



ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಉಜ್ಜರಂಡ ಮಂಡಳ

BANGALORE WATER SUPPLY & SEWERAGE BOARD

Office of the AEE (South Village)-1 Sub division, BWSSB, 21st Main, 11th Block, Anjanapura, Bangalore-83

No: BWSSB / S1TE / AE / 13 /2021-22 Date: 18/05/2021

To,

EE(S)

Sub: Estimate for the work of providing and laying 200mm & 100mm dia DI Feeder Pipeline from Bannerughatta Road to NIMHANS Sakalawara road with fixing of DI Valve for Water Supply facilities to NIMHANS Sakalawara ~~road~~ coming under AEE(SV)-1 Sub Division
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I am herewith submitting an estimate for the above work amounting to Rs.2,00,00,000/- only, which is prepared based on the current SR of BWSSB.

The necessary of the works, which are to be carried out are explained detail in the report accompanying the estimate.

Hence, the estimate may kindly be sanctioned early under the head of "DC Works of Private Party" for the year 2021-22.

ENCL: Estimate, Report in Triplicate

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Report accompanying the estimate for the work of providing and laying 200mm & 100 mm dia DI Feeder Pipeline from Bannerughatta Road to NIMHANS Sakalawara road with fixing of DI Valve for Water Supply facilities to NIMHANS Sakalawara road Campus coming under AEE(SV)-1 Sub Division.

The estimate for the work is got up for Rs.2,00,00,000/- based on CSR of BWSSB 2017-18 and submitted for kind perusal.

The Director NIMHANS, had applied for 100mm dia water supply connection to provided water supply to premises of NIMHANS at Sakalwara Village, B.G. Road. By inspecting above premises it is learnt that, it is a Premier Medical Institution in Sakalawara, B.G. Road, it includes Mental Health Rehabilitation & Training Center, Patient Cartages, Kitchen Room, Staff Quarters, Staff Room, OPD Room & Security Room. As per the Government Order ನಾಳಿ 117 ಎಂಎಂಎ 2020 ಬೆಂಗಳೂರು ದಿನಾಂಕ: 13.01.2021, action was taken to sanction the connection vide Application No.52194VS1 under the jurisdiction of AEE(SV)-1 Sub division.

There exists a 700mm Dia MS feeder main at a distance of 2800 meter near Koliform Gate, B.G. Road, which feeds to Surya City - KHB & Anekal Town. Accordingly it was proposed to link the NIMHANS facility with this network by providing and laying of 200mm & 100mm dia DI water supply distribution line from B.G. Road to NIMHANS Campus.

The above premises is coming under Sakalawara Village, Anekal Taluk, outside the BBMP limits.

An estimate has been prepared for providing and laying of 200mm & 100mm dia DI water supply distribution line and other provisions are made in the estimate such as earthwork excavation, refilling, laying of pipes, Wetmix Macadam, Asphalting and labour charges for fixing control valves & refilling of trenches.

Since it is a DC works of private party, 17.5% ETP charges have been included. It may please be made known to the concerned that as per paragraph II pg 243 of KPWD code Volume I that the Board doesn't bind itself to complete the work within the amount of estimate. If any excess over and above the amount of estimate has to be borne by the counter signing authority. Under the above circumstances, ^{The} M/s Director, National Institute of Mental Health & Nero Science (NIMHANS) P.B.2900, Bangalore-560029 has deposited the necessary funds vide RTGS Merchant Transaction Reference Number 2837182570 towards the execution of the above work.

Hence the estimate may kindly be put up for technical sanction under the "DC Works of Private Party" for the year 2021-22.

Early sanction to the estimate is requested.

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BANGALORE WATER SUPPLY AND SEWERAGE BOARD

Estimate for the work of providing and laying 200mm & 100mm dia DI Feeder Pipeline from Bannerughatta Road to NIMHANS Sakalawara road with fixing of DI Valve for Water Supply facilities to NIMHANS Sakalawara road coming under AEE(SV)-1 Sub Division

SL. No.	Description of Item	Unit	Qty.	Rate	Amount
A	WATER SUPPLY WORKS				
	Length- 2800 Rmt			BWSSB	SR 2017-2018
1	Providing and laying Ductile iron pipes of class-K9 conforming to IS 8329:2000 with latest amendments, conveying to work site, rolling and lowering into trenches, laying true to line, level and perfect linking at joints, testing and commissioning, including loading and unloading at both destinations, cutting of pipes wherever necessary, jointing with DI specials (excluding cost of specials) and rubber gaskets, cleaning the socket and spigot end with soap solution, applying soft soap to the socket and spigot ends before insertion of rubber gaskets, jacking and fixing in perfect conditions etc. The cost to include soap solution, soft soap, waste etc. and giving necessary hydraulic test to the required pressure as per ISS with all lead and lifts and cost of all jointing materials. (The contractor will make his own arrangements for water for testing. Earth work excavation in trenches and jointing of pipes to be measured and paid for separately) Note: In sewerage projects for internal cement mortal lining (CML) of DI pipes, if High Alumina Cement (HAC) as recommended in Annexure B clause 16.3 of IS8329:2000 is considered in place of Slag or Sulphate Resistance Cement (SRC), the cost of pipes may be increased by 5-6% from the prices listed above BWSSB SR-2017-18				
a	200mm dia DI pipes.	Rmt.	2800	2589.00	7249200
b	100mm dia DI pipes.	Rmt.	30	1359.00	40770
2	Supplying & fixing of DI Resilient seated soft sealing sluice valve with body bonnet of ductile Iron of grade GGG50, Wedge fully rubber lined with EPDM & seals of NBR and the valves should be vacuum tight and 100% leak proof with face dimensions as per BS 5163 -89/ IS 14846 -2000 / DIN 3202 F4/ F5. The stem sealing should be with toroidal sealing rings (Minimum 2 "O"-rings). All the valves should be with Electro static power coating both inside and outside with valves should be with Electro static power coating both inside and outside with pocket less body passage. The rate is inclusive of cost of valve, T.P.Set, bolts & nuts and rubber insertions, excluding earthwork				
a	200mm dia	No.	3	25727	77181
b	100mm dia	No.	1	10367	10367
3	Supplying and fixing kinetic AIR VALVE for automatic discharge of accumulate air during working condition, conforming to IS 14845 / EN 1074-4. Body and bonnet of DI conforming to IS-1865 of grade GGG-50, seals are made of approved EPDM, SS 304 float, guide and internals. Flange drilling according to IS-1538 etc. complete. Body and bonnet shall be coated with electrostatically applied epoxy powder coating with a coating thickness of 250 micron both inside and outside.				

SL. No.	Description of Item	Unit	Qty.	Rate	Amount
	150mm Dia	No	2	26732	53464
4	Supplying of Ductile Iron Push on joint D.I. specials conforming to IS; 9523/2000 including Rubber Gasket as per IS 5382				
a	Bends				
	200mm x 90 Deg. Bend	No	5	3358	16790
	200mm x 45 Deg. Bend	No	5	2728	13640
	200mm x 22.5 Deg. Bend	No	5	2413	12065
	200 mm dia Dummy End	No	1	2515	2515
	100 mm dia Dummy End	No	1	1280	1280
b	Branch				
	200X100 mm dia.	No.	1	3343	3343
c	M.J.Collar				
	200 mm dia.	No.	18	4477	80586
5	Earthwork excavation for Pipeline trenches (except building works) including depositing on bank upto a lead of 30 meters including danger lighting and using sight rails and boning rods including shoring, strutting bailing out water at every 100 meters wherever necessary as directed in the following strata.In all soils mixed with boulders up to 30 cms size up to and exclusive of disintegrated rock.				
	0 to 2 Mtrs. Depth (and Valve Cistern)	Cum	2716.8	167	453705.6
	Measurement- 2830mx 0.8mx1.2m				
6	Cutting road surface for pipe line treches and Cutting macadam road (2830mx0.8mx.30m) & Valve Cistern	Cum	679.2	859	583432.8
7	Cutting asphalted or shelcreated surface (2830mx.8mx.15m) & Valve Cistern	Cum	339.6	894	303602.4
8	Refilling available earth around pipe line or cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with laed up to 50m and lift upto 1.5m including cost of all labour complete as per specifications. Qty vide item No.5,6,7-Wet mix qty	Cum	3056.4	103	314809.2
9	Providing, laying, spreading and compacting graded stones aggregates to wet mix macadam specifications including pre mixing the materials with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub9base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications MORTH specifications No. 406 Measurement= 2830m x 0.8m x .30m	Cum	679.2	1668	1132905.6
10	KSRRB 500-6 : Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means.complete as per specifications.MORTH specification No. 502. (2830mx 0.8m)	Sqm	2264	26	58864

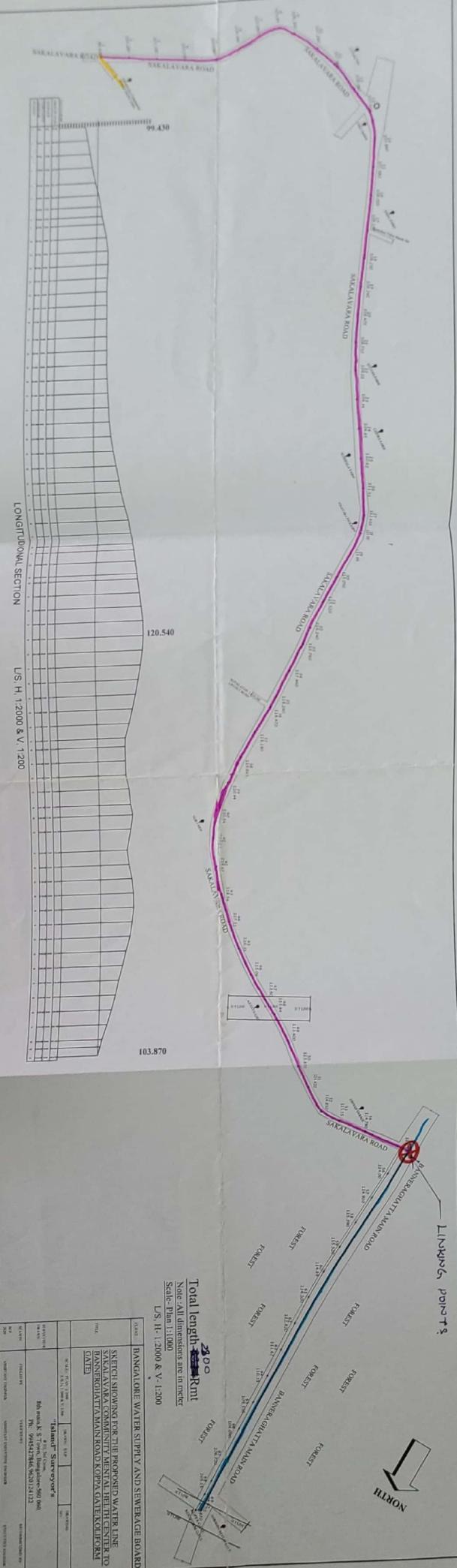
SL. No.	Description of Item	Unit	Qty.	Rate	Amount
11	KSRRB 500 11: Providing and applying bitumen macadam on prepared surface with crush coarse aggregates as per design mix formula for base/ binding course including loading of aggregate with F.e loader, hot mixing of stone aggregate and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed material with paver finisher to the required level and grade, rolling by power roller to achieve the desire density, 50/75mm compacted thickness with 3.3% bitumen but excluding cost of primer/ track coat with lead up to 1 km including cost of material, labour HOM of machineries complete as per specification MORTH/ CHAPTER 5 Gr II 50 mm to75mm (SR: 2016-17, P-286, I-21.11.2). (2830m x 0.8m x 0.05m)	Cum	113.2	5409	612298.8
12	KSRRB 500 : Providing and applying Tack coat on prepared black topped surface at .5 kg per 10sqm, heating Bitumen in boiler fitted withspray set (excluding cleaning of road surface) including cost of all material, labour, HOM of machineriescomplete as per specification (SR: 2016-17, P-285, I-21.7). (2830m x 0.8m).	Sqm	2264	11	24904
13	KSRRB 500 providing and laying bituminous concrete with hot mix plant , usng crushed aggregate of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site laying with a paver finesher to the required grade, level and alligmeng rolling with smooth wheeled, vibratory and tandom rollers to achieve the desired compaction as per morth specification class no 500.9 complete in all respect as per specification. using 100/120 TPH capacity HMP with senser paver GR-2 (30 TO 45MM) with 5.4% VG -30 BITUMEN. (SR: 2016-17, P-288, I-21.22.2) . (2830m x 0.8m x 0.05m)	Cum	113.2	7068	800097.6
14	Disposing off the excess excavated Earth of all types upto a distance mentioned below by vehicle including loading, unloading, with all lifts, labour, HOM of machinery etc., complete. (up to 4 to 5 km) Wet mix qty	Cum	679.2	193	131085.6
15	Provide bedding using approved stone dust / quarry dust of size not exceeding 5.6 mm for the pipe lines trenches including watering and consolidation to 95% proctor density etc. complete with all lead and lifts as per specifications and as directed by the Engineer in charge etc and after obtaining the approval of the Chief Engineer.. SR 2017 2018 P.No.56, Sl. No.18, A108A. (2830 x 0.8m x 0.2m) (2830 x 0.8m x 0.2m)	Cum	452.8	952	431065.6

SL. No.	Description of Item	Unit	Qty.	Rate	Amount
19	Manufacturing, providing, trasporting, rolling, lowering, laying, jointing & testing and commissioning of MS Specials of minimum 8mm thick such as bends, tail pieces, reduces etc. conforming to IS-7322:1985 with latest amendments and including perfect linking and welding of joints to correct position including cost and conveyance of materials with all lead and lifts, cost all labour and giving satisfactory hydraulic test as per IS:3589:2001 with latest amendments for test pressure and working pressure both at factory and site etc. complete as per detailed specifications with inside lining two coat of food grade epoxy painting of approved make with each coat of 250 micron thick (after dry) over one coat of food grade epoxy primer of approved make with minium of 50 micron thick (after dry) and outside 25mm thick coating in CM 1:3 by providing 50x50mm weld mesh including loading and unloading of the pipes for the following category to suit PSC / MS / CI / AC / DI / PVC pipes. The rates are inclusive of all taxes and duties. The weight of MS shell only by considered before lining and coating for arriving at the rate. The thickness of plate will be specified by the engineer. (Contractor will make hiw own arrangements for procuring water for testing) for:				
19A	MS / PSC / CI / DI / PVC / AC pipe bends, tail pieces, reducers etc. for above 500mm dia pipes	Kgs	300	119	35700
20	For Bulk Flow Meters, sensors, transmitter, panels etc. for 200 mm dia. I.No.R010C P.No.151	No	1	215000	215000
21	Survey and Consultancy Works	LS			30000
				Sub-Total	12844582
				ETP Charges @ 17.5%	2247802
				Tender Premium @ 15%	1926687.33
				3rd Party Inspection Charges @ 0.5% +18% GST	75783.03
				Road Cutting Charges	2800000.00
				Advertisement	50000.00
				Mis. & Rounding Off.	55146.00
	TOTAL				20000000

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SKETCH SHOWING
ESTIMATE FOR THE WORK OF PROVIDING AND LAVING 200MM DIA & 100MM. I.D. FEEDER PIPELINE FROM BANNERGHATA ROAD TO NIMHANS SANITARIUM ROAD
WITH FIXING OF DI VALVE FOR WATER SUPPLY FACILITIES TO NIMHANS SANITARIUM COMPLEX UNDER APELSU-1 SUB-DIVISION



Prentz
Age

Woolly
AEROSY-1

EXISTING 700 MM DIA MS PUMPKIN LINE
PROPOSED 200 MM DIA ~~MS~~ DT LINE
PROPOSED 100 MM DIA DT LINE

Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.

Compensation events are those defined in Clause 38 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose Tender to carry out the Works has been accepted by the Employer.

The **Contractor's Tender** is the completed Tender document submitted by the Contractor to the Employer.

The **Contract price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; months are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects liability period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Contractor
Proprietor
M/s. K. RAVI KUMAR

K. Ravi Kumar
Proprietor

For M/s. K. RAVI KUMAR
Employer
Chief Engineer (E)
BWSSB, Bangalore

Plant is any integral part of the Works which is to have a mechanical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Specification means the Specification of the Works included in the Contract or any modification or addition made or approved by the Employer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes works on the Site.

A **Variation** is an instruction given by the Employer which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions for clarifying queries about the Conditions of Contract.

2.2 The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works
- (3) Contractor's Tender
- (4) Contract Data
- (5) Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Bill of quantities and
- (9) any other document listed in the Contract Data as forming part of the Contract.

3. Law governing contract

3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. Employer's decisions

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor.

For M/s. K. RAVI KUMAR

K. Ravi Kumar

Proprietor

M/s. K. RAVI KUMAR
Chief Engineer (E)
BWSSB, Bangalore

5. Delegation

5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting

7.1 Deleted

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer.

9. Personnel

9.1 The Contractor shall employ the technical personnel (of number and qualifications) as may be stipulated by GOK from time to time during the execution of the work. The technical staff so employed shall be available at site as may be stipulated by the Employer.

9.2 If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's risks

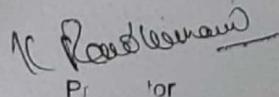
10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's risks

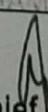
11.1 The Employer is responsible for the excepted risks which are:

- (a) rebellion, riot commotion or disorder unless solely restricted to employees of the Contractor or his Sub-Contractors arising from the conduct of the Works; or
- (b) a cause due solely to the design of the Works, other than the Contractor's design; or
- (c) any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:
 - (i) could not have reasonably foreseen; or

Contractor
FOR M/s. K. RAVI KUMAR


Pr. for

Employer


Chief Engineer (E)
BWSSB, Bangalore

(ii) could reasonably have foreseen, but against which he could reasonably have taken at least one of the following measures;

(A) prevent loss or damage to physical property from occurring by taking appropriate measures or

(B) insure against such loss or damage

12. Contractor's risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract, other than the excepted risks are the responsibility of the Contractor.

13. Insurance:

13.1 The Contractor shall prior to commencing the works, effect and then maintain insurances, in the joint names of the Employer and the Contractor (cover from the first working day after the Start Date to the end of the Liability Period), in the amounts stated in the Contract Data:

(a) for loss of or damage to the Works, Plants and Materials and Contractor's equipment;

(b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Contractor's performance of the Contract including the Contractor's liability for damage to the Employer's property other than the Works and

(c) for liability of both Parties and of any Employer's representative for loss and injury to the Contractor's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. Payments received from insurers relating to loss or damage shall be held joint by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

13.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies, receipts, the Employer may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums and recover the same as a deduction from any other monies due to the Contractor. If no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Employer.

13.5 Both Parties shall comply with any conditions of the insurance policies.

For M/s. K. RAVI KUMAR

K. Ravi Kumar
Proprietor

Chief Engineer (E)
RAMESH
BWSSB, Bangalore

14. Site Investigation Reports:

14.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. Approval by the Employer:

18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for the design of Temporary Works

18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of third parties to the design of the temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

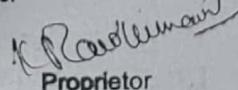
20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

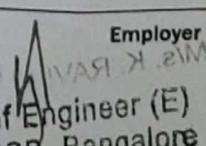
21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the

For M/s. K. RAVI KUMAR
Contractor


Proprietor

Employer


Chief Engineer (E)
BWSSB, Bangalore

Employer is deemed to have delayed the start of the relevant activities and 27. will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Employer and any person authorized by 28. Employer access to the Site, to any place where work in connection with 28.1 Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

24.1 If the Contractor is not satisfied with the decision taken by the Employer, 29. dispute shall be referred by either party to Arbitration within 30 days of 2 notification of the Employer's decision.

24.2 If neither party refers the dispute to Arbitration within the above 30 days, Employer's decision will be final and binding.

24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. Time Control

25. Program

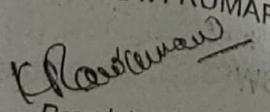
25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.

25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer's decision upon the effect of a Compensation Event or Variation and submit full supporting information.

For M/s. K. RAVI KUMAR

 Proprietor

K. RAVI KUMAR

 Chief Engineer
 BWSSB, Bengaluru

27. Delays ordered by the Employer

27.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Management meetings

28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.

28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

29. Identifying defects

29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

30.1 If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

31. Correction of defects

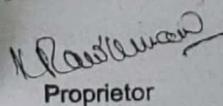
31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

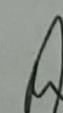
31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

32. Uncorrected defects

32.1 If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

For M/s. R. RAVI KUMAR


Proprietor


Chief Engineer (E)
BWSSB, Bangalore

RAMKUMAR

Proprietor

D. Cost Control

33. Bill of Quantities (BOQ)

33.1 The BOQ shall contain items for the construction, installation, testing and commissioning work to be done by the Contractor.

33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item.

34. Variations

34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him

- (a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
- (b) Omit any item of work;
- (c) Change the character or quality or kind of any item of work;
- (d) Change the levels, lines, positions and dimensions of any part of the work;
- (e) Execute additional items of work of any kind necessary for the completion of the works; and
- (f) Change in any specified sequence, methods or timing of construction of any part of the work.

34.2 The Contractor shall be bound to carry out the work in accordance with instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.

34.3 Variations shall not be made by the Contractor without an order in writing from the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.

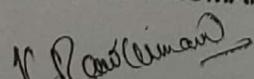
34.4 The Contractor shall promptly request in writing the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved, it shall be accompanied by BOQ, failing which the contractor shall be responsible for deviation, if any. Further approval of the Board has to be obtained for the variation exceeding 5%.

35. Payments for Variations

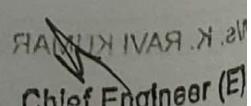
35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of the quantity provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.

35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.

For M/s. K. RAVI KUMAR


Proprietor

41


K. RAVI KUMAR
Chief Engineer (E)
BWSSB, Bangalore
Proprietor

35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract

35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.

35.5 If the Contractor's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.

35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

36.1 The Contractor shall submit to the Employer monthly bills of the value of the work completed less the cumulative amount paid previously.

36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ completed and (ii) valuation of Variations and Compensation Events.

36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

37.1 Payments shall be adjusted for deductions for advance payments, other recoveries in terms of the contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the within 60 days of submission of bill. The Contractor shall be liable to pay liquidated damages for shortfall in progress. For Progress beyond the agreed programme, payment is subject to availability of the grants.

37.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

38.1 The following are Compensation events unless they are caused by the Contractor:

For M/s. K. RAVI KUMAR
Contractor

(Signature)
Proprietor

(Signature)
Employer
For M/s. K. RAVI KUMAR
Chief Engineer (E)
BWSSB, Bangalore
Proprietor

- (a) The Employer does not give access to a part of the Site by the Possession Date stated in the Contract Data.
- (b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
- (c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for any other reasons.
- (e) The effect on the Contractor of any of the Employer's Risks.
- (f) The Employer unreasonably delays issuing a Certificate of Completion.
- (g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

38.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 The rates quoted by the Contractor shall be deemed to be inclusive of the taxes and other taxes that the Contractor will have to pay for the performance of the Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. Price Adjustment:

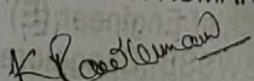
40.1 Deleted

To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other Clauses in the Contract, the rates included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

41. Liquidated damages

41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone stated in the Contract Data). The total amount of liquidated damages shall

For M/s. K. RAVI KUMAR



Proprietor

M/s. K. RAVI KUMAR
Chief Engineer (E)
BWSSB, Bangalore

exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments:

42.1 The Employer shall make payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an unconditional bank guarantee in a form acceptable to the Employer issued by a Nationalized/Scheduled Bank in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.

42.2 The Contractor is to use the advance payment only to pay for Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer.

42.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuation of the work done, variations, price adjustments, compensation events or liquidated damages.

43. Securities:

43.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Security deposit shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion.

44. Cost of Repairs:

44.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

Contractor K. RAVI KUMAR

K. Ravi Kumar
Proprietor

Chief Engineer (E)
BWSSB, Bangalore

10/09/2018

E. Finishing the Contract

45. Completion

45.1 The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Works are completed.

46. Taking over

46.1 The Employer shall take over the Site and the Works within seven days of issuing a certificate of Completion.

47. Final account

47.1 The Contractor shall supply to the Employer a detailed account of the amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 28 days of receiving the Contractor's account if it is correct and complete. If it is correct, the Employer shall issue within 90 days a schedule that states the scope of any corrections or additions that are necessary. If the Final Account is unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor's revised account.

48. As built drawings and/or Operating and Maintenance Manuals

48.1 If "as built"⁷ Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

48.2 If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

49. Termination

49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

49.2 Fundamental breaches of Contract include, but shall not be limited to the following:

(a) the Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;

(b) The Contractor becomes bankrupt or goes into liquidation other than for reconstruction or amalgamation;

⁷ Completion Drawings
For M/s. K. RAVI KUMAR

M/s. K. RAVI KUMAR
Proprietor

- (c) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;
- (d) the Contractor does not maintain a security which is required;
- (e) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (f) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph : "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

- 49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.
- 49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

- 50.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.
- 50.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

Contractor
For M/s. K. RAVI KUMAR

K. Ravi Kumar
Proprietor

K. Ravi Kumar
Chief Engineer (E)
BWSSB, Bangalore
9019

51. Property

51.1 All materials on the Site, Plant, Equipment, Temporary Works and Work deemed to be the property of the Employer, if the Contract is terminated by a Contractor's default.

52. Release from performance

52.1 If the Contract is frustrated by any event entirely outside the control of either Employer or the Contractor the Employer shall certify that the Contract has frustrated. The Contractor shall make the Site safe and stop work as quickly possible after receiving this certificate and shall be paid for all work carried before receiving it and for any work carried out afterwards to a commitment was made

F. Special Conditions of Contract

1. Labour :

The Contractor shall, unless otherwise provided in the Contract, make his arrangements for the engagement of all staff and labour, local or other, and their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer return in detail, in such form and at such intervals as the Employer prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

2. Compliance with labour regulations :

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under regulations, notifications and bye laws of the State or Central Government local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention any of the provisions of any Act or rules made there under, regulations notifications including amendments. If the Employer is caused to pay reimbursement, such amounts as may be necessary to cause or observe, or for non observance of the provisions stipulated in the notifications/by laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

For M/s. K. RAVIKUMAR
Proprietor

3. Protection of Environment:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

4. Arbitration (Clause 24)

4.1 The procedure for arbitration shall be as follows:

- (a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties; failing such agreement, by the Appointing Authority (any one of the Organizations as per list enclosed in Annexure)
- (b) Arbitration proceedings shall be held at *Bangalore*, Karnataka, India
- (c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.
- (d) Performance under the contract shall continue during the arbitration proceedings and payments due the Contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

5. Contractor to Co-ordinate his Work with Other Contractors

5.1 The Contractor has to co-ordinate with the other concerned Contractors as already specified in Conditions of Contract for all such works as per the directions of Engineer in charge at no extra cost.

6. Continuation of Work:

6.1 In case of the death of a contractor after executing the agreement / commencement of the work, his legal heir, if any eligible registered contractor and willing, can execute and complete the work at the accepted tender rates irrespective of the cost of the work

[Signature]
Chief Engineer (E)
BWSSE, Bangalore
Employee

Contractor
For M/s. K. RAVI KUMAR

[Signature]
Proprietor

10/05/19

7. Further the following conditions will also become part of the agreement which may please be noted.

- a) Rates quoted by the contractor / firm is inclusive of all taxes and duties.
- b) The Contractor/Firm should mandatorily pay by themselves the necessary Entry Tax & other applicable taxes without fail.
- c) All applicable taxes payable in respect of work shall be paid by the contractor / firm to the necessary departments.
- d) The Bidder should not have applied for or are now part of Corporate Restructure (CDR) in the last 5 Financial Years.
- e) The Contractor shall use tertiary treated water from BWSSB wherever available for Construction, Hydro testing at the prevailing rates of BWSSB.
- f) The supply of pipes and other materials shall be initially for only 50% of quantity of BOQ is considered and further supply will be as per recommendations of the Engineer-in-Charge based on the requirement.
- g) All required permissions / RWO issues from all concerned departments shall be obtained from the contractor and Board Engineers will assist for the same.
- h) No variation work will be executed by the firm unless approval is conveyed from the competent authority.
- i) The Hard Rock obtained during execution, will not be auctioned by Board (Because of the restriction in stocking of hard rock in site and safety issues). However Rs.50.00 per cum of Hard Rock will be recovered from the firm for Running bills.
- j) One designated qualified safety officer / Engineer shall be deployed at site from the firm.
- k) Jurisdiction of Courts / Arbitration: The sitting of arbitration shall be held in Bangalore only and nowhere else.
- l) Dispute of any kind arising out of the contract shall be resolved within the jurisdiction of Bangalore City only and the parties agree and clearly understand that the courts / tribunals situated at Bangalore Metropolitan City have exclusive jurisdiction for the redressal of the disputes arising out of the contract and at no other place.
- m) The Parties further agree and understand that the place or places of issue of bank guarantee other than Bangalore will have no jurisdiction to resolve dispute of any kind relating to enforcement of the bank guarantees submitted by the contractor at Bangalore for the execution of the contract at Bangalore.
- n) The contractor shall comply with all the legal requirements in the matter of employment of workmen and provide all safety gadgets to the workmen while working in the hazards place or conditions during the execution of the contract.
- o) Contractor shall be fully responsible in the event of death of employee / workman during the execution of the work and liable to pay adequate compensation to the dependents of employee / workman as per law.
- p) On his / their failure, if the Board is made to pay compensation the same shall be recovered by the Board from the contractor out of the amounts due to the contractor or by appropriate legal action.
- q) If death of any employees occurs during execution of work due to negligence of contractor, the contract will be liable for termination.
- r) In the event of such termination, the employer may consider blacklisting of firm after due notice.

For M/s. K. RAVI KUMAR
K. Ravi Kumar
Proprietor

s) In case of any death or accident the contract will be cancelled after following due process.

1) The Board will be entitled to claim exemplary damages from the contractor in case of death of any work man / employees of the contractor in any of the BWSSB works as it damages the reputation of the Board.

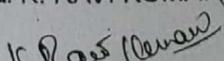
t) The road cutting is to be done by road cutting machines only.



Chief Engineer (E)
BWSSB, Bangalore

Employer

Contractor. K. RAVI KUMAR



K. Ravi Kumar

Proprietor

Annexure:

LIST OF ORGANIZATIONS WHO ARE CONSIDERED AS APPOINTING
AUTHORITY FOR APPOINTMENT OF ARBITRATORS³²

1. Indian Council of Arbitration, New Delhi;
2. International Centre for Alternative Disputes Resolution (India);
3. Indian Roads Congress;
4. Indian Building Congress;
5. Indian Institute of Bridge Engineers;
6. Indian Institute of Public Health Engineers;
7. Institute of Water Works

³² Add any other Organization considered suitable.