



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
ANANTHAPURAMU- 515 002 (A.P) INDIA**

Metric No: 7.1.4

Water conservation facilities available in the Institution:

- 1. Rain water harvesting**
- 2. Borewell /Open well recharge**
- 3. Construction of tanks and bunds**
- 4. Waste water recycling**
- 5. Maintenance of water bodies and distribution system in the campus**

HEI Input : A. Any 4 or all of the above

DVV Comment : Provide Bills for the purchase of equipment for the Borewell /Open well recharge, Construction of tanks and bunds, Waste water recycling, Maintenance of water bodies and distribution system in the campus for 2021-22.

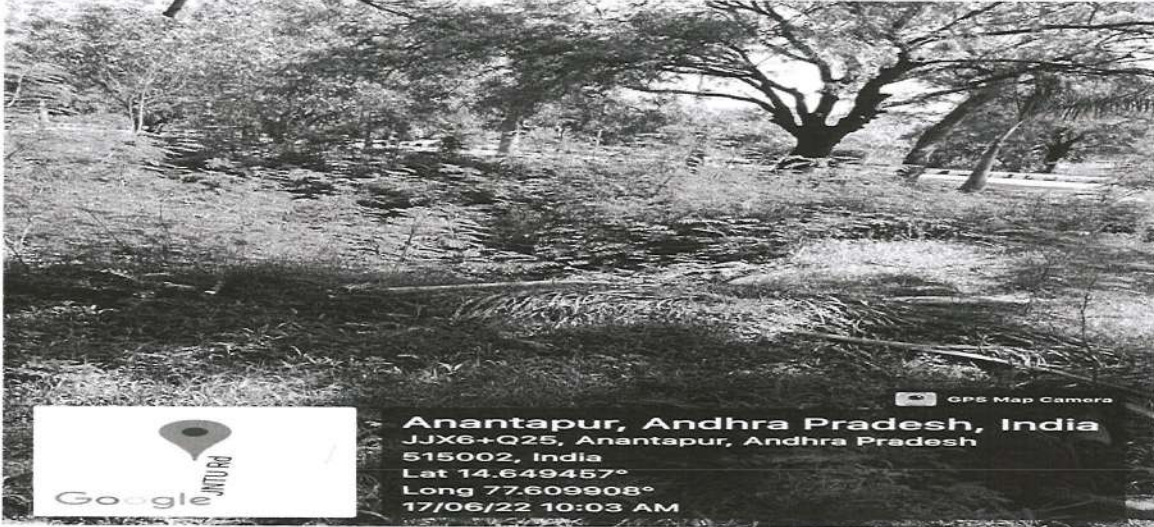
HEI Response: Provided Bills for the purchase of equipment for the Borewell /Open well recharge, Construction of tanks and bunds, Waste water recycling, Maintenance of water bodies and distribution system in the campus for 2021-22.


**REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAMU-515002**

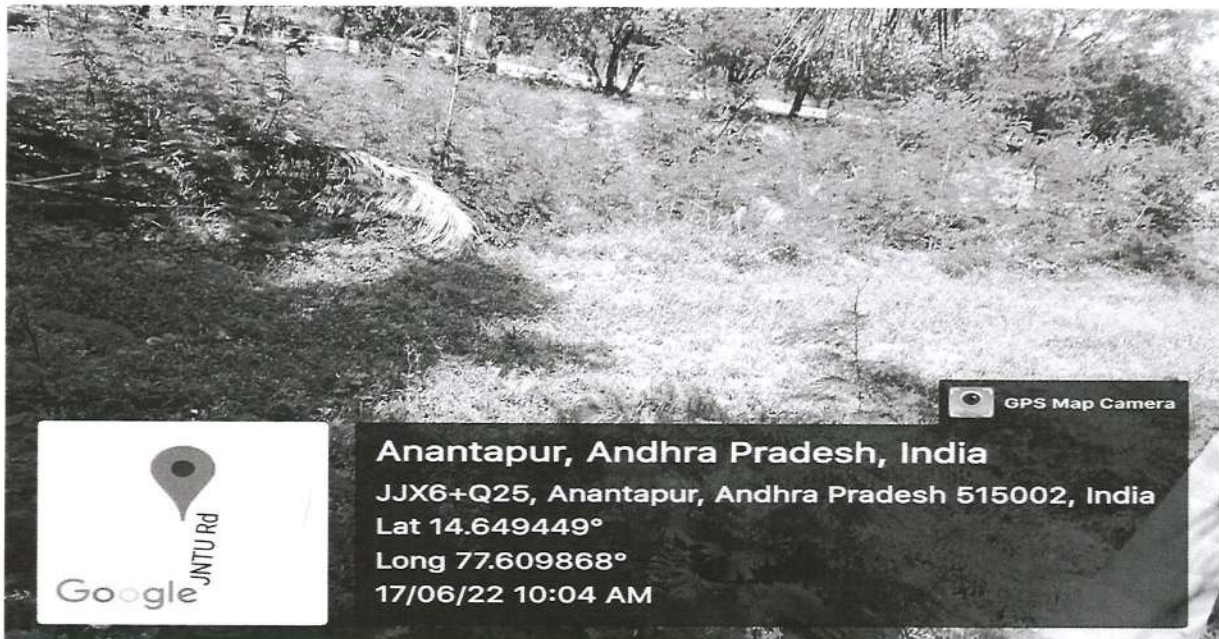


JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
(Established by Govt. of A.P., Act. No. 30 of 2008)
ANANTHAPURAMU – 515002 (A.P.) INDIA

Water Conservation facilities in the campus

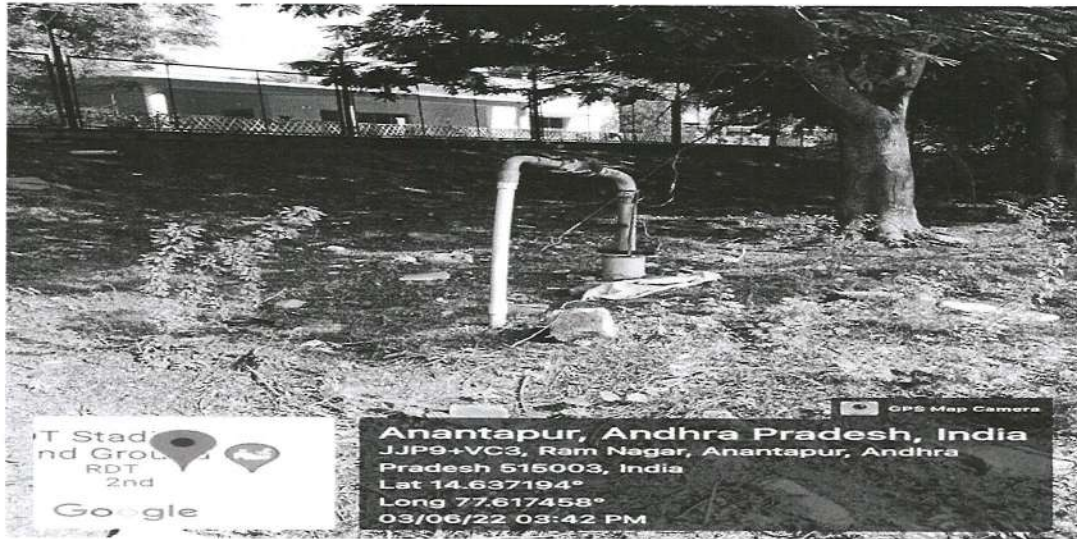


7.1.4. Rain water Harvesting



7.1.4. Rain water Harvesting

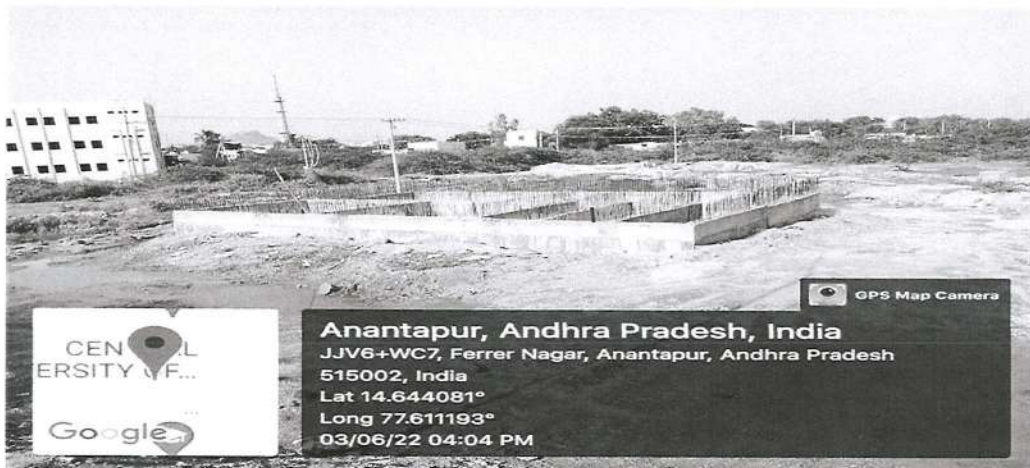
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REGISTRAR
J.N.T.U. Anantapur
ANANTHAPURAMU-515002



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GPS Map Camera
Anantapur, Andhra Pradesh, India
JJP9+VC3, Ram Nagar, Anantapur, Andhra Pradesh 515003, India
Lat 14.637194°
Long 77.617458°
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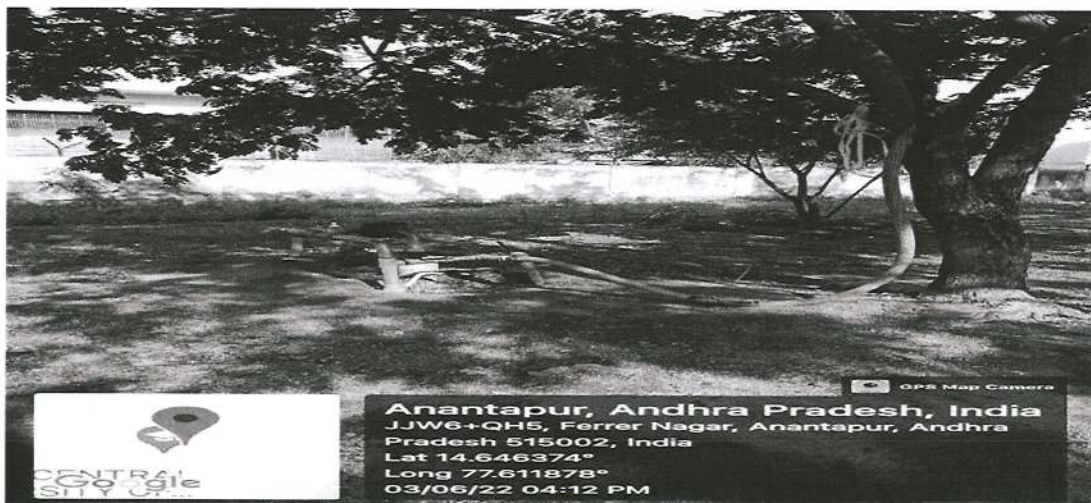
7.1.4. b. Pandameru Bore



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GPS Map Camera
Anantapur, Andhra Pradesh, India
JJV6+WC7, Ferrer Nagar, Anantapur, Andhra Pradesh 515002, India
Lat 14.644081°
Long 77.611193°
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7.1.4. d Waste Water recycling

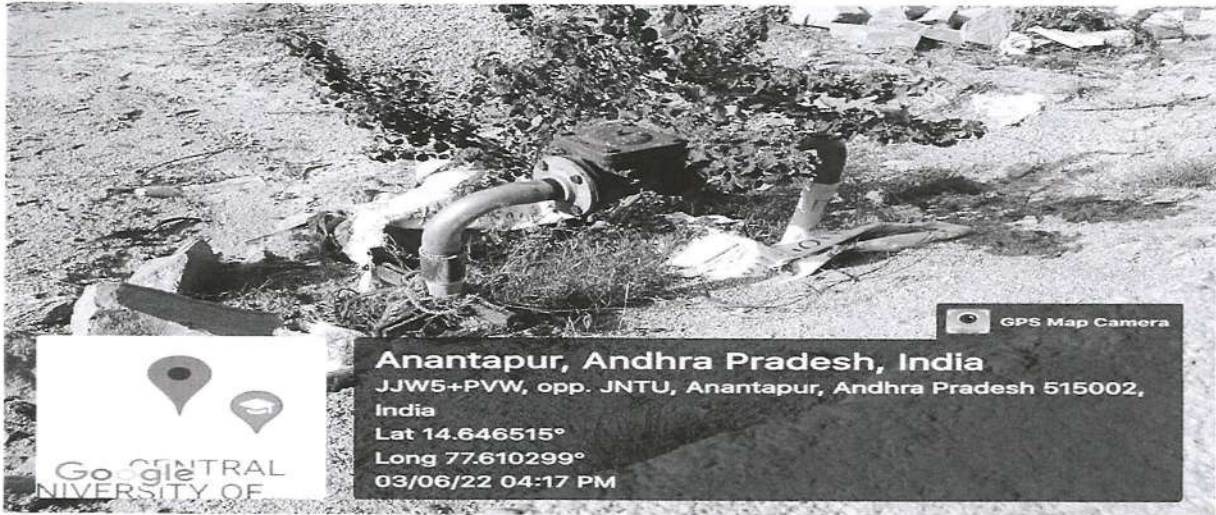


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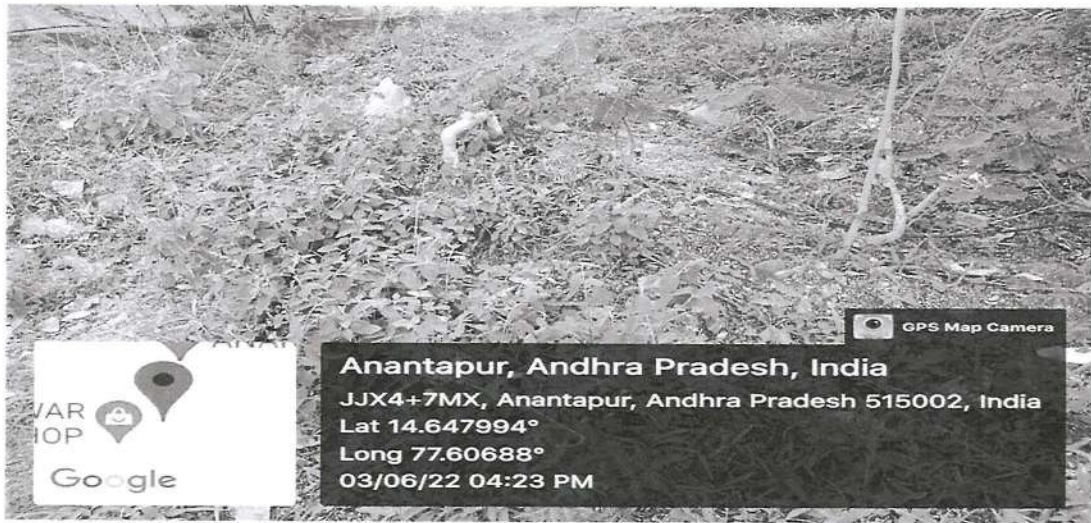
GPS Map Camera
Anantapur, Andhra Pradesh, India
JJW6+QH5, Ferrer Nagar, Anantapur, Andhra Pradesh 515002, India
Lat 14.646374°
Long 77.611878°
03/06/22 04:12 PM

7.1.4. b Borewell Admn Block Backside

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ANANTAPURAMU-515002



7.1.4. b Borewell Admin Block

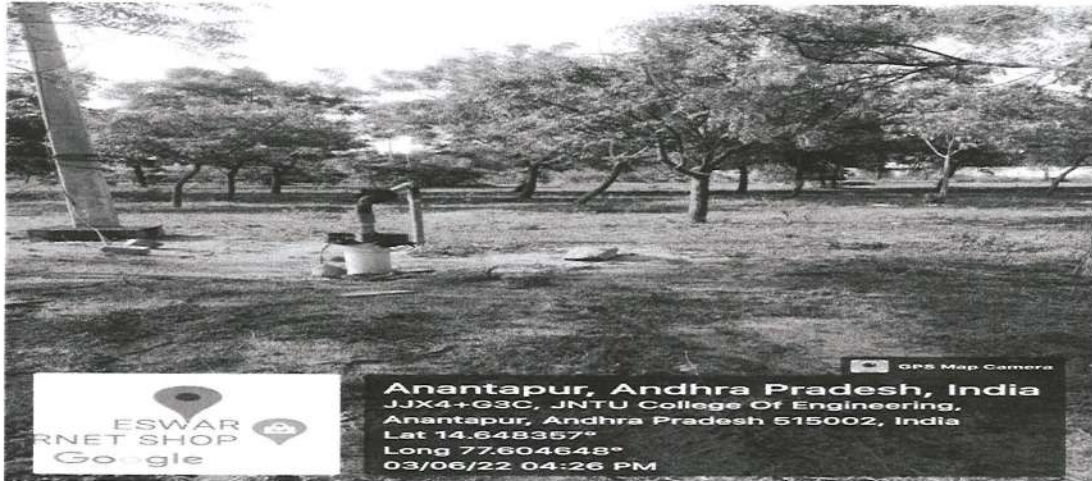


7.1.4. b Borewell Civil Department



7.1.4. b Borewell Gurukulam Opposite

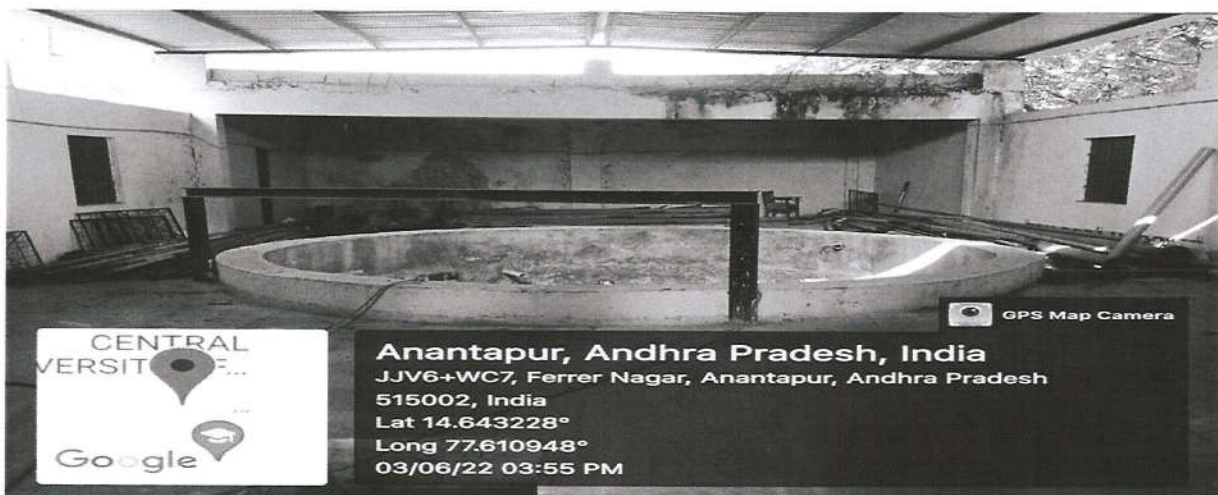

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7.1.4. b Borewell Mechanical Dept.



7.1.4. b V.C Bungalow Borewell A



7.1.4. b V.C Bungalow Borewell B

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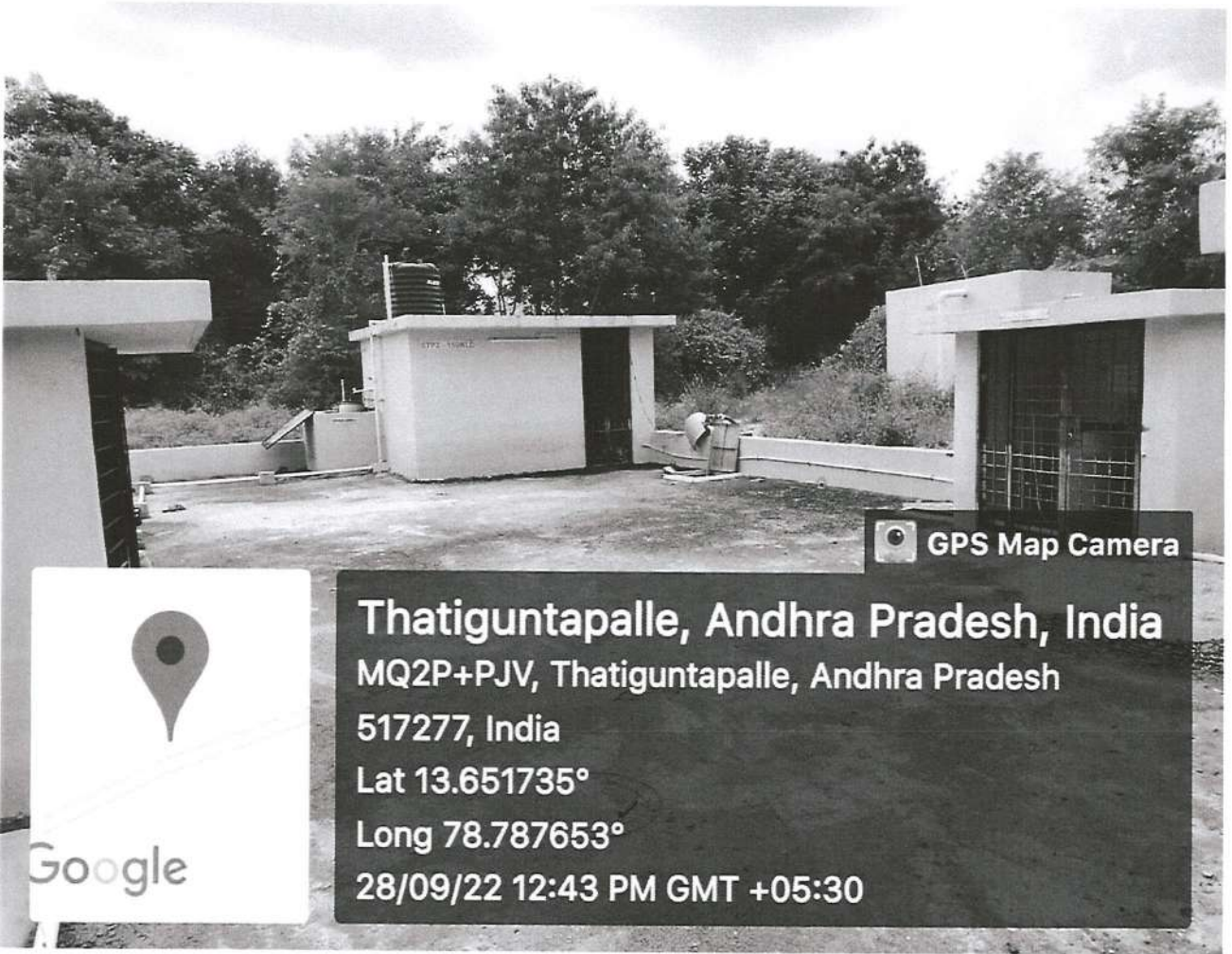


JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
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7.1.4 Waste water recycling



Shrey
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J.N.T.U. Anantapur
ANANTAPURAMU-515002



GPS Map Camera



Thatiguntapalle, Andhra Pradesh, India

MQ2P+PJV, Thatiguntapalle, Andhra Pradesh

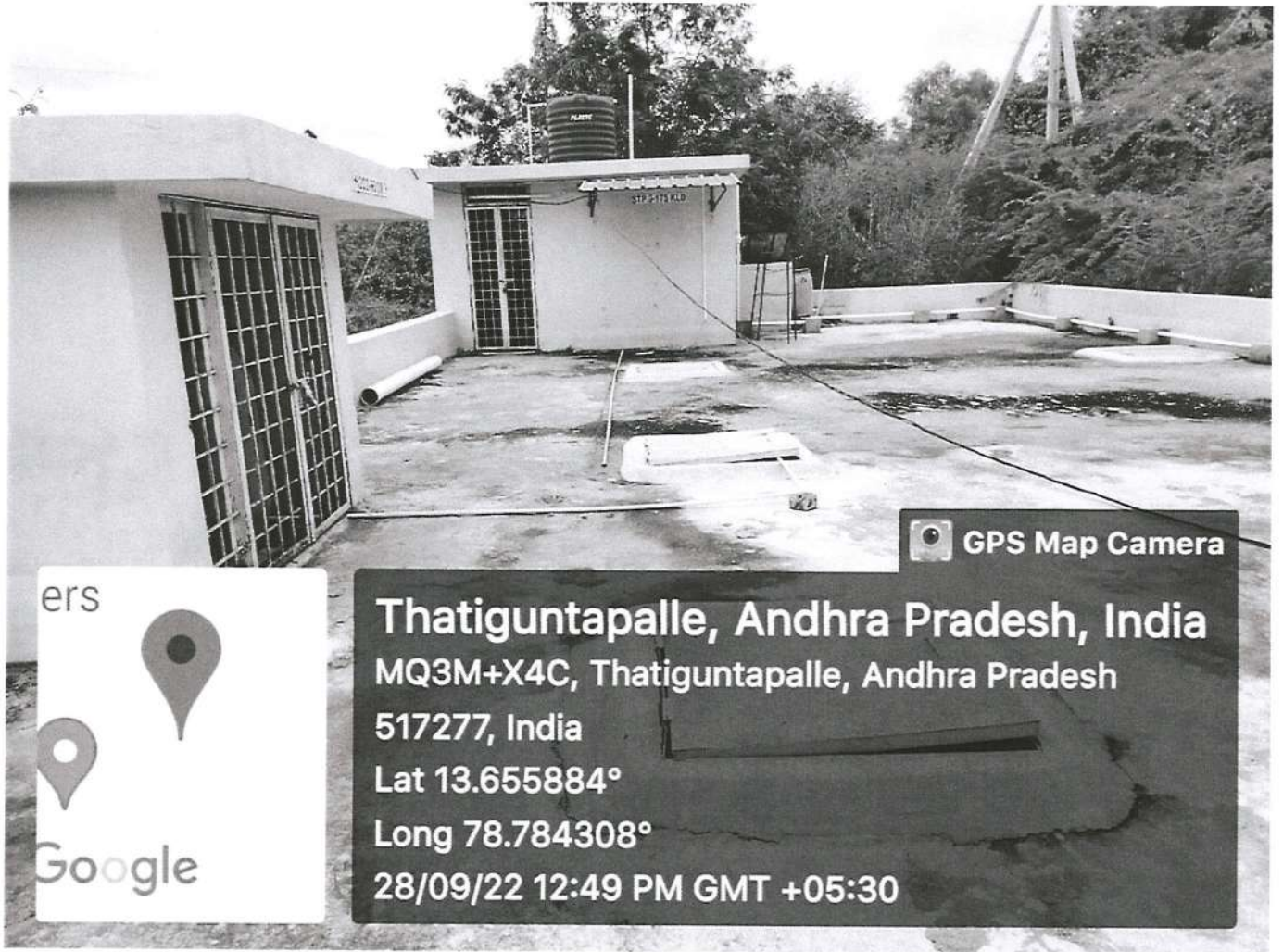
517277, India

Lat 13.651735°

Long 78.787653°

28/09/22 12:43 PM GMT +05:30

Shrey
REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAM II-515002



GPS Map Camera

ers



Google

Thatiguntapalle, Andhra Pradesh, India
MQ3M+X4C, Thatiguntapalle, Andhra Pradesh
517277, India
Lat 13.655884°
Long 78.784308°
28/09/22 12:49 PM GMT +05:30

[Signature]
REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAMI-519002



Ph:08554-272433 Fax:08554-272437

Mobile: 9908088806

Email:registrar@jntua.ac.in

PROCEEDINGS OF THE
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
(Established by Govt. of A.P., ACT No.30 of 2008)
ANANTAPUR – 515 002 (A.P) INDIA

Present: Prof. C. Sashidhar, Registrar

Procs.No.JNTUA/DAPO/D2/ JNTUA CEK /Chemicals for Sewage Water Treatment Plants /2021

Sub: JNTUA-DAPO-Permission to purchase of “**Chemicals for Sewage Water Treatment Plants**” to JNTUA, College of Engineering Kalikiri - University Purchase Committee recommendations – Regarding.

- Read: 1. Lr. No: Nil Submitted by Principal JNTUACEK, Dt: 21.09.202.
2. NIT No.1/JNTUA CEK/Chemicals for Sewage Water treatment plants/ 2021-2022 Dated. 26.08.2021.
3. Proc.No.C2/JNTUA/Estt./Engineering Cell/2019 Dt: 07.12.2019.
4. Minutes of the University Purchase Committee Meeting held on 11-11-2021.
5. Note orders of the Vice-Chancellor, dated: 25-11-2021.

ORDER:

The Principal, JNTUA College of Engineering, Kalikiri, vide his letters (1 & 2) has forwarded a proposal for Procurement of Chemicals for Sewage Water Treatment Plants to JNTUA College of Engineering Kalikiri for which administrative and financial sanction has been obtained vide ref. (3) cited and tender have been invited and submitted the comparative statement of the tender documents along with the recommendations.

The matter has been placed before the University Purchase Committee in its meeting convened on 11-11-2021. The committee after going through the comparative statement and negotiation with the lowest quoted firm M/s Zion Enviro Systems Pvt. Ltd. Chennai- 600 040 and recommended to place the order for purchase of Chemicals for Sewage Water Treatment Plants to JNTUA College of Engineering Kalikiri for negotiated price, vide ref.(4) cited.

Under the circumstances stated, the Hon'ble Vice-Chancellor is pleased to accord permission vide ref.(5) cited to the Principal, JNTUA College of Engineering Kalikiri for Procurement of Chemicals for Sewage Water Treatment Plants to JNTUA College of Engineering Kalikiri. The details are furnished below:

Name of the Supplier: - M/s Zion Enviro Systems Pvt. Ltd. No.72, Mehta Villa, Balaji Nagar, Padikuppam Road, Anna Nagar (West), Chennai- 600 040.


REGISTRAR
J.N.T.U. Anantapur
ANANTAPUR-515002

Contd...2

::2::

Sl. No	Item and Description	Specifications	Base Price in Rs. Quoted per (KG)	After Discount Base Price in Rs. Quoted per (KG)	With GST 18% per KG price in Rs.
1	ZION AR 9020 L (Bio culture for STP)	Consortium of Bacteriological matter to COD & BOD reduction.	410.00	405.00	477.90/-
2	PRETREAT 907 (Coagulant)	To initiate the agglomeration of Colloidal particles.	130.00	130.00	153.40/-
3	PRETREAT 500 (Flocculant)	To aid the fast Agglomerated colloidal particles by increasing size.	300.00	300.00	354.00/-

Note: For all the above items, the technical specifications are as per tender.

Conditions:

1. The Principal of the institution shall place the purchase order as & when necessary based on the requirement and not exceeding the total sanctioned amount i.e., Rs. 9,60,000/-.
2. The Principal of the institution shall make arrangement for monitoring the effluent characteristics on a regular basis to ascertain the effectiveness of the chemical used at the STP before making the next purchase.
3. Payment to the above purchases are to be made as per University norms.
4. The 100% payment shall be paid only after satisfactory performance of the above Chemicals and the vendor shall deposit 3% on the contract value as Security Money Deposit.
5. Any other taxes/hidden costs are to vendor account.

The expenditure shall be met from the **CEK College Development Funds.**

To
The Principal JNTUA College of Engineering, Kalikiri.
Copy to D.R. (Estt.) & D.R. (Accts.) JNTUA, Ananthapuramu.
Copy to P.A. to V.C., P.A. to Rector & P.A. to Registrar.
Copy to file.

Signed by Chundupalle
Sashidhar

Date: 27-11-2021 17:13:20

Reason: Approved

Shree
REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAMI-519002

Purchase

Order No: JNTUACEK/PE(Civil)/19/2021

ORIGINAL

Department PE (Civil)

Date 30.11.2021

To

M/s Zion Enviro Systems Pvt. Ltd
No. 72, Mehta villa, Balaji Nagar
Padikuppam Road, Anna Nagar (West)
Chennai - 600040.

Sir,

Ref: Your quotation No. KLV/ZESPL/S-223/21-22 dated 2.9.2021

Please supply the following items and forward the bill in duplicate.

Item No	Particulars	Rate	Quantity	Total Cost	Remarks
1.	ZION AR 9020L (Bio culture for STP)	477.90 1kg	911.1kg	4,35,420/- (911.1kg)	Inclusive of GST (Vendor to deposit 3% on contract value as security deposit)
2.	PRETREAT 907 (Coagulant)	153.40 1kg	2700 kg	4,14,180/- (2700 kg)	
3.	PRETREAT 500 (Flocculant)	354.00 1kg	300 kg	1,06,200/- (300 kg)	
Total				9,55,800/-	

1. That ours is Govt. Institution and payment will BE MADE ON RECEIPT OF THE ARTICLES IN GOOD CONDITION
2. The goods may be despatched by passenger / goods freight / topay
3. The goods may be insured. Insurance charges will be paid up only on receipt of separate vouchers or certificates from the Insurance Company.
4. The goods as well as the Rly. receipt should be despatched to the Principal and should not be sent by V.P.P. or through a Bank as Govt. regulations do not permit advance payment either in part or in full.
5. Name of the Dept. and order numbers should be clearly marked on the top of the parcels to enable easy distribution to the depts., at this end
6. Advance Stamped Receipt should be enclosed along with the Bill.
7. Certificates for packing forwarding should be furnished along with the Bills.
8. GST Certificates to be enclosed along with.
9. Prices inclusive of Transport Charges

Officer - in - charge

[Signature]
REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAM II-515002

[Signature]
Professor.

[Signature]
Principal

JNTUACollege of Engineering, Kalikiri

TAX INVOICE

(TRIPLICATE FOR SUPPLIER)



ZION ENVIRO SYSTEMS PRIVATE LIMITED
 Plot No. DP-G-66F, SIDCO Industrial Estate
 Kakkalur, Puttur Village
 Thiruvallur District, PIN: 602003
 Ph: -044-43308333
 Tamil Nadu - 602003, India
 GSTIN/UIN: 33AAACZ2381E1ZK
 State Name: Tamil Nadu, Code: 33
 CIN: U51909TN2005PTC056948
 E-Mail: sales@zionenviro.com

Invoice No.
M/21-22/206
 Delivery Note
M/21-22/206
 Reference No. & Date.

Dated
6-Jan-22
 Mode/Terms of Payment
 5% AGAINST DELIVERY+30% AFTER ONE MONTH+30% AFTER 3 MONTH
 Other References

Buyer (Bill to)
JNTUA COLLEGE OF ENGINEERING
 KALIKIRI, CHITTOOR DISTRICT - 517 234, MOB:
 63049 07072
 Andhra Pradesh - 517234, India
 GSTIN/UIN : 37AAAJJ0861G1ZC
 PAN/IT No : AAAJJ0861G
 State Name : Andhra Pradesh, Code : 37
 Place of Supply : Andhra Pradesh

Buyer's Order No.
JNTUACEK/PE(Civil)/19/2021
 Dispatch Doc No.

Dated
30-Nov-21
 Delivery Note Date

Dispatched through
TN 09 U 4300
 Terms of Delivery
IMMEDIATE

Dated
6-Jan-22
 Destination
CHITTOOR

Description of Goods	HSN/SAC	GST Rate	Quantity	Rate	per	Amount
ZION AR 9020 L <i>Bio Culture for STP</i>	38249022	18 %	911.00 Kgs	405.00	Kgs	3,68,955.00
PRETREAT 907 <i>Coagulant</i>	38249022	18 %	2,700.00 Kgs	130.00	Kgs	3,51,000.00
Pretreat 500 <i>Flocculant</i>	38249022	18 %	300.00 Kgs	300.00	Kgs	90,000.00
						8,09,955.00
OUTPUT IGST @ 18%						
ROUNDED OFF						
						18 %
						1,45,791.90
						0.10

Total **3,911.00 Kgs** **₹ 9,55,747.00**
 Amount Chargeable (in words) **E. & O.E**

Indian Rupees Nine Lakh Fifty Five Thousand Seven Hundred Forty Seven Only

HSN/SAC	Taxable Value	Integrated Tax Rate	Integrated Tax Amount	Total Tax Amount
38249022	8,09,955.00	18%	1,45,791.90	1,45,791.90
Total	8,09,955.00		1,45,791.90	1,45,791.90

Tax Amount (in words) : **Indian Rupees One Lakh Forty Five Thousand Seven Hundred Ninety One and Ninety paise Only**

REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAMU-518002

Company's PAN : **AAACZ2381E**

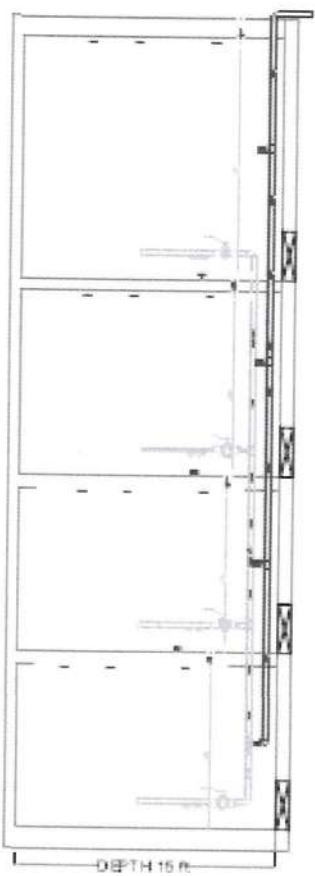
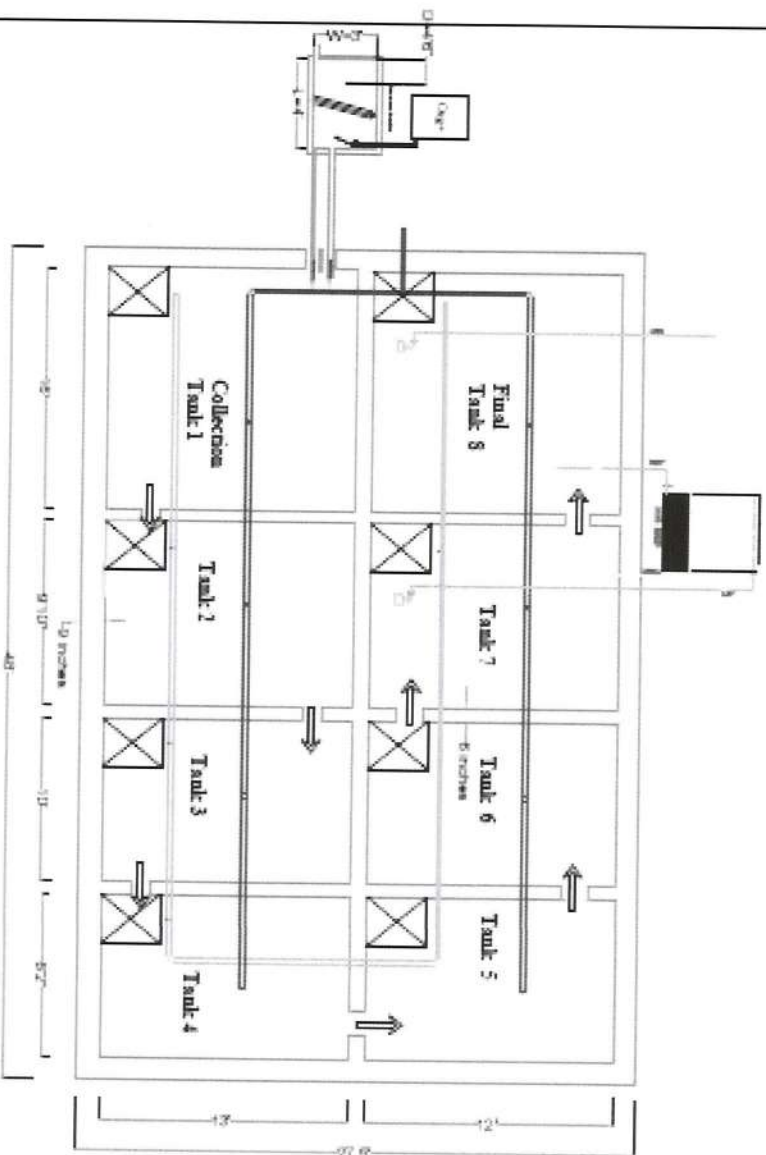
Declaration
 We declare that this invoice shows the actual price of the goods described and that all particulars are true and correct.

for **ZION ENVIRO SYSTEMS PRIVATE LIMITED**

[Signature]
 Authorised Signatory

This is a Computer Generated Invoice

Civil Design for 100 KLD STP3 - JNTUA



LINE	DESCRIPTION
1	RECYCLE LINE
2	INTERNAL WATER LINE
3	AIR VENT
4	H2O2

Note:

- 1) 13 feet clear depth down the inlet
- 2) 1.5 feet free board above the inlet.
- 3) Outfall thickness : 10 inches.
- 4) Internal thickness : 8 inches.
- 5) A sand filter tank should be built above the ground level in between Tank7 & Tanks with the given measurement.

ANANTAPUR REGISTAR
J.N.T.U. Anantapur
ANANTAPUR MI-515007

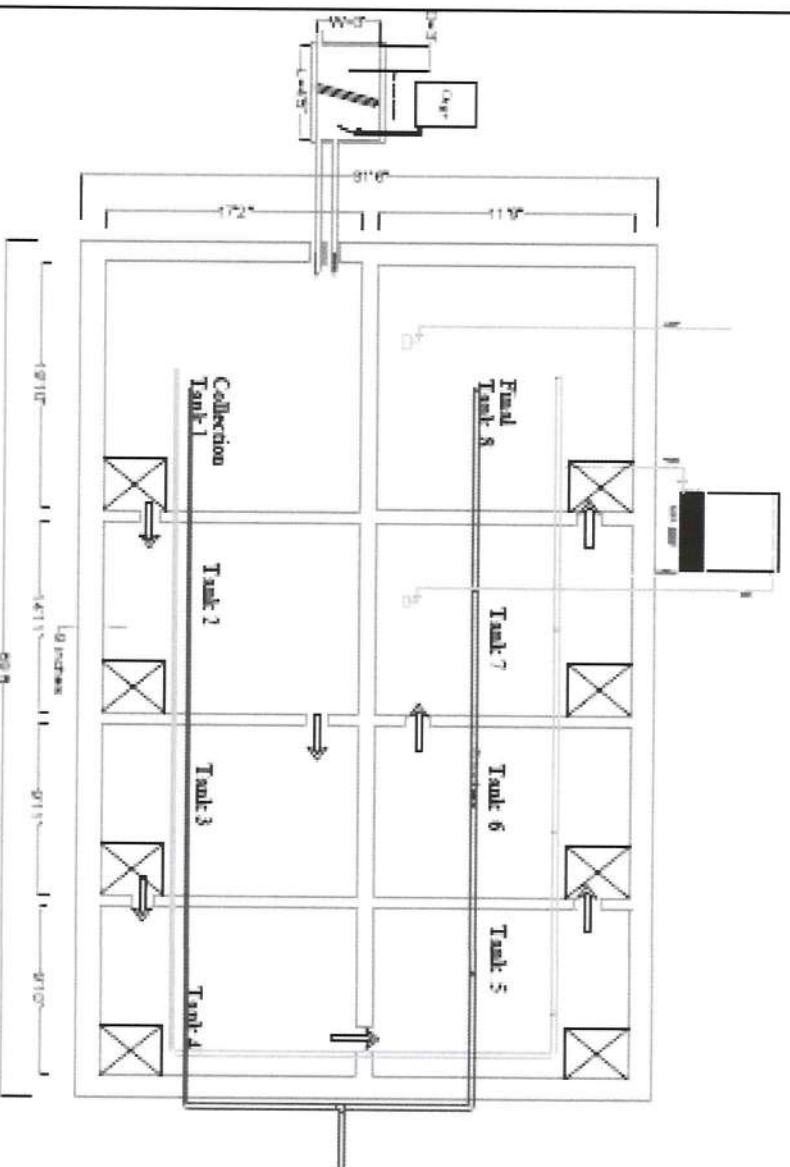
Recycle line:- To re-cycle the final treated water from tank 8 to other tanks to dilute the sewage concentration.

Internal water line:- Water passes internally from one tank to other tank through step by step gradient.

Air vent:- Normal air vent line to send the generated CO₂ in the treatment process.

H₂O₂ :- Dosing the H₂O₂ through Dosing pumps from Tank1-Tank7 to oxidize the sewage contamination

Civil Design for 150 KLD STP2 - JNTUA



PIPE SCHEDULE	
LINE	DESCRIPTION
---	RECYCLE LINE
---	INTERNAL WATER LINE
---	AIR VENT
---	ROD

NOTE:

- 1) 13 feet clear depth down the inlet.
- 2) 1.5 feet free board above the inlet.
- 3) Outerwall thickness : 10 inches.
- 4) Innerwall thickness : 8 inches.
- 5) A sand filter tank should be built above the ground level in between Tank 7 & Tank 8 with the given measurement.

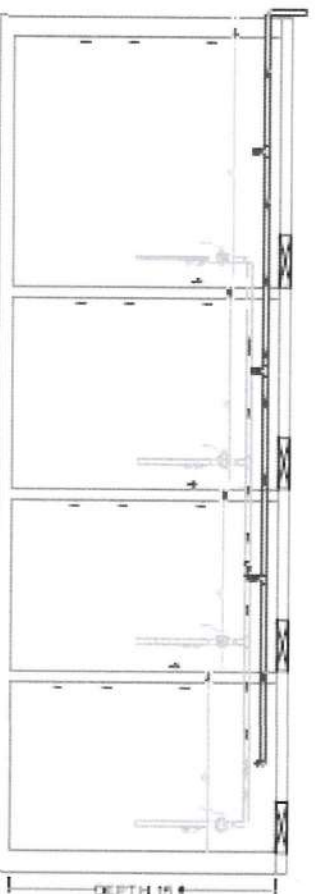

REGISTRAR
J.N.T.U. Anantapur
ANANTAPURKAMII-515002

Recycle line: To re-cycle the final treated water from tank 8 to other tanks to dilute the sewage concentration.

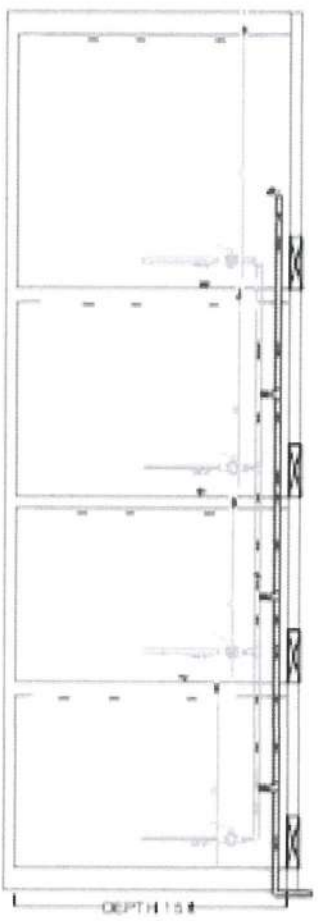
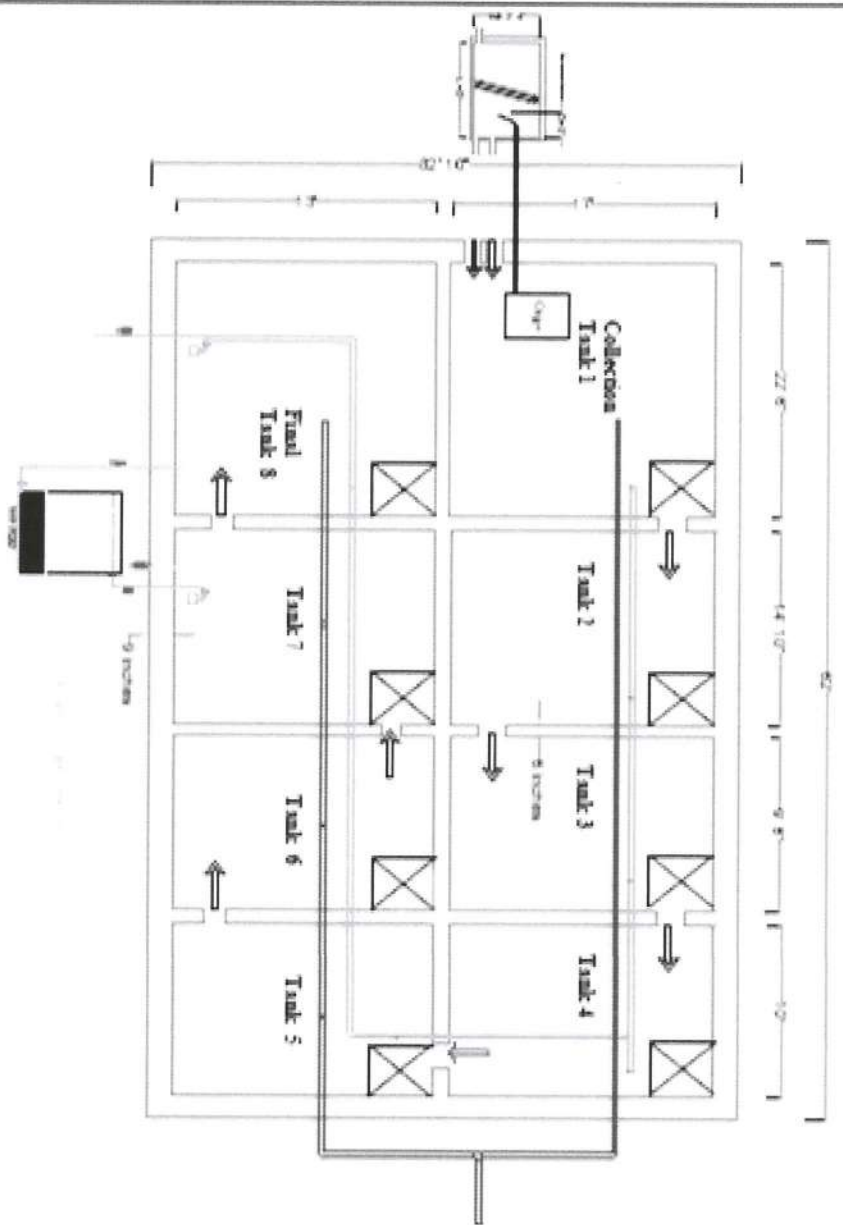
Internal water line: Water passes internally from one tank to other tank through step by step gradient.

Air vent: Normal air vent line to send the generated CO₂ in the treatment process.

H₂O₂: Dosing the H₂O₂ through dosing pumps from Tank 1-Tank 7 to oxidize the sewage contamination.



Civil Design for 175 KLD STP3 - JNTUA



PIPING SCHEDULE	
LINE	DESCRIPTION
	RECYCLE LINE
	INTERNAL WATER LINE
	AIR VENT
	HOSE

NOTE:

- 1) 13 feet clear depth down the inlet.
- 2) 1.5 feet free board above the inlet.
- 3) Outerwall thickness : 10 inches.
- 4) Innerwall thickness : 8 inches.
- 5) A sand filter tank should be built above the ground level in between Tank7 & Tanks with the given measurement.

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J.N.T.U. Anantapur
ANANTAPURAM11-519007

Recycle line:- To re-cycle the final treated water from tank 8 to other tanks to dilute the sewage concentration.

Internal water line:- Water passes internally from one tank to other tank through step by step gradient.

Air vent:- Normal air vent line to send the generated CO₂ in the treatment process.

H₂O₂ :- Dosing the H₂O₂ through Dosing pumps from Tank1-Tank7 to oxidize the sewage contamination

7.1.4

D.H S 02-03-19
D.R 01-04-19.

Name of Contractor or Agency by which executed: Sri Y. Kullayappa

Ag. No. JNTUA/WP/54/2018-19 dt. 2/3/2019 Anantapur 6

Site of Work: Construction of Rain water Harvesting Pit at left side opposite to Main Gate of JNTUA PRA Bldg, 70.000/-

No.	L	B	D	Contents	Measurement up to date	
					No.	Rs.
				Total value of work done		28740.00
				less TP @ 10%		2874.00
				ADD GST @ 12%	(+)	3448.00
				ADD WAC @ 0.1%	(+)	28.74
				ADD Squire charges Rs. 1800	(+)	1800.00
				34016.74		34016.74
				Deduct withhold amount @ 2.5%	(-)	2220.00
				EHD 2.5% 1500/- on Rs. 60000/-		3174.74
				FD 2.5% 720/- on Rs. 28740/-		3179.54
						3179.54
Recoveries						
				a) Labour cess @ 1%		287.4
				b) Income tax @ 9.366% on 28740		651
				c) WAC @ 0.1%		29
				d) Deduct GST @ 2% as per CB		575
				(GST No. 37AACPV5628A27U)		
				e) Squire charges Rs. 1800	(-)	3444.00
				f) Water charge @ 0.25%		72
						28384.00
(Payee twenty eight thousand three hundred and eighty four only)						

UNIVERSITY ENGINEER
JNT University Anantapur
ANANTHAPURAMU

REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAMU-515002

Rate	Per	Total Value to date		Deduct / Previous Measurements		Since last measurements		Remarks
		Rs.	Ps.	Page No.	Quantity	Quantity	Rs.	
								Passed for Rs. 31798.00 (Payee thirty one thousand seven hundred and ninety eight only) for Gross amount and Rs. 28384.00 (Payee twenty eight thousand three hundred and eighty four only) - for net payment.
								UNIVERSITY ENGINEER JNT University Anantapur ANANTHAPURAMU
								Submitted to the Registrar JNTUA Anantapur for payment.
								DIRECTOR Industrial Consultancy Services (ICS) J.N.T. University Anantapur ANANTHAPURAMU-515002
								CB. No. 1A4/W87/54/2019-20 Bill passed for Rs. 31,798/- by Gross amount of Rs. 31,414/- by (-) Recoveries of Rs. 28,384/- by net payment
								REGISTRAR JNT University Anantapur ANANTHAPURAMU-515002
								Slr No. 173/A1/W87/54/2019-20 Paid in Cheque no. 67547 Date 18-12-2019 for Rs. 3342/-
								FINANCE OFFICER JNT University Anantapur ANANTHAPURAMU

Part of Work: Construction of Rainwater harvesting pit at left

Applicable to Main gate at INTERCOLLEGE Engineering, Anantapur.

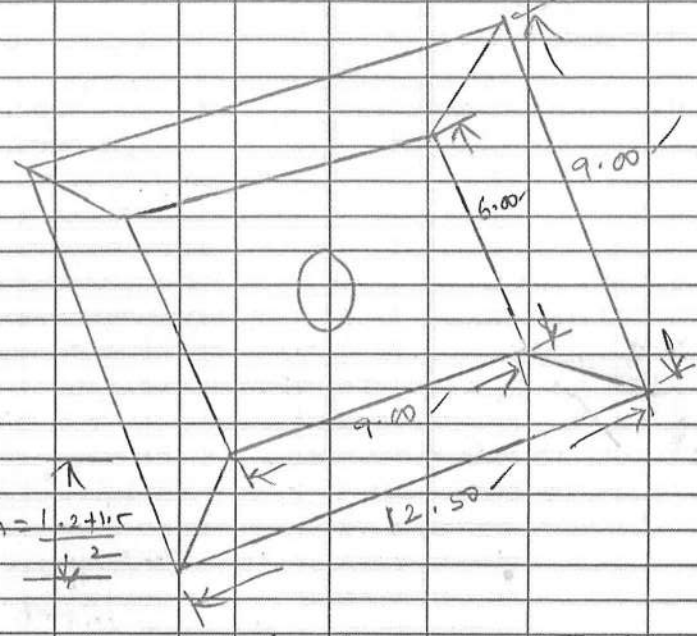
Sl. No.	Description of Item	Measurement up to date					Contents
		No.	L	B	D		
1	Construction of Rain. Earthwork including in ordinary work by mechanical means and depositing on level with an initial load of 10cm and lifting 2cm, including all material, incidental labour charges, such as shoring, sheet piling, planing, strutting etc. complete for finished item of work excluding design charges, concrete charges in multiple of 1000 and cost of development, 1000 like sheet piling, gravel, stone, earth and cement mixed with fair size boulders etc. for pit	1.35	6.09	6.09	1.35	109.99 cu	
	deduct earth for pit	1.2	6.09	6.09	1.35	59.93 cu	

10/10/2019
(Signature)
11/10/2019

App No: INTUA/02/54/2018-19, Dt: 02/02/2019

Name of Contractor or Agency by which executed: S. Kullayya, Anantapur.

Rate	Per	Total Value to date		Deduct / Previous Measurements		Since last measurements		Remarks
		Rs.	Ps.	Page No.	Quantity	Quantity	Rs.	



$$\text{Trapezoidal Pit for volume} = \frac{h}{2} [A_1 + A_2 + \sqrt{A_1 \times A_2}]$$

$$A_1 = \text{Area of bottom pit} = 6.09 \times 9.00 = 54.81 \text{ sqm}$$

$$A_2 = \text{Area of top pit} = 12.00 \times 9.00 = 108.00 \text{ sqm}$$

$$\text{Depth of pit} = \frac{1.2 + 1.5}{2} = 1.35 \text{ m}$$

7.1.4

4
REGISTRAR
J.N.T.U. Anaparthi
ANAPARTHI, 508102




7.4


REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAM-515002



REGISTRAR
A.N.T.D. Anantapur
ANANTAPURAM-515002

7.1.4


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J.N.T.U. Anantapur
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7.1.4

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