	steel bars for reinforcement for all RCC works as per detailed drawings etc. complete.	МТ	129.00	
22	Providing earth work in embankment with approved materials obtained from departmental land upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from departmental Land)	cum	85290.56	

23	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader/ Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401 Plant Mix Method and Grading - I Material	cum	7392.00	
24	Wet Mix Macadam 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 subbase / base course on well-prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver.	cum	9240.00	
25	DENSE BITUMINOUS MACADAM: Proving and laying dense bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder of specified grade of Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 76-100 mm compacted thickness using Batch mix type hot mix plant with SCADA, Sensor Paver, Vibratory roller with Stone Dust filler.(VG-30 bulk bitumen rates are considered to arrive at rates)	cum	3300.00	
26	BITUMINOUS CONCRETE:- Providing and laying bituminous concrete using crushed aggregates of grading 1, premixed with bituminous binder @ 5.20 per cent by weight of total mix and filler, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50 mm compacted thickness with specified grade of	cum	1650.00	

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	Bitumen, Excluding prime / tack coat. For				
	Bitumen of specified grade USING				
	Batch mix type hot mix plant with				
	SCADA, Sensor Paver, Vibratory roller				
	with Stone Dust filler. (VG-30 bulk				
	bitumen rates are considered to arrive at				
	rates)				
	Prime coat - Providing and applying				
	primer coat with bitumen emulsion on				
	prepared surface of granular Base				
27	1 1	Sqm	33,000		
	including cleaning of road surface and	-			
	spraying, primer at the rate of 0.60				
	kg/sqm using mechanical means.				
	Providing and applying tack coat on the				
	prepared surface heating by fames in				
20	Boiler and spraying bitumen set footed in		22000 00		
28	bitumen boller on B.T. surface 2.5 kg/10	cum	33000.00		
	sqm (VG-30 bulk bitumen rates are				
	considered to arrive at rates)				
	Providing and laying in situ / ready mix				
	M20 RCC of trap/ granite/ quartzite/				
	gneiss metal for RCC work of ballast				
	walls, kerbs and box returns including				
	scaffolding, compaction, formwork				
20	finishing and curing etc. complete.		207.00		
29	(excluding reinforcement, with fully	cum	207.90		
	automatic microprocessor based PLC				
	with SCADA enabled concrete batch mix				
	plant / pan mixer with fine aggregates of				
	required specifications (VSI sand finely				
	washed etc) RCC work of Ballast walls				
	& Kerb				
	TOT	AL- API	PROACH	ROADS	
3. Rec	construction of Structures (in Approaches))			·
	Dismantling the R.C.C. work 1:2:4 and				
2.0	sorting out the materials such as steel etc.		100.20		
30	as directed and stacking them within the	cum	190.38		
	specified lead as directed.				
	Excavation for foundation in earth, soils				
	of all types, sand, gravel, soft murum				
	including shoring and strutting,				
31		cum	745.14		
	dewatering as necessary and disposing off				
	excavated stuff as directed etc. complete				
	by Mechanical Means.				
	Excavation for foundation in hard murum				
	including shoring and strutting,				
32	dewatering as necessary and disposing off	Cum	257.00		
	excavated stuff as directed etc. complete.				
					

33	Providing and laying Cast in situ/ Ready Mix cement concrete in M-15 of trap/ granite/ quartzite/ gneiss metal for steps including steel centering, plywood/steel formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.),with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand V.S.I. Grade).	cum	128.15	
34	Providing and laying in situ/ Ready Mix cement concrete M-35 of trap/ granite/quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, formwork, laying/ pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided, (Excluding reinforcement and structural steel) etc. complete, with fully automatic microprocessor based PLC with SCADA enabled Reversible Drum Type mixer/ concrete Batch Mix plant (Pan mixer) etc. complete, with fine aggregate (Crushed sand V.S.I. Grade).	cum	463.12	
35	"Providing and laying in situ /ready mix M-35 cement concrete of trap/ granite/ quartzite/ gneiss metal for cast in citu R.C.C. solid piers, column etc. including provision of V shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/ steel formwork, centering (excluding dewatering by means of pump) and including bailing out water and including CM 1:3 curing complete, (VSI Sand finely washed), for height upto 5 M (With Concrete Mixer).	Cum	461.32	

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36	Providing and laying in situ M-35 controlled cement concrete of trap/granite/quartzite/ gneiss metal for RCC work in solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic microprocessor based PLC with SCADA enabled concrete batch mix plant / pan mixer with natural sand).	cum	294.84		
37	Providing, cutting, bending, hooking, tying and laying in position TMT FE 500 steel bars for reinforcement for all RCC works as per detailed drawings etc. complete.	МТ	99.78		
38	Providing and laying Weep Holes of 100 mm diameter AC/ PVC pipes as per drawing for abutment returns, return walls etc. Complete.	Rmt	65.70		
39	Providing and laying of Filter media with granular materials/stone crushed aggregates behind abutment, wing wall and return wall.	Cum	393.60		
40	Providing and filling Sand in Foundation Trenches as per Drawing & Technical Specification	cum	548.50		
41	Providing and laying cement concrete pipe of IS 458:2003 NP-4 class of 1200mm diameter in proper line, level and slope etc. complete.	Rmt	208.00		
	TOTAL- Reconstruction	of Struc	tures (in App	proaches)	
4. SE	RVICE ROAD				
42	Excavation for roadway in soil by mechanical means including cutting and pushing the earth to site of embankment upto a distance of 100 metres (average lead50 metres), including trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections.	cum	6159.44		
43	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader/ Paver on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per clause 401 Plant	cum	4998.00		

	Mix Method and Grading - I Material			
44	Wet Mix Macadam 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 subbase / base course on well-prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver.	cum	6247.50	
45	DENSE BITUMINOUS MACADAM: Proving and laying dense bituminous macadam using crushed aggregates of Grading 1, premixed with bituminous binder of specified grade of Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 76-100 mm compacted thickness. USING Batch mix type hot mix plant with SCADA, Sensor Paver, Vibratory roller with Stone Dust filler.(VG-30 bulk bitumen rates are considered to arrive at rates)	cum	1102.50	
46	BITUMINOUS CONCRETE:- Providing and laying bituminous concrete using crushed aggregates of grading 1, premixed with bituminous binder @ 5.20 per cent by weight of total mix and filler, transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction for 50 mm compacted thickness with specified grade of Bitumen, excluding prime / tack coat. For Bitumen of specified grade USING Batch mix type hot mix plant with SCADA, Sensor Paver, Vibratory roller with Stone Dust filler. (VG-30 bulk bitumen rates are considered to arrive at rates)	cum	661.50	

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47	Prime coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying, primer at the rate of 0.60 kg/sqm using mechanical means.	sqm	22050.00		
48	Providing and applying tack coat on the prepared surface heating by fames in Boiler and spraying bitumen set footed in bitumen boller on B.T. surface 2.5 kg/10 sqm (VG-30 bulk bitumen rates are considered to arrive at rates)	sqm	22050.00		
49	Providing and laying in situ / ready mix M20 RCC of trap/ granite/ quartzite/ gneiss metal for RCC work of ballast walls, kerbs and box returns including scaffolding, compaction, formwork finishing and curing etc. complete. (excluding reinforcement, with fully automatic microprocessor based PLC with SCADA enabled concrete batch mix plant / pan mixer with fine aggregates of required specifications (VSI sand finely washed etc) RCC work of Ballast walls & Kerb	cum	103.94		
50	Providing, cutting, bending, hooking, tying and laying in position TMT FE 500 steel bars for reinforcement for all RCC works as per detailed drawings etc. complete.	MT TOTA	6.23 L - SERVI O	CE ROAD	
5. RC	C Drains				
51	Excavation for foundation in earth, soils of all types, sand, gravel, soft murum including shoring and strutting, dewatering as necessary and disposing off excavated stuff as directed etc. complete. (By Mechanical Means) a) Upto 1.50m lift Normal Rate b) 1.50m to 3.00m lift, Add 10% c) 3.00m to 4.50m lift, Add 20% d) 4.50m to 6.0m lift, Add 30%	cum	1800.40		

	Providing and laying Cast in			
52	situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for foundation and bedding / steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden cantering will not be allowed.),with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	cum	308.64	
53	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying/pumping, compacting, curing, finishing and roughening them if special finish is to be provided and curing complete.(Excluding reinforcement and structural steel).with fully automatic microprocessor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	cum	1543.20	
54	Providing, cutting, bending, hooking, tying and laying in position TMT FE 500 steel bars for reinforcement for all RCC works as per detailed drawings etc.	МТ	54.01	
	complete.			

55	Providing and Laying factory made coloured chamfered edge Cement concrete grass paver blocks of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine fine aggregate (natural sand/crushed sand VSI grade finely washed etc.), compacting and proper embedding/laying of inter locking paver blocks into the fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) bedding layer through vibratory compaction by using plate vibrator, filling the joints with fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and cutting of paver blocks as per required size and pattern, finishing and sweeping extra fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) and complete as per manufacturer specifications & direction	sqm	2572.00		
	of Engineer-in-Charge. 60mm thick CC paver block of M-35 grade concrete with approved colour and design & pattern.	T	7. T.		
6. RO	AD FURNITURE, LIGHTING & MISC I		CAL - RCC	DRAINS	
56	Supplying and Fixing of Molded Shank Raised Pavement Markers / Cat's Eye made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 +/- 2 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a	Nos	528.00		

	minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer. The contractor shall submit a two year warranty for satisfactory field performance including stipulated retroreflectance of the reflecting panel, to the Engineer.				
57	Providing and Laying hot applied thermoplastic road marking strip on Bituminous Surface of specified shade/ colour of 2.5 mm thick including 1.5 Refractive index reflectorizing glass beads @ 250gm/sqm .Thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35:2015. Initial Dry reflectivity RL shall be > 250 mcd/sqm/lux measured in the initial 7 days and sustained reflectivity RL of 100 mcd/sqm/ lux and Qd of 100 mcd/sqm/ lux measured at the end of 2 years by means of a Standard Reflectometer of Zehntner, Easylux, Delta make capable of measuring RL & QD both according to IRC 35:2015 clause 15.5. The finished surface to be level, uniform, and free from streaks and holes complete as per direction of Engineer-in-charge and in accordance with applicable specifications.(Refer MORTH Clause 803 for technical Specification and Performance for IRC 35:2015).	sqm	990.00		

	Providing and fixing Mandatory/Regulatory sign boards in circular shape of mm dia made out of mm aluminium sheet bonded with white retro reflective sheeting of Class C (Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported			
58	IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C (Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original			
	should be submitted to the Engineer in charge by the contractor/supplier.			
A	600 mm dia made out of 1.5mm aluminium sheet	Nos	20.00	
В	900 mm dia made out of 2mm aluminium sheet	Nos	20.00	
С	1200 mm dia made out of 2mm aluminium sheet	Nos	15.00	

59	Providing and fixing Cautionary/Warning sign boards in Equilateral Triangle size mm made out of mm aluminium sheet bonded with white retro reflective sheeting of Class C (Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C (Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in charge by the contractor/supplier.	Nos	20.00	
a	sheet	Nos	20.00	

60	Providing and fixing Cautionary/Warning sign boards in Octagone size of mm made out of mm aluminium sheet bonded with white retro reflective sheeting of Class C (Type XI Micro prismatic grade sheeting) having pressure sensitive/heat activated adhesive retroreflective specified back ground, border and back side retroreflective symbols, letters, numerals, arrow as per IRC:67-2012 Table No 8.3 Supported with back support frame 25mm x 25mm x 3mm, duly painted on back side with grey stove enamel paint and supported on one no. of M. S. angle iron post of size 65 mm X 65 mm X 6 mm, 3.45 m long, duly painted with with flat oil paint having alternate black and white bands of 25 cm width including G.I. fixtures etc; fixing the boards in M25 grade concrete block of size 60cm X 60cm X 75cm including transportation etc; complete. Class C (Type XI Micro prismatic grade sheeting) shall have 10 years written warranty from the manufacturer and authorised distributor/convertor issued for field performance including the screen printed areas and cut-out sheeting and cut-out durable transparent overlay film			
	printed areas and cut-out sheeting and cut-out durable transparent overlay film and this warranty certificate in original should be submitted to the Engineer in			
A	charge by the contractor/supplier. 900 mm made out of 2mm aluminium sheet	Nos	10.00	

	1		T	I	I
	Providing and fixing of retro- reflectorised informatorily sign board rectangular/Square in shape having area				
	less than 0.9 One Square Meter made out				
	of mm aluminium sheet bonded				
	with white retro reflective sheeting of				
	Class (Type IV High intensity micro-				
	prismatic grade sheeting-HIP) having				
	pressure sensitive/heat activated				
	adhesive retroreflective specified back				
	ground, border and back side				
	retroreflective symbols, letters, numerals,				
	arrow as per IRC:67-2012 Table No 8.3,				
	supported with back support frame				
	25mm x 25mm x 3mm, duly painted on				
	back side with two coats of grey stove				
	enamel paint and supported on one no.				
	mild steel angle iron post 75 mm x 75				
	mm x 6 mm, 3.5 mt long firmly fixed to				
	the ground by means of properly designed				
	foundation with M25 grade cement				
61	concrete 45 cm x 45 cm x 60 cm, 60				
	cm below ground level as per				
	approved drawing The angle iron post				
	shall be duly painted with one coat of				
	epoxy primer and two coats of epoxy				
	finish paints having alternate black				
	and white bands of 25 cm width				
	including GI fixtures and transportation etc. complete. The nut bolts of board				
	•				
	with angle iron post/supporting structure after fixing at site has to be electrically				
	welded. Class B (Type IV High intensity				
	micro-prismatic grade sheeting-HIP)				
	sheeting shall have 7 years written				
	warranty from the manufacturer and				
	authorised distributor/convertor issued				
	for field performance including the				
	screen printed areas and cut-out				
	sheeting and cut-out durable transparent				
	overlay film and this warranty				
	certificate in original should be				
	submitted to the Engineer in charge by				
	the contractor/supplier.				
a	2mm aluminium sheet Class B	sqm	13.50		
a		oqiii	15.50		

62	Providing & erecting 9 m high (clear height) galvanised octagonal pole with foundation bolts having bottom of 155 mm A/F, top 70 mm A/F on provided foundation as per specification no. OH-PL/OPL	Nos	88.00	
63	Making M- 20 grade reinforced cement concrete foundation by considering the safe soil bearing capacity as 10 T/sq.m at 1.5 m depth including supply of steel, concrete, excavation, fixing provided nut bolts with the help of template, duly plastered as per design complete (for 3 to 5m octagonal / conical GI pole).	Nos	88.00	
64	Supplying and erecting integrated LED street light fitting 130-140W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 15600 Lumens, min. efficacy of 120 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140- 270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No FGODF/FLS2.	Nos	176.00	
65	Supplying and erecting triple pole mini feeder pillar with 500V, 200A FPMCCB as incomer and 2 outgoing circuits with HRC fuse base and cartridge of 100A with aluminium bus bar erected in 14 SWG CRCA sheet box with supporting angles, self locks, gasket having IP54,IK10 protection and slanting top to be erected on provided foundation complete as per specification no. SWSWR/MFP	Nos	2.00	
66	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3½ core 25 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	Rmt	2640.00	

67	Supplying & erecting Siemens type brass cable glands for 3 to 4 core 16 sq mm /3 to 4 core 25 sq mm /3 core 35 sq mm for PVC armoured cable as per specification No. CB-GL	Each	80.00		
68	Supplying & erecting single compression type brass cable glands for 4 core 35 Sq.mm./3 core 50 Sq.mm. for XLPE armoured cable as per specification no. CB-GL	Each	5.00		
69	Supplying & erecting crimping type aluminium lugs for cable 25 sq mm complete as per specification No. CB-CL/AL	Each	300.00		
70	Supplying & erecting crimping type aluminium lugs for cable 50 sq mm complete as per specification No. CB-CL/A	Each	60.00		
71	Making trench in soft soil having 0.75 m depth and minimum 0.3 m width for laying provided cables up to voltage level of 1.1kV complete As per specification No. CW-EXN-CTR	Rmt	2640.00		
72	Supplying & erecting internal junction box (big) GRP suitable for providing MCB / HRC Fuse for conical / square GRP Poles for pole above 6 mtrs in height as per specification No.OH-PL/GRP	Each	1.00		
73	Supplying and erecting pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod complete with all materials as per specification No. EA-EP	Nos	50.00		
74	Payment of electric connection charges for electric load up to 10 KW & getting the meter installed from MSEDCL by completing all formalities.	Nos	2.00		
				TOTAL -	
			TOTAL A	AMOUNT	

Note:

- 1. Quoted rates are inclusive of applicable GST as per ITB Clause 42.1 and other applicable taxes
- 2. Item rate shall be inclusive of all material, manpower, equipment cost, royalties, transportation, etc.
- 3. Bidder shall complete the construction works within 9 months from the date of commencement of works. The date of Commencement of works shall be within 15 days from date of issue of Letter of Award / signing of the Contract Agreement for the works, whichever is earlier.
- 4. Bidder shall arrange all the necessary equipment required to execute the work as per the Standards and Specifications and as per good industrial practice.
- 5. The Construction Performance Security amounting to 5% of the contract value (valid Bank Guarantee) shall be provided by the Bidder to PSRDCL as per Tender document before signing of contract. Construction Performance Security in the form of Irrevocable bank guarantee to be submitted from an approved scheduled bank/ nationalized bank in approved format. The Performance Bond will be valid right through the contract and till the end of 28 days from defects liability period of 21 months.
- 6. Defects Liability period of 21 Months shall be considered from the date of final completion certificate issued by PSRDCL to Bidder for CONSTRUCTION completion work & construction works. However, in case of any delay by the Authority for issuing a Final Completion Certificate to PSRDCL due to incomplete or unsatisfactory work of Bidder's scope, DLP shall be started after final completion certificate issued by the Authority to PSRDCL.
- 7. Bidder is required to procure bitumen from Indian refineries only for Bituminous works of CONSTRUCTION. However, the Bidder is expected to procure Bitumen from companies such as IOCL, Tikitar/ Shell, BPCL, HPCL which are approved by NHAI.
- 8. Bidder is required to procure cement from companies such as L&T, ultratech, Ambuja & also required to procure steel from Tata Steel, JSW Steel & Steel Authority of India Limited (SAIL)
- 9. 5% of amount from each Running Account Bill of Bidder shall be deducted and withheld by PSRDCL towards Retention Money. The retention money shall be released interest free to Bidder by PSRDCL upon successful completion of Defects Liability Period of 21 months.
- 10. The Bidder shall provide invoices of cement, Steel, Bitumen Purchase and Weigh Bridge records for executed quantities with RA Bills. The RA Bills will not be processed further for release of payment in absence of the material invoices and test reports.
- 11. Price Adjustment will be back-to-back with the COS approval granted by NHAI/Authority.
- 12. The Bidder shall ensure meeting all requirements of technical specifications and performance standards as provided in PSRDCL's Concession Agreement signed with NHAI and MoRTH / IRC specifications. Strict Adherence to the Quality assurance and

- testing for all works (including testing of imported bitumen) and any material or work not meeting the required specifications shall be clearly rejected. In case of any failure in quality assurance and performance standards, the Bidder shall rectify the defects at his own risk and cost within 7 days, failing which PSRDCL may impose a penalty and can get the rectification done at the risk and cost of the Bidder.
- 13. The Bidder shall prepare the mix design. However, PSRDCL shall review and provide support for getting the approvals of Mix design from IE. All necessary testing / test certificate for material used / work executed shall be carried out / provided by the Bidder to the full satisfaction of PSRDCL/IE and Test Reports shall be submitted along with RA Bills.
- 14. The Bidder shall solely be responsible for implementation of Traffic Management and Diversion during execution of awarded work as per IRC:SP:55-2014 "Guidelines on Traffic Management in Work Zones, other relevant IRC Codes, Clause 112 of Specifications for Road & Bridge Works (5th Revision) and as per Annexure -5B of RFB Volume I. Failing to adhere to implement Traffic Management, Diversion and Safety as per agreed & defined norms shall called for deduction of 2% of amount from each Running Account Bill of the Bidder as penalty.
- 15. TDS shall be deducted at the rates applicable as per provisions of Income Tax Act from Bidder's running bills. For this purpose, Bidder shall submit necessary documents / details / information's as may be required to PSRDCL from time to time.
- 16. The Bidder shall be responsible for compliance as per prevalent Labour Laws including the labour cess compliances and its payment to Authority.
- 17. Bidder shall arrange for all insurances including Bidder's equipment if any and its own surrounding property workmen's compensation, group accident, and group Mediclaim. PSRDCL will not be liable for any compensation towards loss of life & property. The Bidder shall provide, in the joint names of the Employer and the Bidder, insurance cover from any of the acceptable Insurance Companies in India, valid from the Start Date to the end of the Defects Liability cum Maintenance Period, including extended period, in the amounts and deductibles stated in the Contract Data.
- 18. Above Bill of Quantities with rates shall be submitted on letterhead of the Bidder with signature of authorized signatory and company stamp.

SECTION 7 SECURITIES AND OTHER FORMS

SECTION 7: SECURITIES AND OTHER FORMS

Form -7A : Form of Bid

Form – 7B : Bid Security (Bank Guarantee)

Form – 7C : Letter of Acceptance

Form – 7D : Deleted Form – 7E : Deleted Form – 7F : Deleted Form – 7G : Deleted

Form – 7H : Bank Guarantee for Advance Payment

Form – 7I : Performance Bank Guarantee

Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

FORM OF BID

Pune Sholapur Road Development Company Limited

The IL&FS Financial Center, Plot C-22, G Block, Bandra Kurla Complex, Mumbai- 400051, Maharashtra

Tel.: +91 022-26533333,

Facsimile: +91 022-26523979

Gentlemen.

Sub.: Execution of Structure (VUP), Approach roads (MCW), Reconstruction of structures (approaches), service roads, RCC drains, Supply & Installation of Lighting & fixtures, Road furniture & other miscellaneous items at Pune Solapur Section of NH 9 from Km 144+400 to Km 249+000 in the State of Maharashtra

- 1. We offer to execute the Works described above in accordance with the Bidding Documents including Invitation for Bid, Instructions to Bidders, Conditions of Contract, Specifications and Drawings, Bill of Quantities, Annexures and Addenda for the Prices and sum mentioned in Annexure 1 of Section 6 of the Bidding Document attached with this letter. As per this, the payment for aforesaid Works is ₹ ______ as per the sum total as given in Annexure 1 of Section 6.
- 2. We understand that you are not bound to accept the lowest or any Bid you receive.
- 3. Unless and until an Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us, but without prejudice to your right to withdraw such acceptance under the provisions of the Bid Document.
- 4. We assure you that the criteria based on which we were qualified are valid as of date.
- 5. We agree to abide by this Bid for the period of <u>One Hundred twenty (120) days</u> from the closing date of Bid Submission, and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

- 6. We understand that for this Bid, we shall comply with the Eligibility, Bid Validity and Bid Security required as stated in the Bidding documents. We attach herewith our current Income Tax clearance certificate.
- 7. We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Yours faithfully,

Authorized Signature: Name & Title of Signatory: Name of Bidder with official seal:

Address

BID SECURITY (BANK GUARANTEE)

WHEREAS,		[nam	e of Bidder] (l	nereinafter called '	the Bidder")
nas submitted hi	s Bid da	ted	[date	<i>]</i> for the works:	
"Execution of S (approaches), s Road furniture	Structur ervice ro & other	e (VUP), Approach ro oads, RCC drains, Suj r miscellaneous items a 0 in the State of Mahar	oads (MCW), pply & Install at Pune Solap	Reconstruction of lation of Lighting our Section of NH	& fixtures, 9 from Km
		by these presents th			
[name of bank]	having	our registered office a	ıt		
hereinafter calle	ed "the I	Bank") are bound unto l	PSRDCL (here	einafter called "the	e Employer")
n the sum of			for whic	h payment well an	nd truly to be
made to the said	Employ	er the Bank binds itself,	, his successors	s and assigns by the	ese presents.
SEALED with the	ne Comn	non Seal of the said Ban	ık this	day of	2024
THE CONDITIO	ONS of t	his obligation are:			
(1)		Bid opening the Bidde specified in the Form		is Bid during the p	period of Bid
(2)		Bidder having been no yer during the period of		acceptance of his	Bid by the
	(a)	fails or refuses to exe with the Instructions to		•	accordance
	(b)	Deleted			
	(c)	does not accept the co	orrection of the	e Bid Price pursua	ant to Clause

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including 45 days after the Bid validity period
as stated in the Instructions to Bidders or as it may be extended by the Employer, notice of
which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee
should reach the Bank not later than the above date.

DATE	SIGNATURE	OF	THE	BANK
WITNESS	SEAL			
[signature, name, and address]]			

(Please refer Clause 31 of ITB)

(Letterhead paper of the Employer)

Letter of Acceptance

To: [name and address of the Contractor]	[date]

Sub.: "Execution of Structure (VUP), Approach roads (MCW), Reconstruction of structures (approaches), service roads, RCC drains, Supply & Installation of Lighting & fixtures, Road furniture & other miscellaneous items at Pune Solapur Section of NH 9 from Km 144+400 to Km 249+000 in the State of Maharashtra"

Dear Sirs,

- 1. It is hereby confirmed that your Bid received on ______ submitted to the PSRDCL for the work mentioned in the subject above has been accepted for and on behalf of the PSRDCL for an amount mentioned below on rates quoted by you and the terms and conditions as contained in Volume-1 and Volume-2 of bidding documents and subsequently addendum/corrigendum issued.
- 2. The accepted amount of the bid for the above mentioned work in consideration, execution, completion and maintenance of works by you as prescribed in the bidding documents is as under:

Particulars	Particulars Bid amount		Rebate	Bid Amount
	indicated	after arithmetical	offered	after Rebate
	by you	corrections		(in ₹.)
	(in ₹)	(in ₹)		
Construction				
works				

- 4. The date of start will be as defined in S. No. 5 of Contract Data.
- 5. The period of completion of whole work is as defined in S. No. 10 of Contract Data as Contract Completion Date.
- 6. Deleted.
- 7. You are also requested to sign and execute the Contract Agreement within 28 days, failing which action as stated in Para 32.3 of ITB will be taken.

8. You are requested to submit a detailed Construction Program including Environment and Traffic Management Plans as per Clause 25 of General Conditions of Contract, Section 3, Part-I within 21 days of receipt of this letter.

Yours faithfully,

Authorized Signatory Name and Title of Signatory Name of Agency

Form - 7D

(Please refer Clause 32 of ITB)

Deleted

Form – 7F

(Please refer Clause 31 of ITB)

Deleted

FORM OF AGREEMENT

Agreement

GENTI	EMEN
GENIL	LEIVIEIN

Thic a	greement, mad	a the		day	of		2024 b	etween
	,							
Pune S	Sholapur Road I	Developme	nt Company Li	mited, Th	e IL&F	S Financi	al Center, I	Plot C-
22, G	Block, Bandra	Kurla Co	mplex, Mumba	ai- 40005	1, Mah	arashtra,	India (here	inafter
called	"the Employer"	which exp	oression shall u	nless the	context	otherwise	requires, i	nclude
its	successors	and	assigns)	of	the	one	part	and
				[name	and	address	of cont	ractor]
(hereir	nafter called "th	ne Contrac	tor" which exp	pression s	hall ur	iless the	context oth	erwise
require	es, include its su	ccessors an	d assigns) of th	e other pa	rt.			

Whereas, Employer is desirous that Contractor to execute works:

"Execution of Structure (VUP), Approach roads (MCW), Reconstruction of structures (approaches), service roads, RCC drains, Supply & Installation of Lighting & fixtures, Road furniture & other miscellaneous items at Pune Solapur Section of NH 9 from Km 144+400 to Km 249+000 in the State of Maharashtra" (Hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price as given in this Contract.

NOW THIS AGREEMENT WITNESSETH as follows:

- 1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
- In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
- 3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

i)ii)iii)iv)v)vi)vii)viii)	Letter of Acceptance; Contractor's Bid; Contract Data; Conditions of Contract (including Specifications; Drawings; if any Bill of Quantities Any other document forming part of the			Contract);
	whereof, the parties thereto have cause rst before written.	d tl	nis Agreeme	nt to be executed the day
•	aled and Delivered by the said Employer ontractor through his Power of Attorney I		•	horized representative and
Pune Shola	ON BEHALF OF apur Road ent Company Limited		itness: Signature	
Ву	one Company Emilieu	1)	Name	
AUTHOR	IZED REPRESENTATIVE		Address	
		2)	Signature	
			Name	
			Address	

The following documents shall be deemed to form and be read and construed as part of

4.

this Agreement, viz.:

FOR AND BEHALF OF	1)	Signature	
M/s			
By		Name	
		Address	
AUTHORIZED REPRESENTATIVE			
	2)	Signature	
		Name	
		runic	
		Address	

FORMAT FOR PERFORMANCE BANK GUARANTEE

To.

Pune Sholapur Road Development Company Limited

The IL&FS Financial Center, Plot C-22, G Block, Bandra Kurla Complex, Mumbai- 400051, Maharashtra

Tel.: +91 022-26533333,

Facsimile: +91 022-26523979

WHEREAS:

- (A) (the "Contractor") and *Pune Sholapur Road Development Company Limited* (the "Employer / PSRDCL") have entered into a Contract Agreement dated (the "Agreement") whereby *PSRDCL* has awarded "Execution of Structure (VUP), Approach roads (MCW), Reconstruction of structures (approaches), service roads, RCC drains, Supply & Installation of Lighting & fixtures, Road furniture & other miscellaneous items at Pune Solapur Section of NH 9 from Km 144+400 to Km 249+000 in the State of Maharashtra" subject to and in accordance with the provisions of the Agreement.
- (B) The Agreement requires the Contractor to furnish a Performance Security to the Employer / PSRDCL in a sum of 5% of Agreed Contract Value as security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the Construction Period (as defined in the Agreement).
- (C) We, through our Branch at (the "Bank") have agreed to furnish this Bank Guarantee by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the Construction Period, under and in accordance with the Agreement, and agrees and undertakes to pay to the PSRDCL /Employer, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums upto an aggregate sum of the Guarantee Amount as the PSRDCL / Employer shall

claim, without the Employer / PSRDCL being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

- 2. A letter from PSRDCL/Employer that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the PSRDCL/Employer shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during the Construction Period under the Agreement and its decision that the Contractor is in default shall be final, and binding on the Bank, notwithstanding any differences between the Employer / PSRDCL and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
- 3. In order to give effect to this Guarantee, the Employer / PSRDCL shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
- 4. It shall not be necessary, and the Bank hereby waives any necessity, for the Employer / PSRDCL to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
- 5. The Employer / PSRDCL shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/ or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Employer / PSRDCL against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Employer / PSRDCL, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Employer / PSRDCL of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Employer / PSRDCL or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
- 6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Employer / PSRDCL in respect of

or relating to the Agreement or for the fulfilment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.

- 7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force until the successful completion of *Defect Liability Period of 21 Months from the Date of issue of Completion Certificate* and unless a demand or claim in writing is made by the Employer / PSRDCL on the Bank under this Guarantee, no later than 6 (six) months from the date of expiry of this Guarantee, all rights of the Employer / PSRDCL under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
- 8. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Employer / PSRDCL in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
- 9. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Employer / PSRDCL that the envelope was so posted shall be conclusive.
- 10. This Guarantee shall come into force with immediate effect and shall remain in force and effect for a period as per point 7 or until it is released earlier by the Employer / PSRDCL pursuant to the provisions of the Agreement.

11.	This guarantee shall also be operatable at our	branch at Mumbai,
	from whom, confirmation regarding the issue of this guarantee or	extension/ renewal
	thereof shall be made available on demand. In the contingency of	this guarantee being
	invoked and payment hereunder claimed, the said branch shall ac	cept such invitation
	letter and make payment of amounts so demanded under the said inv	ocation.

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SIGNED, SEALED AND DELIVERED For and on behalf of the BANK by:

(Signature)
(Name)
(Designation)
(Code Number)
(Address)

NOTES:

- i. The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- ii. The address, telephone number and other details of the Head Office of the Bank as well as of issuing Branch should be mentioned on the covering letter of issuing Branch.