



MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

(Affiliated to JNTU, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2015 Certified)
Maisammaguda, Dhulapally, Komapally, Secunderabad – 500100, Telangana State, India.

7.1.4. WATER **CONSERVATION FACILITIES**



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S.NO	PARTICULARS
1	Rain Water Harvesting
2	Borewell/Open well Recharge
3	Construction of Tanks and Bunds
4	Maintenance of Water Bodies and Distribution System in the Campus

1. RAIN WATER HARVESTING

Water conservation facilities are available in the Institution. The first and foremost is Rain water Harvesting. All required facilities are provided in the campus to harvest the rain water to the maximum extent. The related Geotagged photos are shown below:



IMG20201121103123.jpg Properties

General Security Details Previous Versions

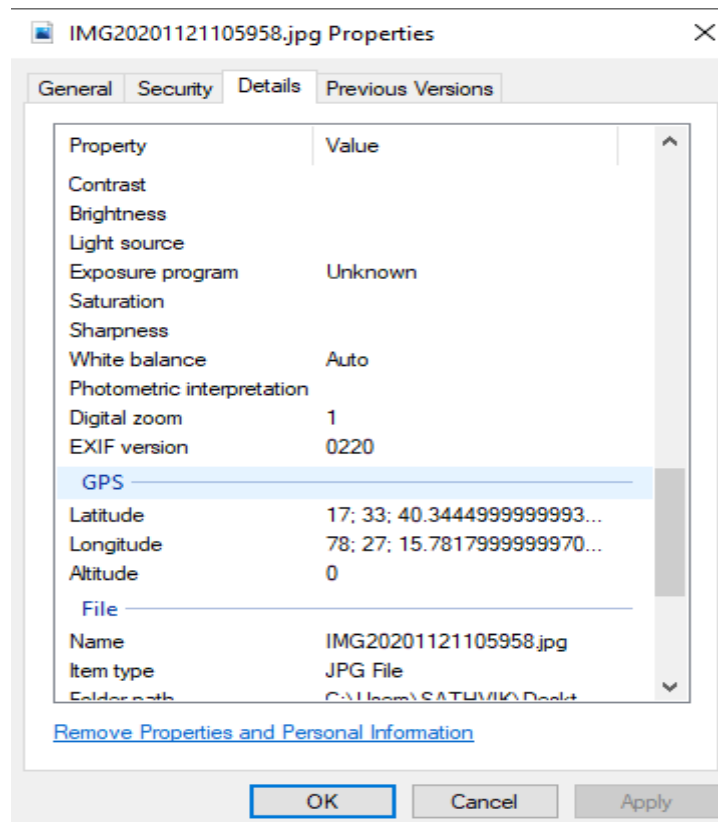
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Light source	
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Sharpness	
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Photometric interpretation	
Digital zoom	1
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Altitude	516
File	
Name	IMG20201121103123.jpg
Item type	JPG File
Folder path	C:\Users\SATHVIK\Desktop

[Remove Properties and Personal Information](#)

OK Cancel Apply

2. BOREWELL/OPEN WELL RECHARGE

As a part of Water conservation facilities that are available in the Institution, the borewell facilities are available in the campus. The related Geotagged photos are shown below:





IMG20201121103123.jpg Properties

General Security Details Previous Versions

Property	Value
Contrast	
Brightness	
Light source	
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Saturation	
Sharpness	
White balance	Auto
Photometric interpretation	
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Altitude	516
File	
Name	IMG20201121103123.jpg
Item type	JPG File
Folder path	C:\Users\SATHVIK\Desktop

[Remove Properties and Personal Information](#)

OK Cancel Apply

3. CONSTRUCTION OF TANKS AND BUNDS

As a part of Water conservation facilities that are available in the Institution, the construction of Water tanks and bunds are taken up and are provided in the campus. The related Geotagged photos are shown below:



IMG20201121102924.jpg Properties

General Security Details Previous Versions

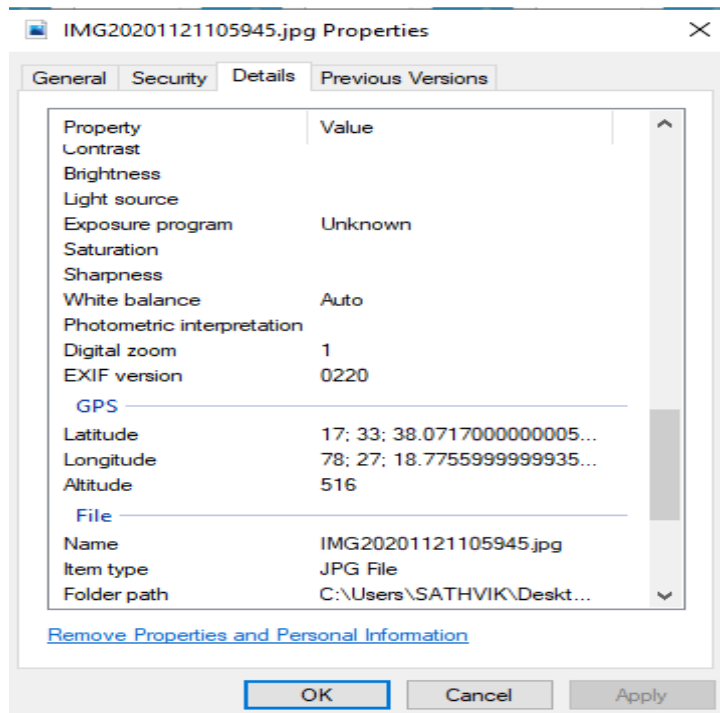
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Sharpness	
White balance	Auto
Photometric interpretation	
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Name	IMG20201121102924.jpg
Item type	JPG File

[Remove Properties and Personal Information](#)

OK Cancel Apply

4. MAINTENANCE OF WATER BODIES AND DISTRIBUTION SYSTEM IN THE CAMPUS

As a part of Water conservation facilities that are available in the Institution, water bodies and Distribution of water system is provided in the campus. The related Geotagged photos are shown below:





MRCET
17.5624°N, 78.4556°E

IMG20201121105833.jpg Properties

General Security Details Previous Versions

Property	Value
Contrast	
Brightness	
Light source	
Exposure program	Unknown
Saturation	
Sharpness	
White balance	Auto
Photometric interpretation	
Digital zoom	1
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Altitude	518
File	
Name	IMG20201121105833.jpg
Item type	JPG File
Folder path	C:\Users\SATHVIK\Desktop

[Remove Properties and Personal Information](#)

OK Cancel Apply



-2-

Check list : to be done every day in the morning :

1. Check for power : 220 V single phase.
2. Check for RAW water : raw water tank.
3. Back wash sand filter : 3 mins – daily.
4. Back wash carbon filter : 3 mins – daily.
5. Start Raw water pump, wait for 10 sec.. start high pressure pump and adjust pressure at 100 PSI.
6. Change slim filters once in 40 days , add anti scalant every day as recommended.
7. Switch off as stated.

Flow of water is as following :

It is very important to know flow rout of water :

HDPE tank a/ RAW water tank to RO through sand filter, carbon filter, filter cartridges then to HPP and membranes.

Any clarification required, please call us on 9550370017.



To,
M/s. Mallareddy College of
Engineering and
MRCI



RO Plant operating manual
For drinking water - College

Reverse osmosis system : RO system in your plant is one of the very important unit to remove bacteria, dissolved solids, suspended solids.

Check for 220 V power before switch on of the plant.

Do back wash of sand filter and carbon filters daily for 3 mins.. check for RAW water availability and switch on RAW water pump also HPP. provide pressure 100 PSI so as to get the purified water.

The process of separation is used to separate dissolved solids from effluent and provide pure water from RO system. Our system is designed for 1000 liters per hour capacity having 50 % recovery. The reject water can be used for gardening.

This plant is designed for hard water to produce RO water of 1000 LPH capacity.

The said plant consists of RO plant of 1000 LPH.

Following is the RO manual.

The RO plant is a 1000 litres per hour system, having following components :

RAW WATER PUMP – 1 HP one.

SAND FILTER 1354 FRP,

CARBON FILTER 1354 FRP,

MPV 20 NB 2 nos.,

SLIM FILTERS 2 Nos.

High pressure pump HPP 2-18 ,

8040 HOUSING,

8040 MEMBRANES 1 Nos.

Pressure gauges , flow meters , UV Ozone generator.

