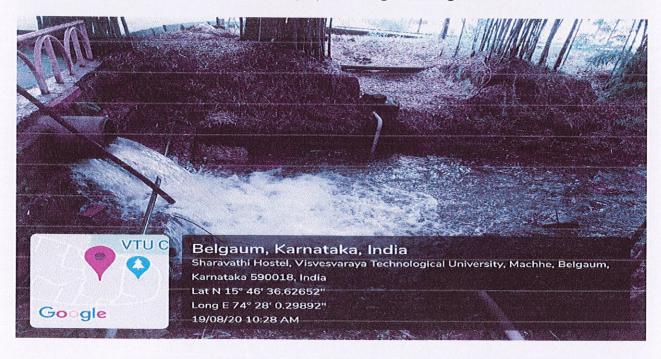
# **RAIN WATER HARVESTING**



# Recharge pits along the Ring Road



**Check Dam** 



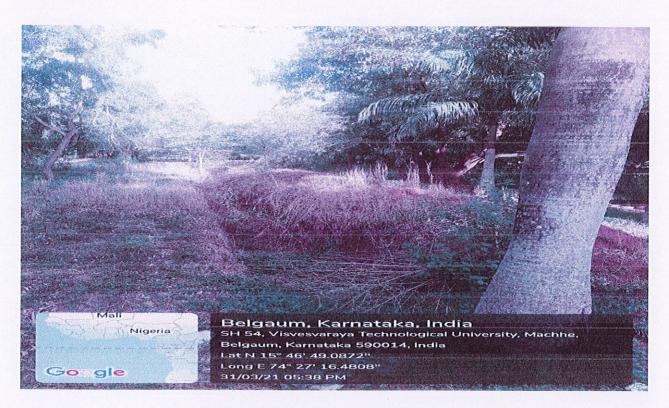


**Check Dam** 



Water storage at Check Dam

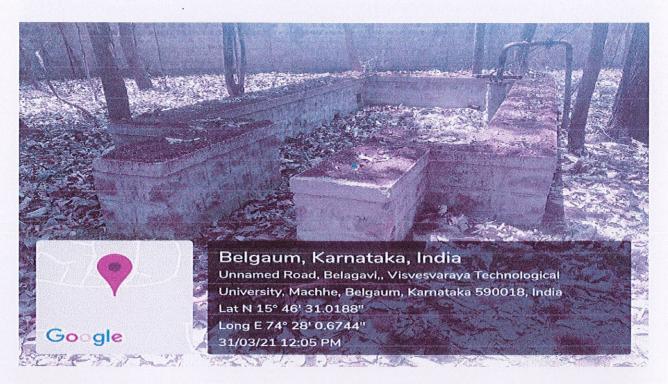




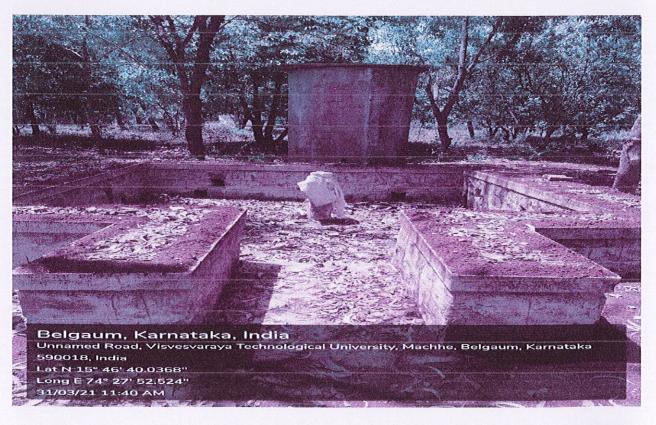
Trenches for Rainwater harvesting



### **BOREWELL RICHARGE PIT**



**Recharge pits for Borewells** 



**Recharge pits for Borewells** 



### SEWAGE TREATMENT PLANT



### **Sewage Treatment Plant**



**Inside Sewage Treatment Plant** 



Head of Account: 5001-101-102

Estimate Sanctioned for Rs. 62,39,000/-

Form P.W.G. 33 (Revised)

# **RUNNING ACCOUNTS BILL**

(See Para 215)

Daplicates Rain Water Karnesting

(Final payment must be made on forms printed on yellow paper which should not be used for Intermediate

For contractor: - This form provides for (1) Advance payments and (2) payments for measured works. The form of Account of secured Advances which has been printed separately should be attached where necessary.

Sub - Division

Division VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM dated
Cash Book Vr. No
Name of Contractor_Sri B. G. Godse, Contractor, Belgaum
Name of Work Construction of Footpath & side drainage including percolation pits(for rain harvesting) along the ring road at VTU. "Inana Sangama". Belgaum.
Serial No. of this bill R.A. Bill No.3 <sup>rd</sup> & Final
No. and date of his/her previous bill for this work RA Bill No.2 paid vide cheque no.278241/10.02.2011
Reference to Agreement No VTU/IRC No.27/2010-11, dated:30.8.2010
Date of written order to commence work 01-09-2010
Due Date of actual completion of work  28-02-2011

### I. ACCOUNT OF WORK EXECUTED

	Item of work (Grounded under 'Sub Heads' and Sub-works of estimate	Unit	Rate	Quantity executed up to date as per Measurement Book	Payment on actual measuredate/since F	ements up to	Domaska
	1	2	3	4	5		Remarks
						6	
f	SEPARATE SHEETS ARE ENCLOSED		HO FOR RS 27	VIUE CHEQUE 8705 DEA 20 11/20 VIU BGM	•		

Total value of work done to date (A)

:Rs. (66,31,162.00)

Deduct Value of work shown on previous Bill

:Rs 63,12,109.00

Net Value work since previous Bill (P)

:Rs. 3,19,053.00 304653.00

Figures (F) in words Rupees

:Rs. Three Lakhs Nineteen Thousand Fifty Three Only.

When there are two or more entries in column 6 relating to cash Sub-Head of estimate they should in the case of works the accounts of which are kept by Sub-Heads, be totaled and the total recorded in column for posting the works abstract

### II. CERTIFICATES AND SIGNATURE

То	Measurements	on	which	are	based	the	entries	in	columns	1	to	6	of	Account	1	were	made
by .	Sri Jayappa. D, A	sst.	Engr., V	/TU,	Belgaum	1.											

On 21-05-2011

of forwarded with

and re-recorded at page

Measurements Book No. Electronic Measurements Book & M.B.No.386/ Page No. 70 - 71

2. Certified that in addition to and quite apart from the quantities of work actually executed at shown in column 4 of Account I, some work has actually been done in connection with several items, and value of such work (after deducting there from the proportionate amount of secured advance, if any ultimately recoverable on account of the quantities or materials used therein) is in no case, less than the advance payment as per items 2 of the memorandum of payment made as proposed to be made for the convenience of the contractor, in anticipation of and subject to the results of the details measurements, which will be made as soon as possible &

of and subject to the results of the measurements checked by Resident E	ngineer, VT	U, Belgaum.	a temperature of		
Dated Signature of Officer  Assistant Executive Engineer Visvesvaraya Technological University BELGAUM  (Rank)  Signature of Contractor		(Rank)	Re Dated is Signal High	sident Engin a Vection off BELGAUM	isli) loor iseruavtherisji
This Certificate must be signed by	, the Sub-Di	– visional or Di	visional Officer.		
This Certificate must be signed by	the oub-bi	violottai o. z.		t the Officer w	ho authorise t
This Signature is necessary only payment in such case the two signatu	when the C re are esser	Officer who partial.	repares the bill is no	6.6	16762.
	III MEMO	RANDUM O	F PAYMENTS	Rs. 6	6,31,162.00
<ol> <li>Total value of work actually measu</li> <li>Total 'up-to-date' advance paymen</li> </ol>	red as per A t for work no	account I, Col ot yet measur	lumn 5 Entry (A) red as per details give	en below:	
Rs.		P. (-)		(B)	
(a) Total as per previous bill	(-)	(b)	Since previous bill		
as per page	of M.B. No	).			0 Entry (0)
3. Total 'Up-to-date' Secured advance	e of Security	y or materials	s as per Annexure (fro	om 26A) Colur	nn 3 Entry (c).
4. Total (Items 1 +2 +3)				A 22211D	t hill
<ol><li>Deduct amount with held Figures for Works abstract</li></ol>	(a)		rious bill as per last ru	inning Account	C Dill
Rs. P.	(b)	From this	bill.		
6. Balance i.e. 'Up-to-date' payment	s		(items 4-5) (K)		er tive fact.
7. Total amount of payment already	made as pe	er entry (K) of	last Running Accoun	t Bill No. Rs.	63,12,109.0

Accounts for

Rs. (3,19,053.00)

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# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

Name of work: Construction of Footpath & side drainage including percolation pits(for rain harvesting) along the ring road at VTU,
"Jnana Sangama", Belgaum

Contractor: Sri B. G. Godse, Contractor, Belgaum

Agreement No.VTU/IRC No.27/2010-11, dated:30.8.2010

R.A. Bill No.3 & Final

Sl.No.	Description	Unit Tender	Rate	Previo	ously Paid	Now to	be paid	Upto Date		
31.110.	Description	Offic	Qty	Nate	Qty	Amount	Qty	Amount	Qty	Amount
	CIVIL WORKS									
	WORK BELOW PLINTH									
1	Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually ( other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables ) and removing the excavated stuff to all distance, excavated surface levelled and neatly dressed, disposed earth to be levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications.		448.00	70.00	554.46	38812.2	0.00	0.00	554.46	38812.20
2	Providing and laying Stone dust for pathway including spreading watering tamping etc,. Complete as per specifications and direction of EIC.									
		Cum	396.00	175.00	355.26	62170.5	0.00	0.00	355.26	62170.50

3	Providing and laying in position plain cement concrete of mix 1:3:6 using 40mm and down size graded granite metal machine mixed, concrete laid in layers not exceeding 15cms.thick well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specificatios.	Cum	198.00	3090.00	240.01	741630.9	0.00	0.00	240.01	741630.90
4	Providing and fixing at site precast cement concrete M15 grade kerb, 425 cms wide and 10cms thick using 20mm and down granite metal including cost of materials, labour, curing complete as per specifications.	Rmt	2200.00	160.00	2375.4	380064	0.00	0.00	2375.40	380064.00
5	Providing and laying in position plain cement concrete of nominal mix 1:2:4 using 20mm and down size graded trap/basalt/granite metal machine mixed, concrete laid in layers not exceeding 15cms thick well compacted in foundation, plinth and cills, including cost of all materials labour, HOM of machinery, curing complete as per specifications.	Cum	760.00	4200.00	758.28	3184776	0.00	0.00	758.28	3184776.00
6	Providing and removing centring, shuttering strutting etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications.	Sqm	3520.00	120.00		441102	0.00	0.00		441102.00
7	Providing and laying heavy duty cobble stones 60mm thick intelock shape and colour with a minimum compressive strength of 281 kg per sqcm over 50mm thick cement mortar ( average thickess) and compacting with plate virator having 3tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications.	Sqm	2200.00		2747.72	1236474	0.00			1236474.00

, s

Providing and laying reinforced cement concrete pipe 150mm dia NP2 for culverts including pointing ends, and fixing collars with cement mortar 1:2 including cost of all materials, labour, curing complete as per									
specifications.	Rmt	400.00	260.00	228	59280	0.00	0.00	228.00	59280.00
Providing and laying reinforced cement concrete pipe NP3 for culverts including pointing ends, and fixing collars with cement mortar 1:2 including cost of all materials, labour, curing complete as per									
specifications.	Rmt	83.00	2000.00	83.9	167800	0.00	0.00	83.90	167800.00

, , , , , ,

	PART-'B'									
1	Earhtwork excavation of 1.20 to 1.50 M. External diameter to a depth up to 3 M. Well through all types of strata namely Sandy soil, Ordinary soil, hard soil, and soft rock without blasting complete as per drawing and technical specification. Depth of sinking is reccorded from bed level complete .rates including setting out compaction of shorring and braking,dresing of sides and bottom and backfilling with approvel materials.									
		Cum	160.00	200.00	0	0	143.15	28630.00	143.15	28630.00
2	Providing and laying reinforced cement concrete Rings of 1.20 to 1.50 Mt. dia and 350 to400 mm depth for well sticing with suitable weep holes including cost of material, labour, curing complete as per specifications.	Nos	240.00	900.00	0	0	200.00	180000.00	200.00	190000 00
3	Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100mm dia AC pipe extending through the full width of the structure with slope of 1V: 20 H towards drawing foce. Complete as per drawing and tecnical specifications complete as per spcifications.	IVOS	240.00	900.00	-	U	200,00	100000.00	200.00	180000.00
		Nos	180.00	150.00	0	0		0.00	0.00	0.00

4	Providing and laying of Filter media with granular materials / stone crushed aggregates satisfying the requirements laid down in clause 250004.2.2 of									
	MORTH specification to a thickness of not less than 300mm.	Cum	65.00	700.00	0	0	74.57	52199.00	74.57	52199.00
5	Providing 10cm thick RCC 1:1.5: 3 concrete for perforated drawing of 1500mm dia with suitable perporated holes as per drawings using clean granite or trap jelly of 20mm and down size with nessesary reinforcement at 20cm.C/C both the ways of 8mm dia .including formwork centing, curing, finising the exposed faces with CM 1:3 etc., complete.									
		Sqm	55.00	800.00	0	0	54.78	43824.00	54.78	43824.00
	TOTAL RS.					6312109.60		304653.00		6616762.60
	SAY RS.					6312109.00		304653.00		6616762.00

Assistant Executive Engineer, VTU, Belgaum

Resident Engineer, VTU, Belgaum

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

Name of work: Construction of Footpath & side drainage including percolation pits(for rain harvesting) along the ring road at VTU, "Jnana Sangama", Belgaum

Contractor: Sri B. G. Godse, Contractor, Belgaum Agreement No.VTU/IRC No.27/2010-11, dated:30.8.2010

### **ROYALTY CHARGES**

	PART - B		Royalty	M	letal / Ru	bble / Sto	nes		Murru	m / San	d	
I. NO	Item Discription	Unit	Qty in this bill	Const	Qty	Rate	Amount	Const	Qty	Rate	Amount	Net Amount
	Providing 10cm thick RCC 1:1.5: 3 concrete for perforated drawing of 1500mm dia with suitable perporated holes as per drawings using clean granite or trap jelly of 20mm and down size with nessesary reinforcement at 20cm.C/C both the ways of 8mm dia including formwork centing, curing, finising the exposed faces with CM 1:3 etc., complete.		5,47	0.94	5 14	66.78	343.37	0.45	2.46	55.20	135.87	479.24
		Cuili	0.47	0.94	5.14	66.78	343.37	0.45	2.40	55.20	135.87	479.24
							343.37				135.87	479.24

Say Rs,

479.00

Resident Engineer VTU, Belgaum

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

# FORM NO.PWG 46 Completion Certificate

1 Name of Section Resident Engineer, V.T.U, "Jnana

Sangama", Belgaum

2 Name of work Construction of footpath & side

drainage including percolation pits (for rain harvesting) along the ring road at VTU, "Jnana Sangama",

Belgaum

3 Sanctioned estimate dated: Rs. 62,39,000=00 Dt:09-04-2010

4 Agency Sri B. G. Godse, Contractor, Belgaum

5 Authority IRC No.27/2010-11, dated:30-08-2010

6 Date of commencement 01-09-2010

7 Due date of completion 28-02-2011

8 Actual date of completion 28-02-2011

9 Name of Engineer & Subordinate

By whom the work has been supervised giving the details of their personal incumbencies etc. date of taking and handing over the charge in connection their with

Sl.No.	Name and designation	Period of	Period of		
		incumbency From	incumbency To		
1	Sri. Jayappa D., Asst. Engr.,	01-09-2010	28-02-2011		
2	Sri. U. D. Godkhindi, A.E.E.,	01-09-2010	28-02-2011		
3	Sri.T.M. Prakash, R. E.	01-09-2010	28-02-2011		

Certificate: Certified that the work of Construction of footpath & side drainage including percolation pits (for rain harvesting) along the ring road at VTU, "Jnana Sangama", Belgaum Inspected by me on 28-02-2011 and completed satisfactorily as per terms and conditions of contract agreement.

RESIDENT ENGINEER VTU, BELGAUM

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

FORM NO.PWG 47 Completion Report

Name of work:

Construction of footpath & side drainage including percolation pits (for rain harvesting) along the ring road at

VTU, "Jnana Sangama", Belgaum

Name of contractor: Sri B. G. Godse, Contractor, Belgaum

Date of commencement: 01-09-2010

Due date of completion: 28-02-2011

Actual date of completion: 28-02-2011

Sr. No	Name of work	Estimated amount Put to tender (Rs)	Tendered amount (Rs)	Expend- iture (Rs)	Savings or Excess (Rs)	% of Savings or Excess	Remarks
1	Construction of footpath & side drainage including percolation pits (for rain narvesting) along the ring road at VTU, "Jnana Sangama", Belgaum	62,38,161/-	63,03,380/-	66,16,762/-	3,04,653/- Excess	4.83% Excess	As per actual.

- II. By whom executed: 1) Shri U. D. Godkhindi, A.E.E.,
  - 2) Shri Jayappa. D., Asst. Engr.,
- III. Date of last inspection of Resident Engineer: 28-02-2011
- IV. Name of the officials who took final measurements & also inspected:

1) Shri U. D. Godkhindi, A.E.E.,

2) Shri Jayappa. D., Asst. Engr.,

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Donnpa

Head of Account: 5001-101-101

the works abstract

Estimate Sanctioned for Rs. 4,99,849=00

Form P.W.G. 33 (Revised)

# RUNNING ACCOUNTS BILL

Richarge P

(See Para 215)

(Final payment must be made on forms printed on yellow paper which should not be used for Intermediate payments)

For contractor: - This form provides for (1) Advance payments and (2) payments for measured works. The form of Account of secured Advances which has been printed separately should be attached where necessary.

Sub - Division

Division VISVESVAF	RAYA T	<u>ECHNOLOG</u>	ICAL UNIVERSITY, BEI	_GAUM da	ated		
Cash Book Vr. Ne-	i Suresl	n C. Hooli, B	elagavi				
Name of Contractor							
Name of Work Provid	ing of I	Recharge pit	& Hydrofacturing for exis	sting Bore we	ells in VTU	Campus,	Jnan
Serial No. of this bill R.	A. Bill	No.1 <sup>st</sup> & Fina	al				
No. and date of his/her	previous	bill for this wo	ork	100	act Diffueldings		
Reference to Agreemer	nt No	ΓU/IRC-05/2	020-21, Dt:06-07-2020		4		
Date of written order to	commen	ce work 07-0	7-2020			ermin i	
Due Date of completion		20-08-202	0				
Actual Date of Completi	on: 18-0		OUNT OF WORK EXECUTED				
Item of work (Grounded			Quantity executed up to	Payment on	the basis of		
under 'Sub Heads' and Sub-works of estimate	Unit	Rate	date as per Measurement Book	actual measu	rements up to	D .	
1	2	3	4	5	Previous bill   6	Remark 7	S
SEPARATE SHEETS ARE ENCLOSED							
Total value of work done to	date (A)		:Rs. 4,57,726.00				
Deduct Value of work show	n on prev	ious Bill	:Rs <b>0.00</b>				
Net Value work since previo			:Rs. <b>4,57,726.00</b>				
Figures (F) in words Rupee	S	Rs. Four La	akhs Fifty Seven Thousand	Seven Hundr	ed Twenty S	ix only	
When there are two or no of works the accounts of	nore enti f which a	ries in column are kept by Su	6 relating to cash Sub-Heab-Heads, be totaled and th	ad of estimate e total recorde	they should i	n the case	e g

(P.T.O.)

#### II. CERTIFICATES AND SIGNATURE

To Measurements	on	which	are	based	the	entries	in	columns	1	to	6	of	Account	1	were	made
by Sri Jayappa, As	st. E	ngr., V	TU, E	Belagavi												
On 20-08-2020									and	d re-	rec	orde	ed at page			

Measurements recorded in M.B. No.2238, page from 13 to 17

2. Certified that in addition to and quite apart from the quantities of work actually executed at shown in column 4 of Account I, some work has actually been done in connection with several items, and value of such work (after deducting there from the proportionate amount of secured advance, if any ultimately recoverable on account of the quantities or materials used therein) is in no case, less than the advance payment as per items 2 of the memorandum of payment made as proposed to be made for the convenience of the contractor, in anticipation of and subject to the results of the details measurements, which will be made as soon as possible & measurements checked by *Resident Engineer, VTU, Belgaum*.

Dated Signature of Officer						
Preparing the bill						
(Rank)		(Rank)	Dated	Signature of the Resident En	Officer A agavi	, uthorising
Signature of Contractor				Payment		
Measurments are accepte	& Full	sofimal)				
This Certificate must be signed by the	Sub-Div	visional or Divis	ional Of	ficer.		
This Signature is necessary only who payment in such case the two signature a			pares the	e bill is not the Offic	er who aut	thorise the
· II	I MEMO	RANDUM OF I	PAYMEN	NTS	Rs. 4,57	,726.00
Total value of work actually measured a     Total 'up-to-date' advance payment for	as per Ad work not	ccount I, Colum t yet measured	n 5 Entr as per c	ry (A) details given below:		
Rs.		P. (-)		(B)		- :
(a) Total as per previous bill	(-)	(b) Sii	nce prev	vious bill		
as per page of I	M.B. No.					
3. Total 'Up-to-date' Secured advance of	Security	or materials as	per Ann	nexure (from 26A) Co	olumn 3 En	try (c).
4. Total (Items 1 +2 +3)						
<ol><li>Deduct amount with held Figures for Works abstract</li></ol>	(a)	From previous	s bill as p	per last running Acco	ount bill	
Rs. P.	(b)	From this bill.				
6. Balance i.e. 'Up-to-date' payments			(items	s 4-5) (K)		
7. Total amount of payment already made of forwarded with	e as per e Accour		Running	g Account Bill No. I 19	Rs.	0.00

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

NAME OF WORK: Providing of Recharge pit & Hydrofacturing for existing Bore wells in VTU Campus, Jnana Sangama, Belagavi.

Estimated Amount : Rs 4,99,849.00 Tendered Amount : Rs 4,59,999.00

Agency: Sri S.C. Hooli

Ageement Number: VTU/IRC No.05/2020-21, dated:06-07-2020

Date of Work Order: VTU/BGM/RE/ AE/2020-21/1102/1 Date 06-07-2020

Date Of Commencement: 07-07-2020 Due Date of Completion: 20-08-2020 Actual Date of Completion 18-08-2020

### Date of Recording 20-08-2020

**RA BILL-1st and Final** 

l No	Item	Unit	Tender	Tender	Previo	usly Paid	Now t	o be paid	Up	to Date
			Qty	Rate	Qty	Amount	Qty	Amount	Qty	Amount
1	Earthwork excavation by manual means for foundation of buildings, culverts, water spply and sanitary lines and electrical conduits etc, eithe in pits or in trenches 1.5 m and above in width, in hard soil not exceeding 1.5 m. In depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from the edges of excavation with lead up to 50 m. including breaking of clods complete as per specifications The Bidders Should qualify all the Conditions mentioned in the bid document	Cum	131.18	200.0	0.00	0.00	130.90	26180.00	130.90	26180.00

I No	` Item	Unit	Tender	Tender	Previo	usly Paid	Now t	o be paid	Up	to Date
			Qty	Rate	Qty	Amount	Qty	Amount	Qty	Amount
2	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications The Bidders Should qualify all the Conditions mentioned in the bid document	Cum	6.23	3000.0	0.00	0.00	6.19	18570.00	6.19	18570.00

I No	Item	Unit	Tender	Tender	Previo	ously Paid	Now t	o be paid	Up	to Date
			Qty	Rate	Qty	Amount	Qty	Amount	Qty	Amount
3	Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintles, and beams retaining walls, return walls, walls (any thickness) including attached plasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications The Bidders Should qualify all the Conditions mentioned in the bid document		5.36	5000.0	0.00	0.00	5.34	26700.00	5.34	26700.

l No	Item	Unit	Tender	Tender	Previo	usly Paid	Now t	o be paid	Up	oto Date
			Qty	Rate	Qty	Amount	Qty	Amount	Qty	Amount
4	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications The Bidders Should qualify all the Conditions mentioned in the bid document		10.37	2000.0	0.00	0.00	10.15	20300.06	10.15	20300.00
5	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications The Bidders Should qualify all the Conditions mentioned in the bid document		11.18	2000.0	0.00	0.00	10.93	21860.00	10.93	21860.00
6	Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications The Bidders Should qualify all the Conditions mentioned in the bid document	Sqm	49.68	146.0	0.00	0.00	48.60	7095.60	48.60	7095.60

l No	Item	Unit	Tender	Tender	Previo	usly Paid	Now	to be paid	Uı	oto Date
154			Qty	Rate	Qty	Amount	Qty	Amount	Qty	Amount
7	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications A. Stone / Boulder MORTH Specification No. 2504 The Bidders Should qualify all the Conditions mentioned in the bid document		90	500.0	0.00	0.00	88.20°	, ,		44100.00
8	Supply of coarse sand The Bidders Should qualify all the Conditions mentioned in the bid document	Cum	7.2 🔨	4000.0	0.00	0.00	ر 7.20	28800.00	7.20	28800.00
9	Supplying and spreading Charcoal The Bidders Should qualify all the Conditions mentioned in the bid document	Kg	400	500.0	0.00	0.00	400.00	200000.00	400.00	200000.00
10	Drilling holes of size 3.50mm to 4.0mm dia. To casing pipe upto 1 m. depth The Bidders Should qualify all the Conditions mentioned in the bid document	No	300 /	100.0 ×	0.00	0.00	300.00	30000.00	300.00	30000.00
11	Providing aqua nylon mesh for sand filter The Bidders Should qualify all the Conditions mentioned in the bid document	LS	4/	1000.0 🗡	0.00	0.00	4.00	/ 4000.00	4.00	4000.00
12	Supplying and Binding with Nylon Rope The Bidders Should qualify all the Conditions mentioned in the bid document	LS	4	30.0	0.00	0.00	4.00	120.00	4.00	120.00

l No	Item	Unit	Tender	Tender	Previo	usly Paid	Now t	o be paid	Up	to Date
140			Qty	Rate	Qty	Amount	Qty	Amount	Qty	Amount
13	Hydrofracking of 150mm to 165mm dia. Bore wells by using Hydrofracturing unit using single packer with minimum of two fractures including transportation unit supporting vehicle, crew charges, cost of all consumables and yield testing of bore wells one hour at once before fracturing and the other after fracturing within a radius of 50km. from taluka head quarters including supplying necessary water for fracturing etc; complete The Bidders Should qualify all the Conditions mentioned in the bid document	each	3	5000.0	0.00	0.00	3.00	15000.00	3.00	15000.00
14	Cleaning of bore well including yield testing of bore well either using slow or fast rig for not more than two hours at the final depth with a minimum working of two hours continuously with air compressor or suitable pump as per specification including the cost of transportation charges, crew charges, cost of all consumables etc; complete The Bidders Should qualify all the Conditions mentioned in the bid document	each	3	5000.0	0.00	0.00	3.00	15000.00	3.00	15000.00
	Total Amount Rs			Say Rs		0.00		457725.60 <b>4,57,726.0</b> 0	/	457725.6 <b>4,57,726.0</b>

CONTRACTOR

Assistant Engineer VTU, Belagavi

Resident Engineer

NAME OF WORK: Providing of Recharge pit & Hydrofacturing for existing Bore wells in VTU Campus, Jnana Sangama, Belagavi.

Agency: Sri Sri S.C. Hooli

# RA BILL NO :-1st and Final ROYALTY CHARGES

				Meta	I / Rubble	e / Stones		Murr	um / Sand	t l	
I. NO	Item Discription	up to date Qty	Const	Qty	Rate	Amount	Const	Qty	Rate	Amount	Net Amount
1.110	item biseription										
2+3	Providing & Laying Cement Concrete work	11.53	0.95	10.95	126.00	1380.14	0.45	5.19	138.00	716.01	2096.15
4+5+7	Size stone masonry	109.28	1.00	109.28	126.00	13769.28	0.00	0.00	138.00	0.00	13769.28
4	sand filling	7.20	0.00	0.00	0.00	0.00	0.02	0.14	138.00	19.87	19.87

**Total Amount Rs** 

15885.31

Say Rs

15885.00

Contractor

Assistant Engineer

VTU, Belagavi

Resident Engineer
VTU, Belagavi

7

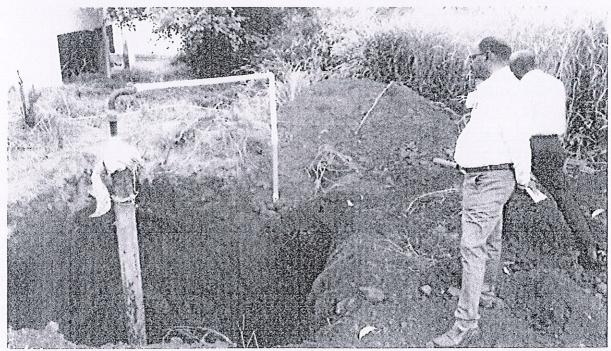




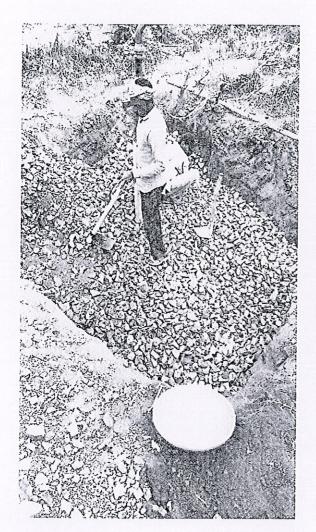
Munit

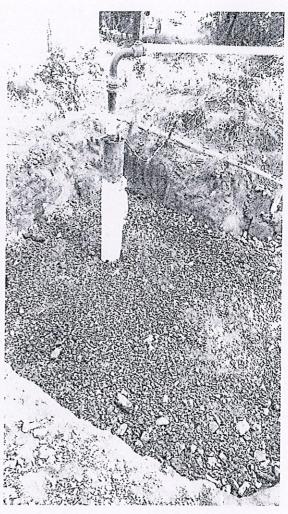






Mary





Any I





Mulunes

Rs. 4,57,726.00

(a) By reco	now to be made detailed be every of amount creditable to		P.	(a) Rs.	P.
Deduction	s:-				
SI.	Dtila	Amount			
. No.	Particulars	(in.Rs.)			
1	I.T. @ 2%	. 9,155.00			
2	SC on IT @ 10%	915.00			
3	Edu. Cess on IT @ 4%	366.00			
4	LWC @ 1%	4,577.00			
5	GST @ 2%	9,155.00			
6	CBF @ 0.1%	458.00			
7	Royalty	15,885.00			
	Tota	I Rs. 40,511.00			
					Rs. 40, <u>511.00</u>
Total 5 (b)	+	(G)	)		Rs. 4,17,215.00
			_) (b)		
of acc	overy of amounts creditable ounts:	e other works of Head			
(c) By che	eque Rs. 4,17,215.00		)		
Total 8 (b)	+ (c)				
			(H)		
Pay Rs Cheque			(		)
				Dated initials	of Disbursing Officer. ent Engineer
					J, Belagavi
Received (					ove memorandum. unt of this work.
				311 4000	and of this from.
Dated the				(a	mount in vernacular)
Witness	Paid by me Cheque No	· · · · · · · · · · · · · · · · · · ·			
	Date			Full	Signature of Contractor
		EX. ENGR.			
Paid by me v	ide Cheque No			Dated	19
payment.		Date	ed initial:	s of persons ac	tually making the

This figure should be posted to see that it agrees with the total 7 and 8.

If the net amount to be paid is less than Rs. 10 and it cannot be included in cheque the payments should be made in cash, entry being already suitably and the alteration attested by dated initials.

Here specify the net amount payable vide item 8 (c).

This payee's acknowledgement should be for the gross amount paid as per item 8 (i.e. a+b+c)

Payments should be attested by some known person when the payee's acknowledgement is given by a mark. See of thumb impression.

#### IV. REMARKS

This space is reserved for any remarks which he Disbursing Officer may wish to record in respect of the execution or the work, check of measurements or the state of contractor account.

Entries relating to each description of materials should be posted thus in column 3. First enter the difference between quantities in columns 1 and 2 then show below this entry. The quantities if any brought to site against which a further advance has been auhorised this entry being prefixed by the plus sign. Finally strike the total of the two entries which will present the total quantity outstanding.

### Entries in column 8 show the money values of the total quantities outstanding as per column 3

Certified (1) that the plus quantities of materials shown in column 3 of the Account above have actually been brought by the contractor to the site of the work and the contractor has not previously received any advance on their security (2) that there materials are of an imperishable nature and are all required by the contractor use or the work in connection with items for which rates for finished work have been agreed upon, and (3) that a formal agreements in form 31 signed and executed by the contractor in accordance with paragraph 288 (a) of the Central Public Works Accounts Code is recorded in the Divisional Office.

Dated Signature of Officer Preparing the
Bill
Rank
Dated Signature of Officer, Authorising
Payment
Resident Engineer (Rank) WTH Relegant

These certificates must be signed by the Sub-Divisional or Divisional Officer.

This signature is necessary only when the Officer who prepares the bill is not the officer who authorises the payment case the two signatures are essential.

COPY.

#### II. CERTIFICATES AND SIGNATURE

То	Measurements	on	which	are	based	the	entries	in	columns	1	to	6	of	Account	1	were	made
by S	Sri Anand Rogai	nnav	ar, Ass	t. En	gineer,	VTU,	Belagav	i.						, iocount		were	made

On 20-07-2015

and re-recorded at page

Measurements Book No. e-Abstract sheets recorded page from 1 to 8 & e-Measurement Sheets recorded page from 1 to 16

2. Certified that in addition to and quite apart from the quantities of work actually executed at shown in column 4 of Account I, some work has actually been done in connection with several items, and value of such work (after deducting there from the proportionate amount of secured advance, if any ultimately recoverable on account of the quantities or materials used therein) is in no case, less than the advance payment as per items 2 of the memorandum of payment made as proposed to be made for the convenience of the contractor, in anticipation of and subject to the results of the details measurements, which will be made as soon as possible & measurements checked by *Resident Engineer, VTU, Belagavi.* 

Dated Signature of Officer
Assistant Executive Enginesi
fsvesvarava Technologica Univerรกิ Prepariกูดู เลือ bill
Preparing the bill

(Rank)

Resident Engineer

Visvestating Technological Matronomo

Dated Signature Officer Authorising

(Rank) Utopia Automation & Control Pvt. 19d.

Signature of Contractor

**Authorised Signatory** 

Payment

This Certificate must be signed by the Sub-Divisional or Divisional Officer.

This Signature is necessary only when the Officer who prepares the bill is not the Officer who authorise the payment in such case the two signature are essential.

### III MEMORANDUM OF PAYMENTS

Rs. 1,73,71,139.00

1. Total value of work actually measured as per Account I, Column 5 Entry (A)

2. Total 'up-to-date' advance payment for work not yet measured as per details given below:

Rs.

P. (-)

(B)

(a) Total as per previous bill

(-)

(b) Since previous bill

as per page

of M.B. No.

- 3. Total 'Up-to-date' Secured advance of Security or materials as per Annexure (from 26A) Column 3 Entry (c).
- 4. Total (Items 1 +2 +3)
- 5. Deduct amount with held Figures for Works abstract

P.

(a) From previous bill as per last running Account bill

Rs.

(b) From this bill.

6. Balance i.e. 'Up-to-date' payments

(items 4-5) (K)

7. Total amount of payment already made as per entry (K) of last Running Account Bill No. Rs. 1,09,27,000.00 of forwarded with Accounts for 19

Rs. 64,44,139.00

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

Name of work:- Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, Jnana Sangama" Belagavi

Name of Contractor:- M/s. Utopia Automation & Control Pvt. Ltd., Satara

### RA Bill No.2nd & Final

No	Item Name	Item	Unit	Quantity	Rate	Previ	ous Paid	Now t	obe Paid	Upto Date	
1	Civil Works :Earth work excavation for Pipe line	Code				Qty	Amount	Qty	Amount	Qtv	Amount
	trenched including depositing on bank with lead including shoring, strutting barricading, danger lighting and using sight rails and boning rods at every 100 meters wherever necessary as directed by engineer in the following strata etc. complete: i) in all kinds of soil mixed with boulders upto 30cms size and exclusive if										711104111
	disintegrated rock for 0 to 2.0m depth	1	Cum	100.00	145.0	98.11	14225.95	26.89	3899.05	125.00	10105
	Above 125% is approved in the 95th Estate Board				164.55	0.00	0.00	40.32			18125.
	Refilling pipelines trenches and foundation with selected available earth from trench excavation and foundation including watering, consolidation in layers of 15cms thickness including disposing off the surplus				39,1100	0.00	0.00	40.32	6634.66	40.32	6634.
	earth with all lead and lift	2	Cum	100.00	50.0	100.20	5010.00	0.00	0.00	100.20	5010.

SNo	Item Name		Unit	Quantity	Rate	Previ	ous Paid	Now t	obe Paid	Upt	o Date
		Code	0	quantity	riate	Qty	Amount	Qty	Amount	Qty	Amount
3	Providing and laying reinforced cement pipes NP2 of										
	150mm dia for swerage line including pointing ends										
	and fixing collars with cement mortar 1:1 running on										
	MS saddle support and BBM masonary Pedestal with										
	plaster at 3m. Center to Center and Inspection										
	chamber/ Manhole at every 20m. Including all										
	neccessary excavation in all type of soil and refilling										
	etc complete as per existing ground levels with proper										
	gradation to drain in proposed collection tank.including										
	cost of all material, labour, curing, complete as per										
	specification, Drawing and direction of EIC										
	( Excluding cost of chambers/Manhole)	3	m	570.00	1160.0	595.50	690780.00	117.00	135720.00	712.50	826500.00
	Above 125% is approved in the 95th Estate Board				1160.00	0.00	0.00	89.50	103820.00	89.50	103820.00
	Providing and constructing of Manhole Chambers conical in shape									00.00	100020.00
	at top with CC 1:3:6 foundation using 40mm and down size graded										
	metal of approved quality and with an offset of 0.15mts alround the										
	chamber and brick masonry in CM 1:4 plaster with bricks of										
	approved quality and CM plaster 1:3 proporation 12mm thick inside										
	and outside except for the conical surface outside where the										8
	thickness of plaster shall be 20mm thick with 1 to 6 slope in the										
	concerte towards the central drain, finished smooth and fixing of										
	pipes in CC CC 1:2:4 with graded metal of 20mm and down size										
	including supplying and fixing SFRC manhole frame and cover										
	conforming to IS 12592 ( part-I) 1988 & IS 12592 ( Part-II) : 1991										
	with latest amendments in CC 1:2:4, supplying and fixing of										
	plasteric foot steeps staggred at 30 cms apart as directed, watering,										
	curing, barricading, danger, lighting, pouring tar over MH frame and										
	cover cost of tar, shoring, strutting, dewatering, engraving, manhole										
	No on the inner conical surface etc as per the direction and fixing										
	ncluding earth work in all soils etc complete, raod box to fixed in CC										
	1:3:6 and plastered with CM 1:3, 20mm thick with all lead and lift										
	curing for 10 days per spec ( KUWSDB SR) : For 1200 mm dia upto	4	Nos	16.00	12000.0	0.00	0.00	0.00	0.00	0.00	0.00,
5	For upto 1.0m & upto 2.0 mt depth	5	Nos	8.00	24500.0	10.00	245000.00	0.00	0.00	10.00	245000.00

SNo	Item Name	Item Code	Unit	Quantity	Rate	Previ	ous Paid	Now to	obe Paid	Upt	o Date
	Above 125% is approved in the 95th Estate Board	Code				Qty	Amount	Qty	Amount	Qty	Amount
6	(Considering Collection Tank of Volume 126 Cum.,				23316.65	0.00	0.00	32.00	746132.80	32.00	746132.80
	Treated water Tank of Volume 185 Cum., Sludge Tank of Volume 126 Cum.) Providing and laying in position reinforced cement concrete Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine										
1	aggregate @0.47cum, with superplastisiser @ 3lts confirming to IS9 103-1999 Reaffirmed-2008, machine mixed, concrete laid, vibreted R.C.C. beams, columns of all sizes in foundation plinth and superstructure ground floor level for roof slabs, stairecase, lintles,										
i	columns,RCC Walls , including cost all materials,										
1	abour, HOM of machinery, curing, complete as per										
5	specifications.	6	Cum	93.00	5500.0	83.23	457765.00	33.02	181610.00	110.05	0000== 00
	Above 125% is approved in the 95th Estate Board				5845.06	0.00				116.25	639375.00
ii p r a p n	Providing T.M.T. Steel reinforcement for RCC work neluding straightening, cutting, bending, hooking, blacing in position, lapping and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks, and wastage shall not be measured and paid) cost of materials, labour HOM of machinery complete as per specifications for Ground						0.00	12.77	74641.42	12.77	74641.42
	Floor, PWD SR 2013-14, P- 19, I-4.46.3  Above 125% is approved in the 95th Estate Board	/	Q	35.00	7200.0	43.75	315000.00		0.00	43.75	315000.00
8 P	Providing and removing centering , shuttering ,				7268.47	0.00		36.990	268860.71	36.99	268860.71
ve in a	trutting propping etc and removal of formwork for ertical surface such as walls at any thinkness, nocluding attached pilasters, buttresses, plinth beams and string courses cost of all materials, labour omplete as per specifications. Specification. PWD SR										
20	013-14, P- 17, I-4.31	8	Sqm	600.00	300.0	336.00	100800.00	328.74	98622.00	664.74	199422.00

10 F	Extra for use of water proofing compound in cement concrete of mix M25 at one kg of compound per bag of cement	Code		Quantity	Rate				obe Paid	Upto Date	
10 F	concrete of mix M25 at one kg of compound per bag of					Qty	Amount	Qty	Amount	Qty	Amount
10 F	ement										Amount
n		9	Cum	90.00	300.0	83.23	24969.00	29.27	8781.00	112.50	22750.0
n	Above 125% is approved in the 95th Estate Board				257.43			9.23	2376.08	9.23	33750.0 2376.0
n	Providing and laying in position plain cement concrete							0.20	2070.00	3.23	23/0.0
	of mix 1:3:6 using 40mm and down size graded granite										
6	netal machine mixed, concrete laid in layers not										
1	xceeding 15cms. Thick well compacted, in foundation										
	nd plinth, including cost of material, labours, HOM of										
	nachinery, curing complete as per specification	10	Cum.	30.00	4100.0	37.50	153750.00		0.00	07.50	
	Above 125% is approved in the 95th Estate Board				4438.82	0.00	0.00	1.66	0.00	37.50	153750.0
11 F	iling in foundtaion/below floor with granite/trap/trap/				1700.02	0.00	0.00	1.00	7368.44	1.66	7368.4
b	roken metal 150 mm and down size with approved										
S	and including hand packing, ramming, watering,										
III	cluding cost of all materials and labour with all lead										
a	nd lift complete as per specification	11	Cum.	40.00	900.0	50.00	45000.00		0.00	50.00	45000.00
10 0	Above 125% is approved in the 95th Estate Board				1710.11	0.00	0.00	4.32	7387.68	4.32	7387.68
	roviding and constructing burnt brick masonry for										
	asement and super structure with approved quality of										
	on-modular bricks of standard size of class										
	esignation 35 with Cement mortar 1:6 inculuding cost										
	materials, labour charges, scaffolding, curing										
CC	omplete as per specifications for Ground Floor	12	Cum	20.00	5000.0	6.44	32200.00	18.56	92800.00	25.00	125000.00
10 0	Above 125% is approved in the 95th Estate Board				4686.15	0.00	0.00	27.74	129993.80	27.74	129993.80
13 12	roviding 18mm thick cement plaster in single coat										120000.00
WI TO	th cement mortar 1:4,to Cement plaster including										
re	unding off corners whereever required smooth ndering,: Providing and removing scaffolding,										
in	cluding cost of materials, labour, curing complete as										
ре	er specifications	13	Sqm	150.00	300.0	0.00	0.00	187.50	56250.00	107.50	E00E0 00
	Above 125% is approved in the 95th Estate Board		- 4	.00.00	194.84	0.00	0.00	1139.46	56250.00 222012.39	187.50 1139.46	56250.00 222012.39

. . . . . t

SNo	Item Name	Item	Unit	Quantity	Rate	Previ	ious Paid	Now to	obe Paid	Upt	o Date
		Code				Qty	Amount	Qty	Amount	Qty	Amount
14	Providing & Fixing Precoated Trapezoidal shaped										·
	sheets of 24 gauge of requierd size to enclose water										
	treatment panel ( roof size 9mx7m) which is proposed										
	to be installed over collection tank with necessary M.S.										
	structural steel supporting roofing arrangements etc. complete. rate including all material, Labour,										
	fabrication etc.complete As per the direction of EIC	14	Sqm	76.00	1180.0	0.00	0.00	05.00	440400 00		
	Above 125% is approved in the 95th Estate Board		Sqiii	. 70.00	1100.00	0.00	0.00	95.00	112100.00	95.00	112100.00
15	Provding and laying red oxide flooring 40mm thick with				1100.00	0.00	0.00	53.00	58300.00	53.00	58300.00
	an under layer of 30mm thick M-25 cement concrete,										
	using broken granite metal of 12.5mm nominal size										
	and top layer of 10mm thick plaster with 1:3 CM mixed										
	with red oxide finished with floating coat of neat										
	cement mixed with red oxide, including cost of material,										
	labours, curing complete as per spec,	15	Sqm	63.00	350.0	0.00	0.00	78.75	27562.50	70 75	07500 50
	Above 125% is approved in the 95th Estate Board		- 4		559.27	0.00	0.00	79.59	44512.30	78.75 79.59	27562.50
16	Providing and fixing pull and push type rolling shutter of				000.27	0.00	0.00	13.33	44012.00	79.59	44512.30
	approved make out of 18gauge, 75mm widw cold rolled										
	steel laths of convex corrugation, with side guides and										
	bottom rail, with interlocking arrangments for steel laths										
	by means of alternate clips, suspension shft with high										
	tension coil type springs two numbers, mounted on										
	specially designed pip shaft, with bracket plates, guide										
ľ	channels, ball bearing arrangments, for inside &										*
	outside locking with push and pull operation complete										
	ncluding pulling hooks, 4 Nos, handles with all fittings										
1	and accesories, painted with a coat of red lead paint(		4								
	without top cover) cost of materails, labour, HOM of machinery complete as per spec.	16	Sqm	3.50	3500.0	0.00	0.00	4.00	45000.00		
1	Above 125% is approved in the 95th Estate Board	10	Oqiii	3.30	3262.74	0.00	0.00	4.38	15330.00	4.38	15330.00
	7.5010 12070 10 approved in the 30th Estate Board				3202.74			2.12	6917.01	2.12	6917.01

SNo	Item Name	Item	Unit	Quantity	Rate	Previ	ious Paid	Now to	obe Paid	Upt	o Date
		Code				Qty	Amount	Qty	Amount	Qtv	Amount
17	Providing and fixing top covers made out of 20 goauge									,	7 timodrit
	MS sheet over pull and push rolling shutter bent to										9
	shape including cost of red lead primer coat of										
	painting, material, labours, HOM of machinery complete as per specification	17	Dest	4 70	550.0						
18	Providing and fixing in position anodized aluminium	17	Rmt	1.70	550.0	0.00	0.00	1.70	935.00	1.70	935.00
	windows and ventilators as per approved drawings with										
	sliding shutters using Two track window frame of size										
	92x31.75mm bottom section 1.3mm thick, weight										
	1.07kg/m; sides and top sections 1.3 mm, thick, weight										
	0.933 kg/m shutter frame section comprising top and										
	bottom section of size 40mmx18mm, wall thickness										
	1.25mm. weight 0.417 kg./m. shutter side outer										
	40mmx18mm. wall thickness 1.25mm. weight 0.417										
	kg/m, shutter interlock section 40mmx26.7mm wall										
	thickness 1.1 mm. thick, weight 0.469 kg/m, the										
	shutters mounted on nylon rollers with approved quality										
	of fixtures such as aluminium handles tower bolts etc.;										
	providing and fixing 5.5mm, thick plain glass for										
	shutters fitted with rubber beading all aluminium										
	sections anodised 12 to 15 microns thick including										
	cutting to required length, joints mitred subdividing the										
1	frame tenonned and rivetted, in the assembled frame,										
18	stiffened with end clips for corners, angles etc., and										
f	fixed to the walls, lintels, floor beams/cills as the case										
r	may be, with necessary steel screws, raul plugs or teak										P
	wood gatties including cutting masonry or concrete and	18	Sqm	3.00	4500.0	0.00	0.00	3.75	16875.00	3.75	16875.00
	Above 125% is approved in the 95th Estate Board				3696.83	0.00	0.00	0.25	924.21	0.25	924.21
19	Providing, fabricating and fixing in position MS Grill to									0.20	021.21
Įv	windows made out of 12mm x 12mm MS square bars,										,
Įv	with spacing @ 125 mm c/c welded over MS flat of										
12	25mm x 6mm size as per design and drawing and fixed										
	with screws and rawl lugs / teakwood guttas, etc. a)	46									
-10	Ground Floor	19	Kgs	50.00	95.0	0.00	0.00	62.50	5937.50	62.50	5937.50
	Above 125% is approved in the 95th Estate Board				100.95	0.00	0.00	17.50	1766.63	17.50	1766.63

SNo	Item Name	Item Code	Unit	Quantity	Rate	Prev	ious Paid	Now	tobe Paid	Up	to Date
27	Providing, supplying , Installing, Testing &					Qty	Amount	Qty	Amount	Qty	Amount
	Providing, supplying , Installing, Testing & Commissioning of Sulphuric Acid Dosing System For										Amount
	Equilization Tank, with Dosing Pump, Storage Tank,										
	Side mounted level Gauge, level Switch, isolation valve										
Y EW	for water line with all accessories complete.Rate										
	inclusive of all taxes . Make / Model : Positive										٠
	measuring Equivalent	27	Nos	2.00	147500.0	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			110625.00	2.00	221250.00		0.00	2.00	
- 00		BR			36875.00	0.00	0.00	2.00	73750.00	2.00	221250.00
28	Providing, fixing , Installing, Testing & Commissioning		•				0.00	2.00	70730.00	2.00	73750.00
	E clear reactor unit withTransfer Pump with manual										
	valve, Eclear Reactor Unit, Selector Switch, pressure Gauge, manual valve, Ball valve with all accessories										
	complete.Rate inclusive of all taxes . Make / Model :										
	Utopia or Equivalent	28	Nos	1.00	3100000.0	0.00	0.00		0.00		
	75% recommended	PR		1100	2325000.00	1.00	2325000.00		0.00	0.00	0.00
		BR			775000.00	0.00	0.00	1.00	0.00	1.00	2325000.00
29	Providing & fixing, Installing, Testing & Commissioning				770000.00	0.00	0.00	1.00	775000.00	1.00	775000.00
1	of Dosing Systems For Eclear Reactor with Dosing										
	Pump,Storage Tank, Side mounted level Gauge, level										
	Switch, isolation valve for water line, Costic Dosing										
	Tank, low level switch, high level switch, drain valve,										
	Costic Dosing Pump, manual valve, Strainer Filter For										
	Caustic Dosing, with all accessories etc, tansportation										
	tc complete. Rate inclusive of all taxes, Make / Model										
:	Positive measuring or Equivalent	29	Nos	3.00	226666.7	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			170000.03	3.00	510000.08		100000000000000000000000000000000000000	0.00	0.00
		BR			56666.68	0.00	0.00	3.00	0.00	3.00	510000.08
		ALCO THE RES			30000.00	0.00	0.00	3.00	170000.03	3.00	170000.03

SNo	Item Name	Item	Unit	Quantity	Rate	Prev	ious Paid	Now	tobe Paid	Up	to Date
20	Droviding 0 5 1	Code				Qty	Amount	Qty	Amount	Qty	Amount
30	Providing & fixing , Installing, Testing & Commissioning of Membrane Circulation Unit With										
	Membrane Circulation Tank, with Launders, low level										
	switch , high level switch, Membrane Ultrafiltration						•				
	Modules, Cleaning System For UF Membrane, Dosing										
	Pump, Storage Tank, Side mounted level Gauge, level										
	Switch, isolation valve for water line with all										P
	accessories etc , tansportation etc complete. Rate										
	inclusive of all taxes.Make / Model : Utopia or										
	Equivalent	30	Nos	1.00		0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			2587500.00	1.00	2587500.00		0.00	1.00	2587500.00
21	Droviding 9 finite 1 at 11 To 1	BR			862500.00	0.00	0.00	1.00	862500.00	1.00	862500.00
31	Providing & fixing, Installing, Testing & Commissioning of UF Feed Pump and CIP System with Pressure										
	indicator, manual valve, Membrane Back Flush										
	Pumps, Pressure Indicator, manual valve with all										
	accessories etc , tansportation etc complete. Rate										
	inclusive of all taxes.Make / Model : Grundfoss or										
	Equivalent	31	Nos	2.00	265000.0	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			198750.00	2.00	397500.00		0.00	2.00	397500.00
		BR			66250.00	0.00	0.00	2.00	132500.00	2.00	132500.00
	Providing & fixing, Installing, Testing & Commissioning							2.00	102000.00	2.00	132300.00
	of Activated Carbon Filter with Accessories, pressure										
	Gauge, Drain / Vent Valve, pressure vessel, media,										
	Multiport Valve with all accessories etc, tansportation										1
	etc complete. Make / Model: Utopia or Equivalent	32	Nos	1.00	280000.0	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			210000.00	1.00	210000.00		0.00	1.00	210000.00
		BR			70000.00	0.00	0.00	1.00	70000.00	1.00	70000.00
33	Providing, Installing, Testing & Commissioning, of								7 0000.00	1.00	70000,00
1	Sludge handling Sludge Pump with Drain valve										
1	accessories with all accessories etc , tansportation etc										
li li	complete.Rate inclusive of all taxes. Make / Model : Utopia or Equivalent	33	Nos	1.00	520000.0	0.00	0.00				
		00	1403	1.00	320000.0	0.00	0.00		0.00	0.00	0.00

SNo	Item Name	Item Code	Unit	Quantity	Rate	Previ	ous Paid	Now t	obe Paid	Upt	o Date
						Qty	Amount	Qty	Amount	Qty	Amount
	75% recommended	PR			390000.00	1.00	390000.00		0.00	1.00	390000.00
- 04	ID i. ii.	BR			130000.00	0.00	0.00	1.00	130000.00	1.00	130000.00
34	Providing & Fixing, Installing, Testing &						5 7 (5 15 15 12)				100000.00
	Commissioning, of Electricals and Instrumentation										
	such as Pressure Indicator, Rotamete, Flow Switch, Flow Transmitters With Totaliser, Side Mounted Level										
	Gauge, Level Gauge With Level Switch, Ball Valve,										
	Butterfly Valves, pH Meter, Energy meter, GSM										ę
	Controller with all parameters as mentioned in										
	Technical speicification and all necessary cabling with										
	all accessories etc, tansportation etc complete. Rate										
	inclusive of all taxes.Make / Model : Utopia or										
	Equivalent	34	Nos	1.00	695000.0	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			521250.00	1.00	521250.00		0.00	1.00	521250.00
		BR			173750.00	0.00	0.00	1.00	173750.00	1.00	173750.00
35	Providing & fixing, Installing, Testing & Commissioning						0.00	1.00	170700.00	1.00	173730.00
	of Microproceser based control panel with all	•									
	Accessories, tansportation etc complete. Rate inclusive										
	of all taxes.Make / Model: Utopia or Equivalent	35	Nos	1.00	580000.0	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			435000.00	1.00	435000.00		0.00	1.00	435000.00
		BR			145000.00	0.00	0.00	1.00	145000.00	1.00	145000.00
36	Making power supply connection to Eclear Reactor							1100	1 10000.00	1.00	143000.00
	Unit with Accessories etc complete. Rate inclusive of										
	all taxes.Make / Model : Rate inclusive of all	0.0									
	taxes.Utopia or Equivalent	36	Job	10.00	67000.0	0.00	0.00		0.00	0.00	0.00
	75% recommended	PR			50250.00	10.00	502500.00		0.00	10.00	502500.00
		BR			16750.00	0.00	0.00	10.00	167500.00	10.00	167500.00

& Commissioning of Software, Software ment as per the requirement of client, entation assembly, Control panel assembly, cal fitings, Piping ,Electric wiring, piping and			Quantity		Qty	Amount	Qty	Amount	Qty	Amount
ment as per the requirement of client, entation assembly, Control panel assembly,										Amount
ntation assembly, Control panel assembly,										
ntation assembly, Control panel assembly, cal fitings, Piping Electric wiring, piping and										
cal fitings, Piping Electric wiring piping and										
ng,plumbing accessories, pipe support, labour										
etc. complete.Rate inclusive of all taxes (In										
this PR qty has not included the bill. Hence,										
date qty paid in the 2nd & final bill)	37	Job	1.00	710000.0	0.00	0.00	1.00	710000.00	1.00	710000.00
Total Amount						10927000 03			1.00	
Say Rs.						The state of the s				17371139.16 17371139.00
tł	etc. complete.Rate inclusive of all taxes (In nis PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)	etc. complete.Rate inclusive of all taxes (In nis PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount	etc. complete.Rate inclusive of all taxes (In nis PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill) 37 Job  Total Amount	etc. complete.Rate inclusive of all taxes (In nis PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill) 37 Job 1.00  Total Amount	etc. complete.Rate inclusive of all taxes (In nis PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill) 37 Job 1.00 710000.0  Total Amount	etc. complete.Rate inclusive of all taxes (In nis PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill) 37 Job 1.00 710000.0 0.00  Total Amount	etc. complete.Rate inclusive of all taxes (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount  37 Job 1.00 710000.0 0.00 0.00  10927000.03	etc. complete.Rate inclusive of all taxes (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill) 37 Job 1.00 710000.0 0.00 0.00 1.00 Total Amount 10927000.03	etc. complete.Rate inclusive of all taxes (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount  Total Property Amount  Total Property Research (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount  Total Property Research (In his Property Research (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount  Total Property Research (In his Property Research (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount  Total Property Research (In his Property Research (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Property Research (In his Property Research (In his Property Research (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill)  Total Amount  Total Property Research (In his Pro	etc. complete.Rate inclusive of all taxes (In his PR qty has not included the bill. Hence, date qty paid in the 2nd & final bill) 37 Job 1.00 710000.0 0.00 0.00 1.00 710000.00 1.00 Total Amount 10927000.03 6444139.13

Asst. Executing Engineer, VTU, Belagavi Resident Engineer, VTU, Belagavi

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

#### **ROYALTY STATEMENT**

NAME OF WORK: Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, Jnana Sangama" Belagavi

Name of the Agency : M/s. Utopia Automation & Control Pvt. Ltd., Satara

	Γ		R. A	. Bill No.2	& Final						
IT.No.	Particulars	Unit	R. A. Bill No. 01		SAND/MU	JRRUM IN	CUM	UM METAL			
	Description and the control of the c		Qty	CONST	QTY	RATE	AMOUNT	CONST	QTY	RATE	AMOUNT
	Providing and laying in position M-25 cement concrete	Cum	129.02	0.48	61.93	96.00	5945.24	0.96	123.86	54.00	6688.4
	Providing and laying in position plain cement concrete 1:3:6	Cum	39.16	0.48	18.80	96.00	1804.49	0.96	37.59	54.00	
11	Providing and filling in foundation with granite / trap broken metal 150mm and downsizewith approved sand	Cum	54.32	0.00	0.00	96.00		1.00	54.32	54.00	2030.09
12	Providing and constructing brick masonry in CM 1:6 (52.74 x 500 = 26.370/1000=26.37)	Cum	26.37	0.00	0.00	0.00	0.00	1.00	26.37	30.00	791.10
	Plaster ( 1326.96 x .02 =26.54)	Sqm	26.54	1.00	26.54	96.00		0.00	0.00	0.00	0.0
15	Red Oxide flooring ( 158.34 x .04 =6.33)	Sqm	6.33	0.45	2.85	96.00	273.46	0.96	6.08	54.00	328.1
	Total Amount in Rs.						10571.03			01.00	
	Grand Total Amount in Rs.						10371.03		23342.01		12770.98
							1st RA Bill Alread	Deducted	12321.00		

Asst. Executive Engineer, VTU., Belgaum

Resident Engineer,

11021.01

VTU, Belgaum

	•				Rs.	64,44,139.00
8. Payments	now to be made detailed belo	W				
	overy of amount creditable to t	nis work Rs.	P.	(a) Rs.	P.	
Deduction SI.	IS:-					
No.	Particulars		Amount (in.Rs.)			
1	I.T. @ 2%					
2	SC on IT @ 10%		1,28,883.00 12,888.00			
3	Edu. Cess on IT @ 3%		3,866.00			
4	LWC @ 1%		64,441.00			
5	ST @ 5%		3,22,207.00			
6	CBF @ 0.1%		6444.00			
7	Royalty Charges		11,021.00			
8	Addl. SD @ 5%(Rs.20,66,0	00/-)	1,03,300.00			
		Total Rs.	6,53,050.00			
					Rs.	6,53,050.00
Total 5 (b)	+	(G)	)			57,91,089.00
			, ,,		13.	37,71,007.00
(b) Du raa			) (b)			
(b) By reco	overy of amounts creditable or ounts:	ther works of	Heads)			
0, 000	·					
(c) By che	que Rs. 57,91,089.00					
Total 8 (b)	+ (c)					
11874. N. 1911 11981 1			(H)			
Pay Rs			(		)	
Cheque				Mana	616	Inte
						Y/*
				Dated Totals		
			Alba	9		sed Walverolt;
Received (			,	as per abov	e memor	andum.
				On accou	nt of this	work.
Dated the				(am	ount in v	ernacular)
Witness	Paid by me Cheque No					i Chechi put Lod.
					**************************************	6. 10
	, Date	••••••	•			Contractor
				0.01	nonsea	Bignatory
		EX. EN	GR.			
Paid by me vid	de Cheque No			Dated	19	
			Dated initials			in a the
payment.			Dated initials o	i persons acti	ually mak	ing the

This figure should be posted to see that it agrees with the total 7 and 8.

If the net amount to be paid is less than Rs. 10 and it cannot be included in cheque the payments should be made in cash, entry being already suitably and the alteration attested by dated initials.

Here specify the net amount payable vide item 8 (c).

This payee's acknowledgement should be for the gross amount paid as per item 8 (i.e. a+b+c)

Payments should be attested by some known person when the payee's acknowledgement is given by a mark. See of thumb impression.

#### IV. REMARKS

This space is reserved for any remarks which he Disbursing Officer may wish to record in respect of the execution or the work, check of measurements or the state of contractor account.

Entries relating to each description of materials should be posted thus in column 3. First enter the difference between quantities in columns 1 and 2 then show below this entry. The quantities if any brought to site against which a further advance has been auhorised this entry being prefixed by the plus sign. Finally strike the total of the two entries which will present the total quantity outstanding.

Entries in column 8 show the money values of the total quantities outstanding as per column 3

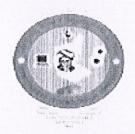
Certified (1) that the plus quantities of materials shown in column 3 of the Account above have actually been brought by the contractor to the site of the work and the contractor has not previously received any advance on their security (2) that there materials are of an imperishable nature and are all required by the contractor use or the work in connection with items for which rates for finished work have been agreed upon, and (3) that a formal agreements in form 31 signed and executed by the contractor in accordance with paragraph 288 (a) of the Central Public Works Accounts Code is recorded in the Divisional Office.

Chaucop
Dated Signature of Officer Preparing the
Billing ad Annotogical Links and Landschill
Rank
Dated Signature of Officer, Authorising
Payment
(Rank)

These certificates must be signed by the Sub-Divisional or Divisional Officer.

ing seek the second control of the second co

This signature is necessary only when the Officer who prepares the bill is not the officer who authorises the payment case the two signatures are essential.



# VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANA SANGAMA BELGAUM



Providing Supplying, Installing, Testing & Commissioning of Automated Non-Bacteriology Sewerage Treatment Plant of 200 KLD.

Third Party Quality Audit Report On R.A Bill No.II<sup>nd</sup> and Final



## KATCON CONSULTANTS BELGAUM

247,"Padma Kunj", Ranade road, Tilakwadi, Belgaum-590006, Tel: +91 9483263282

Email: Katconbgm@gmail.com



## KATCON CONSULTANTS

247,"Padma Kunj", Ranade road Tilakwadi, Belgavi-590 006 Tel-Fax: 0831-2970283.

email: katconbgm@rediffmail.com

Date: 28/09/2015

Ref: KATCON/TPR/STP/R A II/614

To,

The Registrar VTU Belgavi,

SUB: Providing, supplying, testing and commissioning of automated non biological sewerage treatment plant 200KLD based on advanced Nano Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU Jnana Sangam Belgavi, - Conducting third Party Inspection Reg.

REF: Your letter No: VTU/RE/2015-2016/259 DTd: 24/09/2015 R A Bill no 2<sup>nd</sup> and final.

The R A Bill no 2<sup>nd</sup> and Final amounting to Rs.64, 44,139/- is received under letter citied above, for third party quantity Audit Report. The bill is received unsigned. The work was inspected on 27.09.2015, by Shri B, D Jadhav, N.G.Patil and S.B Ragashetty Engineers of Katcon Consultants. The following items are involved in the R A Bill no 2<sup>nd</sup> and final. The item wise comments are under:

SI No:	Item of work	Comments
1	Excavation for Foundation in ordinary soil	No Comments
2	Refilling pipe lines	No Comments
3	Providing and laying reinforced NP2 pipes	To check leakage if any water
		tightness/gas test is to be conducted.
4	Man hole chambers	Inspected & Accepted Cofor final's
6	M25 RCC Concrete	For M25 design mix have should have
		been obtained. However since the
		Test Results are satisfactory, the item
		is accepted.
7	TMT steel	The tests on steel have been
		conducted by GIT Belgavi on
		31.09.2015 and are found to be
		satisfactory. Hence accepted.
8	Centering Work	No Comments
10	Providing and laying in position plain cement concrete of mix 1:3:6	No Comments
11	Filling in foundation below floor	No Comments
12	Providing and constructing burnt brick masonry	Brick should have been got tested.
		Since the quantity is only 25 cums it
		is accepted.
13	Providing 18mm thick cement plaster	Inspected & Accepted
14	Providing and Fixing Pre-coated Trapezoidal shaped	Inspected & Accepted
	sheets 24 gauge	
15	Providing and laying Red oxide flooring 40mm	Inspected & Accepted
16	Pull and Push type rolling shutters	Inspected & Accepted
17	Providing top covers	Inspected & Accepted



# GOGTE INSTITUTE OF TECHNOLOGY

"Gnana Ganga"

UDYAMBAG, BELGAUM-590 008, KARNATAKA
(Affiliated to Visvesvaraya Technological University, Belgaum)
(APPROVED BY AICTE, NEW DELHI)
(ACCREDITED BY NBA, AICTE, NEW DELHI)



Dr. A.S.Deshpande

Dr. A.S.Deshpande

Dr. Ph.D., M.A.S.M.E.,

M.L.E.E. (USA) M.I.E.,

PRINCIPAL

(Off): (0831) 2405500, 2405506

Fax.: (0831) 2441909

Res.: (0831 2440869

E-mail: a.s.deshpande@git.edu S.T. No.-AAAAT3599EST001

PAN No.-AAAAT3599E

SS SS SIS/GIT/CIV/ 76/445412014-15

Date: 30-01-2015

#### TESTING REPORT

Disco

: Visvesvaraya Technological Unversity, Belgaum

Maferrace

: VTU/RE/2014-2015/391, Ltd. 5/01/2015.

Losse of Testing

: 20/01/2014

Marke of Work

: Construction of (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at "Jnana

Sangama" VTU, Belgaum.

Test on

: Coarse Aggregate

(Supplied by M/s Utopia Automation control Pvt.Ltd.)

Test on Coarse Aggregate

SLNo.	Test	Test result
	Specific Gravity	3.1
2	Water absorption	0.8 %
3	Fineness modulus	3.45

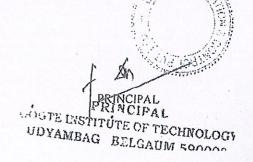
Remark: Nil

Tested By:

Prof. V.K.Parvati

HOD, Civil Engg.
HOPESON & HEAD
Engineering Department,
Institute of Technology,
1226ag, Belgaum - 590 non







# KARNATAK LAW SOCIETY'S GOGTE INSTITUTE OF TECHNOLOGY

"Gnana Ganga"

UDYAMBAG, BELGAUM-590 008, KARNATAKA
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(APPROVED BY AICTE, NEW DELHI)
(ACCREDITED BY NBA, AICTE, NEW DELHI)



D: A.S.Deshpande U.E. S.D., M.A.S.M.E., S.M. LEE E.(USA) M.L.E., PRINCIPAL 2: (Off): (0831) 2405500, 2405506

Fax.: (0831) 2441909

Res.: (0831 2440869

E-mail: a.s.deshpande@git.edu S.T. No.-AAAAT3599EST001

PAN No.-AAAAT3599E

KLS GIT/CIV/ 76/4454/2014-15

Date: 30-01-2015

#### TESTING REPORT

C Teamor

: Visvesvaraya Technological Unversity, Belgaum

Market Service

: VTU/RE/2014-2015/391, Ltd. 5/01/2015.

Late of Testing

: 20/01/2014

Name of Work

: Construction of (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at "Juana Sangama" VTU,

Belgaum.

Toront of the

: Cement (Supplied by M/s Utopia Automation control Pvt.Ltd.)

### Test on Cement:

SIL No	Description	Result Values
	Identification	ACC Cement
2.	Type of cement O.P.C/ Pozzolana/PSC:	0.P.C (43 Grade)
3.	Normal consistency percentage:	32%
4.	Initial Setting time:	180 Minutes
5.	Final Setting time:	360 Minutes
6.	Specific Gravity	2.89
7.	Fineness	5 %
Š.	Crushing strength N /mm² (Mortar Cubes) 1) 3 days 2) 7 days 3) 28 days	23.50 N/mm² 28.10 N/mm² To be tested

Tested By:

Prof.V.K.Parvati

HOD Civil Engineering



Na dirake de M



# KARNATAK LAW SOCIETY'S GOGTE INSTITUTE OF TECHNOLOGY

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(ACCREDITED BY NBA, AICTE, NEW DELHI)



A.S.Deshpande

T.D., M.A.S.M.E.,

EEE.(USA) M.I.E.,

TRINCIPAL

2 : (Off): (0831) 2405500, 2405506

Fax.: (0831) 2441909

Res.: (0831 2440869

E-mail: <u>a.s.deshpande@git.edu</u> S.T. No.-AAAAT3599EST001 PAN No.-AAAAT3599E

XLSGIT/CIV/76/4454/2014-15-

Date: 29-09-2014

#### TESTING REPORT

Constant

: Visvesvaraya Technological Unversity, Belgaum

: VTU/RE/2014-2015/391, Ltd. 5/01/2015.

Date of Lesting

20/01/2014

Mante of Work

: Construction of (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at "Jnana Sangama" VIII B.

Sangama" VTU, Belgaum.

Total Property

: Sand (Supplied by M/s Utopia Automation control Pvt.Ltd.)

## Test on Sand

	Test	Test result
I Specific gra	ivity	2.46
2 Bulkage		6%
3 Silt content		4%
4 Fineness M	odule28	3.19

Remarks: Nil

Tested By :

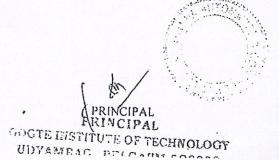
Bref V.K. Parvati

DODICTOR Engg.

SECR & W(A))

Sector Department,
and Technology,







## KARNATAK LAW SOCIETY'S

### GOGTE INSTITUTE OF TECHNOLOGY

"Gnana Ganga"

UDYAMBAG, BELGAUM-590 008, KARNATAKA (Affiliated to Visvesvaraya Technological University, Belgaum)

(APPROVED BY AICTE, NEW DELHI)
(ACCREDITED BY NBA, AICTE, NEW DELHI)



Dr. A.S.Deshpande

M.Tech., Ph.D., M.A.S.M.E., S.M. I.E.E.E.(USA) M.I.E.,

PRINCIPAL

🖀 : (Off) : (0831) 2405500, 2405506

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Res.: (0831 2440869

E-mail: a.s.deshpande@git.edu

S.T. No.-AAAAT3599EST001

PAN No.-AAAAT3599E

Ref. No. GIT/BGM/CIV /76 /4454 /2014-15

Date: 30-01-2015

#### TESTING REPORT

Client

: Visvesvaraya Technological Unversity, Belgaum

Reference

: VTU/RE/2014-2015/391, Ltd. 5/01/2015.

Date of Testing

: 20/01/2014

Name of Work

: Construction of (Electro Membrane Reactor) process with GSM

enabled remote monitoring system and allied works at

"Jnana Sangama" VTU, Belgaum.

Test on

: Steel (TMT) (Supplied by M/s Utopia Automation control

Pvt.Ltd.)

#### TEST REPORT

Sl.No.	Particulars /Invoice No.	Sp-1	Sp-2	Sp-3
1	Wt/m (gms/m)	400	586	843
2	Actual dia on wt.basis ( mm )	8.06	9.75	11.7
3	Nominal dia ( mm )	8	10	12
4	C/S Area ( cm²)	0.51	0.75	1.07
5	Proof Load ( Kg )	2800	3500	5300
6	Proof Stress ( Kg / cm <sup>2</sup> )	5490	4667	4953
7	Ultimate Load ( Kg )	3200	4500	6900
8.	Ultimate Stress ( Kg / cm <sup>2</sup> )	6275	6000	6449
9	Gauge Length ( mm )	40	- 50	60
10	Final Gauge Length (mm)	49	62	74
11	Percentage Elongation	22.5	24	23.3

Bend Test

No Cracks Observed

Rebend Test

No Cracks Observed

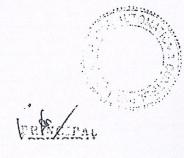
Remarks

Nil

Tested by: Prof.V.K.Parvati

HOD. Civil Engineering PROFESSOR & HEAD





# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

### RESIDENT ENGINEER SECTION

List of Documents Enclosed to the Final Bill of Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, "Jnana Sangama" Belagavi

Name of Contractor: M/s. Utopia Automation & Control Pvt. Ltd., Satara

- 1. The Completion Certificate in form No PWG-46
- 2. The Completion Report in form No PWG-47
- 3. The Completion Certificate
- 4. Agreement Copy
- 5. List of Advances
- 6. Estimate Copy
- 7. Excess & Savings Statement
- 8. Royalty Statement
- 9. Q.C. Test Report

Resident Engineer VTU, Belagavi

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI FORM NO.PWG 46 Completion Certificate

1) Name of Section: Resident Engineer, V.T.U, "Jnana Sangama", Belagavi

2) Name of work: Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR ( Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, "Jnana Sangama" Belagavi

3) Sanctioned estimate Amount: Rs.1,50,00,000=00

4) Agency: M/s. Utopia Automation & Control Pvt. Ltd., Satara

5) Authority: Agreement No. VTU/IRC No.10/2014-15, Dt:31-10-2014

6) Date of commencement: 08-11-2014

7) Due date of completion:08-05-2015

8) Actual date of completion: 17-09-2015

9) Time Extension granted up to: 31-09-2015(without penalty)

10) Name of Engineer & Subordinate:

By whom the work has been supervised giving the details of their personal incumbencies etc., date of taking and handing over the charge in connection their with

SI. No.	Name and designation	Period of incumbency From	Period of incumbency To
1	Sri Anand Rogannavar I/c. A.E.E.,	08-11-2014	17-09-2015
2	Dr. B. C. Shanthappa, Resident Engineer,	08-11-2014	17-09-2015

Certificate: Certified that the work of Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, Jnana Sangama" Belagavi inspected by me on 17-09-2015 and completed satisfactorily as per terms and conditions of contract agreement.

RESIDENT ENGINEER VTU, BELAGAVI

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

## **Completion Certificate**

1) Name of work:

Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, Jnana Sangama" Belagavi.

- 2) Name of contractor: M/s. Utopia Automation & Control Pvt. Ltd., Satara
- 3) Date of commencement: 08-11-2014
- 4) Due date of completion: 08-05-2015
- 5) Time Extension granted up to: 31-09-2015(without penalty)
- 6) Actual date of completion: 17-09-2015
- 7) Estimated cost:Rs.1,50,00,000.00
- 8) Cost put to tender: Rs.1,50,00,000.00
- 9) Cost of work at tendered rate: Rs.1,51,40,965.00
- 10) Actual expenditure incurred: Rs.1,73,71,139.00
- 11) Whether the work has been completed satisfactorily: "Yes"

#### CERTIFICATE

Certified that the work has been completed satisfactorily as per the terms and conditions of contract agreement and as per prescribed specifications.

REGISTRAR, VTU, BELAGAV

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI FORM NO.PWG 47

Completion Report

Name of work:

Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR ( Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, Jnana Sangama" Belagavi.

Name of contractor

: M/s. Utopia Automation & Control Pvt. Ltd., Satara

Date of commencement

: 08-11-2014

Due date of completion

: 08-05-2015

Time Extension granted up to: 31-09-2015(without penalty)

Actual date of completion

: 17-09-2015

Sr. no	Name of work	Estimated amount Put to tender (Rs)	Tendered amount (Rs)	Expenditure (Rs)	Excess or Savings (Rs)	% Of Savings or Excess	Remarks
	Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 (LD based on Advanced Nano-Technology enabled EMR ( Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, Jnana Sangama" Belagavi	1,50,00,000/-	1,51,40,965/-	1,73,71,139/-	22,30,174 Excess	14.72% Excess	Excess is due to additional work taken such as sewage line from P. G. Block South to Ring Road & Library to Ring Road connected to sewage line which were not in the tender.

- II. By whom executed: 1) Dr. B. C. Shanthappa, R.E.,
  - 3) Shri Anand Rogannavar, I/c. AEE..
- III. Date of last inspection of Resident Engineer: Dr. B. C. Shanthappa, R.E.,
- IV. Name of the officials who took final measurements & also inspected:

1) Dr. B. C. Shanthappa, R.E., Ocharthage

2) Shri Anand/Rógannavar, I/c. AEE.,

P.T.O.

#### **CERTIFICATE:**

Inspected by me personally on the date noted below and certified that the work of Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, "Jnana Sangama" Belagavi entrusted to M/s. Utopia Automation & Control Pvt. Ltd., Satara has been completed satisfactorily as per terms and conditions of contract agreement and as per specification.

Asst. Executive Engineer, V.T.U., Belagavi

Resident Engineer
V.T.U., Belagavi

Registrar V.T.U., Belagavi.

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

Statement showing the list of advances made to the contractor

Name of Contractor: M/s. Utopia Automation & Control Pvt. Ltd., Satara

Name of work: Providing, Supplying, installing, Testing & commissioning of Automated Non bacteriological sewage Treatment Plant of 200 KLD based on Advanced Nano-Technology enabled EMR (Electro Membrane Reactor) process with GSM enabled remote monitoring system and allied works at VTU, "Jnana Sangama" Belagavi.

SI no	Opening balance (Rs)	Advance made Vr.no. & date (Rs)	Amount (Rs)	Total (Rs)	Recovered in R A Bill Cheque no & date (Rs)	Amount (Rs)	Balance (Rs)
1	_	_	_	_			Nil

V T U., Belagavi