



SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

SreeSainath Nagar, Tirupati – 517 102

Environmental Consciousness and Sustainability

7.1.4 Water Conservation Facilities

Environmental Consciousness and Sustainability

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

Options:

- A. Any 4 or all of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1of the above
- E. None of the above

Upload:

- **Geotagged photographs / videos of the facilities**
- **Any other relevant information**

- Campus is sufficiently equipped with sustainable rain water harvesting systems.
- Soak pits, trench pits, ponds and sumps are well constructed at appropriate locations and maintained to store rainwater above the ground and recharge groundwater through a well-connected drainage network designed for collecting rainwater runoff from roof tops and open areas, at the time of downpour within the campus.
- The stored rainwater is mainly used for gardening and construction.
- Further, most of the internal pavements and open spaces are laid with porous/permeable concrete paver tiles separated by joints and rainwater is allowed to infiltrate.
- Landscape is maintained such that each and every drop of rainwater is collected and drained into rainwater harvesting systems.
- Existing open wells in the campus are well utilized to harvest rainwater.
- Well conceived stormwater drainage system is in place in the campus to manage storm water.
- Drains are always kept clean.

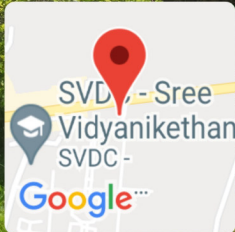
- Bunds were constructed at appropriate places in the campus to store rainwater and facilitate it to infiltrate into the ground and thereby to recharge groundwater to the maximum extent. This has led to the development and sustenance of greenery in the campus.
- Kerb stones were used in the form of low level fencing to retain rain water runoff for infiltration at locations wherever it is appropriate.
- Wastewater is generated from wash rooms, toilets of all buildings, canteen and messes is collected and transported by means of well conceived sewerage system to three sewage treatment plants of 150 KLD, 200 KLD and 250 KLD. An extended type of activated sludge process principle is provided in the working of these sewage treatment plants. The wastewater generated is 100% domestic origin. **The treated water is used for the gardening the lawns on campus.**
- Well conceived plumb line system is in place in the campus for conveying water and wastewater in the campus.
- The groundwater is pumped to overhead tanks located on the terrace of different buildings in the campus and then distributed through a well designed distribution system for different applications.
- There are six overhead tanks on the terrace of various buildings and one underground tank in the campus. The total water storage capacity of all tanks is 576000 litres. The present water demand is about 310000 litres. The present storage capacity of tanks is sufficient for storing and distribution.
- The groundwater available in the campus contains hardness beyond the drinking water standards. The institute installed five Reverse Osmosis (RO) systems of capacities 500 Litres per hour, 1000 Liters per hour, 2000 Liters per hour (2 No.) and 3000 Liters per hour at appropriate locations as per the requirement. These RO systems are usually operated during morning (4 am to 9 am) and evening (6 pm to 10 pm).
- Manual alert system is provided to check overflow of water tanks. The water works man always keep track on the water tanks.
- Water tanks are cleaned periodically.

- Drinking water quality standards are well maintained through periodic water quality tests.
- Pipelines, taps and other sources of water discharge are well maintained without any leakages.



PRINCIPAL
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SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Salnath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P, INDIA.

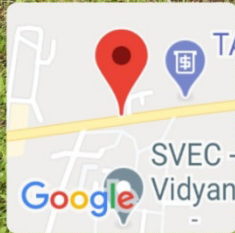
RAIN WATER HARVESTING STRUCTURES



Tirupati, Andhra Pradesh, India
134, Anantapur - Tirupati Hwy, Sainath Nagar,
Andhra Pradesh 517102, India
Lat N 13° 37' 24.834" Long E 79° 17' 27.7764"
24/08/21 09:58 AM

30.18° C

**Rain Water Harvesting Pond at Main Gate
(Size: 14.5 m Diameter X 1.5 m Depth)**



Nagapatla, Andhra Pradesh, India
NH71, Andhra Pradesh 517102, India
Lat N 13° 37' 25.7016" Long E 79° 17' 24.792"
07/01/21 09:57 AM

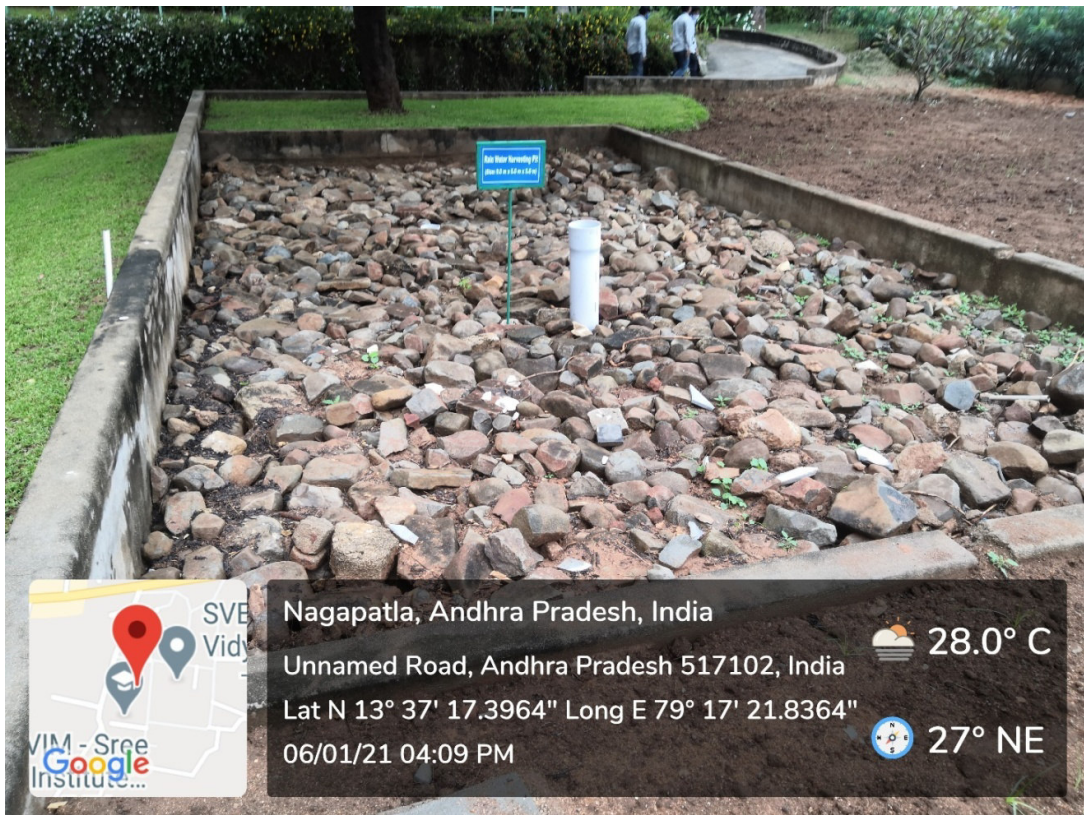
24.0° C

32° NE

**Rainwater Harvesting Pit at New Canteen
(Size: 5.25 m x 5.0 m x 3.6 m)**



**Rainwater Harvesting Pit beside MNS Block
 (Size: 5.25 m x 5.0 m x 3.6 m)**



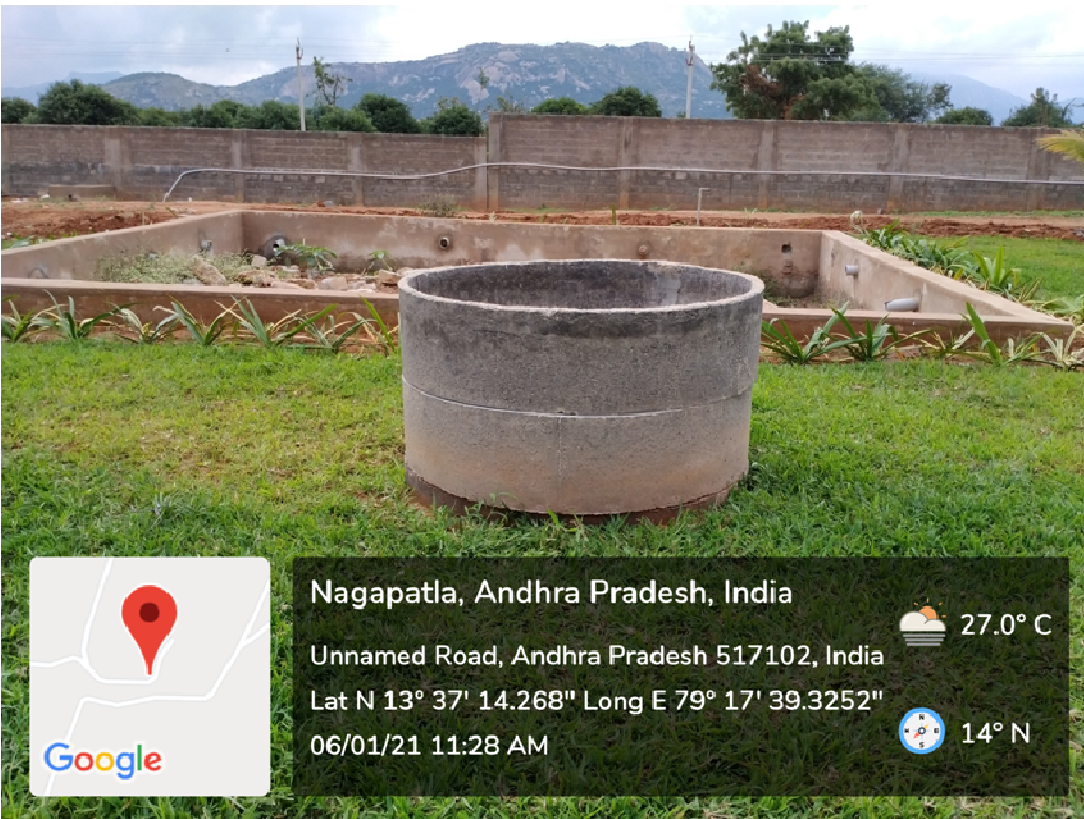
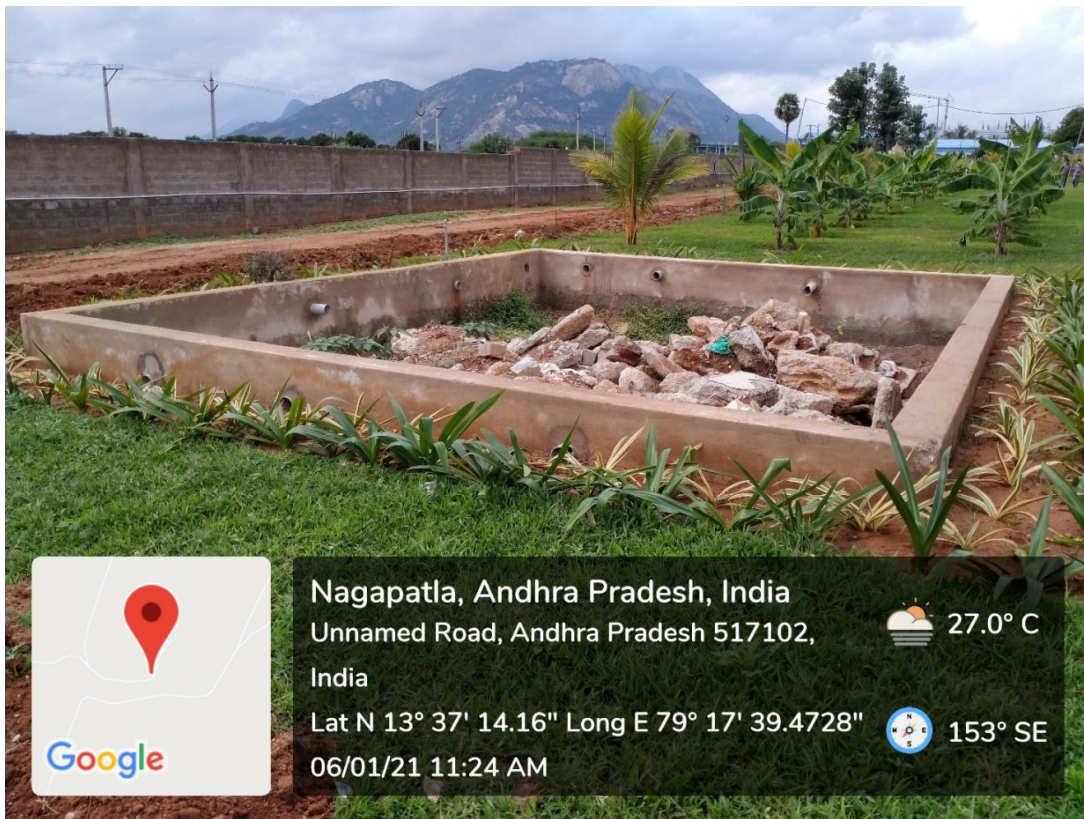
**Rainwater Harvesting Pit in front of MNS Block
 (Size: 9.0 m x 5.0 m x 3.6 m)**



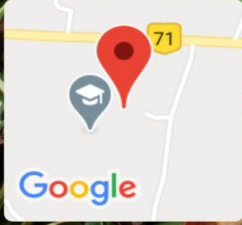
Rainwater Harvesting Pit at PAT Office (Size: 4.0 m x 4.0 m x 3.6 m)



**Rainwater Harvesting Pit at East of V Block
(Size: 8.8 m x 7.8 m x 3.6 m)**



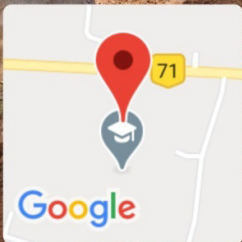
**Rainwater Harvesting Pit at South of V Block
(Size: 7.5 m x 6.0 m x 3.6 m)**



Nagapatla, Andhra Pradesh, India
NH71, Nagapatla, Andhra Pradesh 517102, India
Lat N 13° 37' 19.2648" Long E 79° 17' 2.1768"
22/01/21 11:45 AM

☀️ 28.0° C
🌐 157° SE

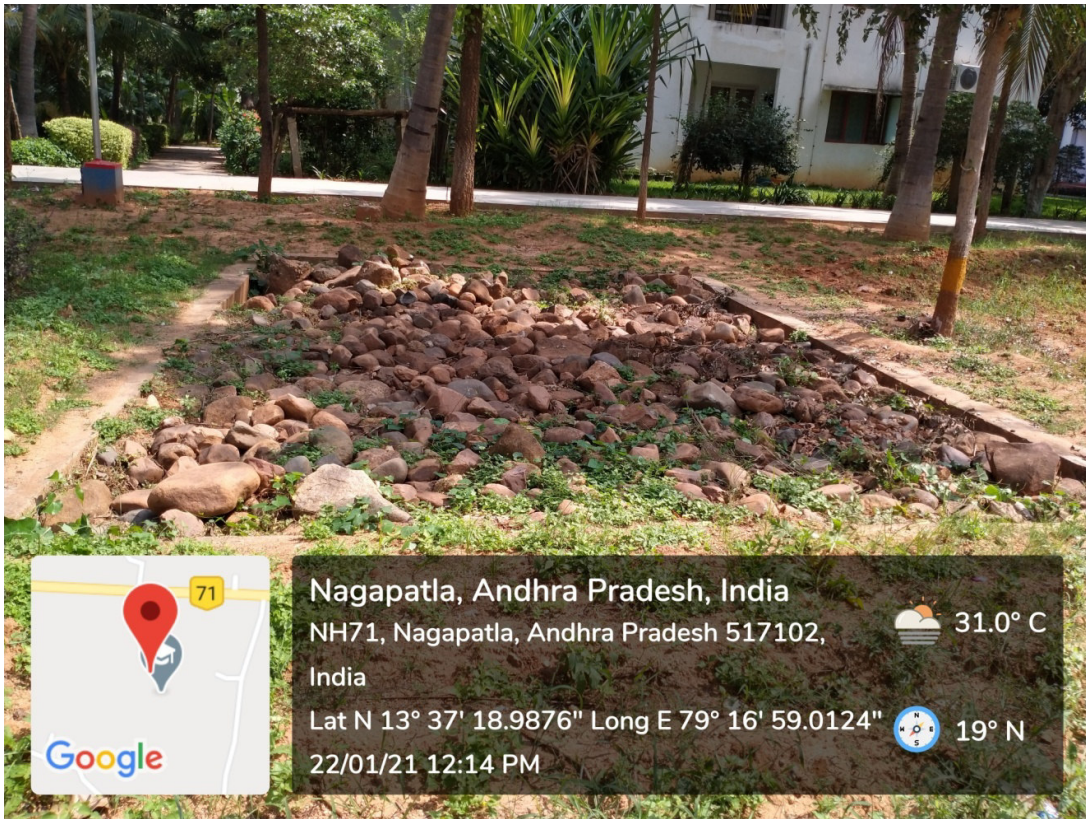
**Rainwater Harvesting Pit-1 at Girls Hostel Premises
(Size: 5.5 m x 5.52 m x 3.6 m)**



Nagapatla, Andhra Pradesh, India
NH71, Nagapatla, Andhra Pradesh 517102, India
Lat N 13° 37' 20.928" Long E 79° 16' 59.8944"
22/01/21 12:12 PM

☀️ 31.0° C
🌐 241° SW

**Rainwater Harvesting Pit-2 at Girls Hostel Premises
(Size: 7.48 m x 4.74 m x 3.6 m)**



Nagapatla, Andhra Pradesh, India

NH71, Nagapatla, Andhra Pradesh 517102,

India

Lat N 13° 37' 18.9876" Long E 79° 16' 59.0124"

22/01/21 12:14 PM

 31.0° C

 19° N

Rainwater Harvesting Pit-3 at Girls Hostel Premises
(Size: 6.37 m x 4.25 m x 3.6 m)



Nagapatla, Andhra Pradesh, India

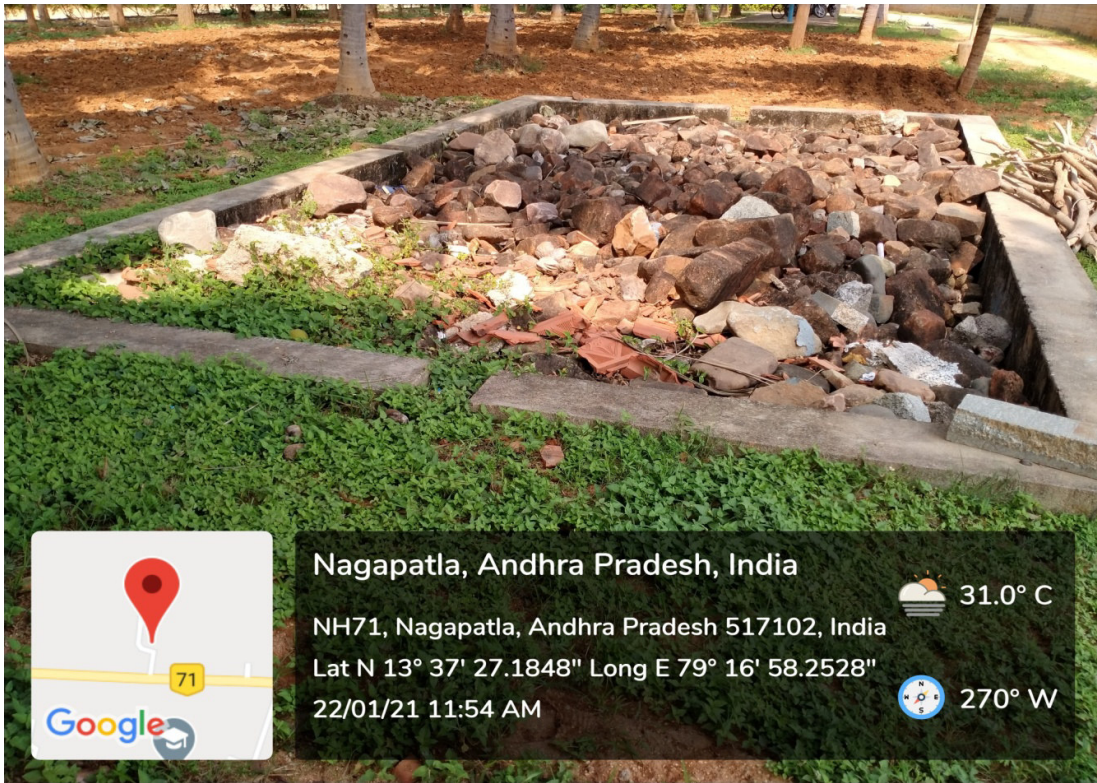
NH71, Nagapatla, Andhra Pradesh 517102, India

Lat N 13° 37' 15.9852"

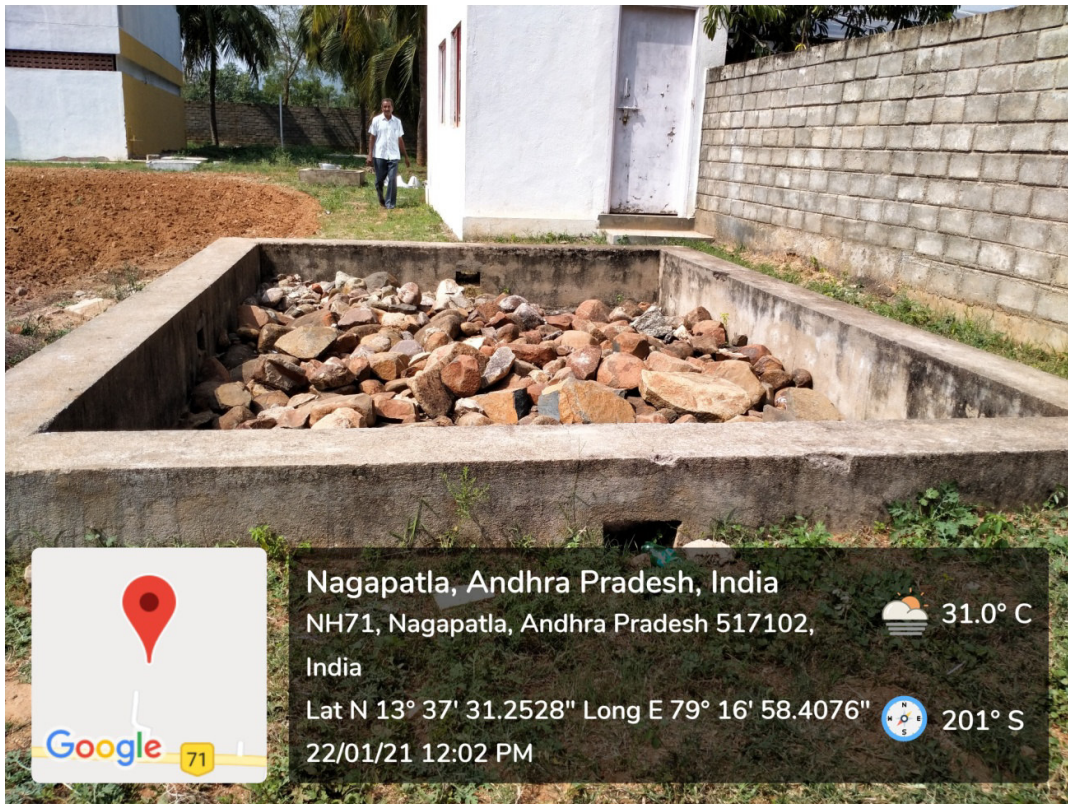
Long E 79° 17' 1.0644"

22/01/21 03:22 PM

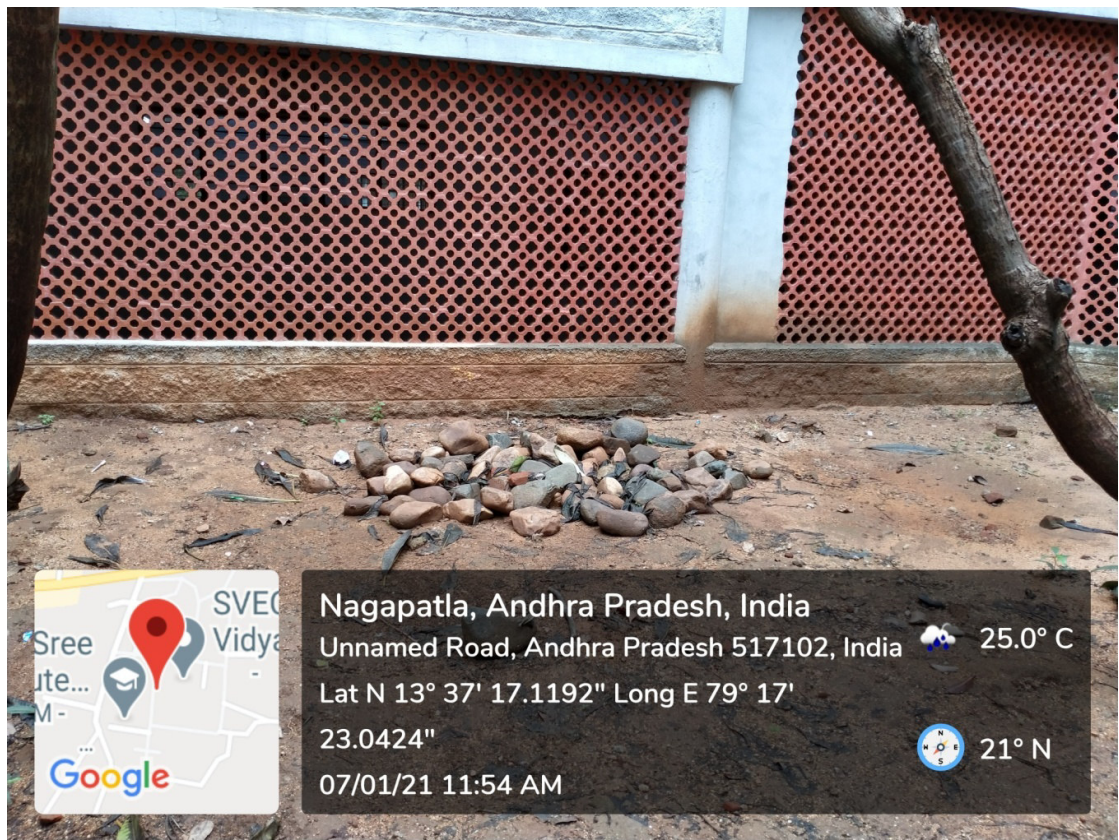
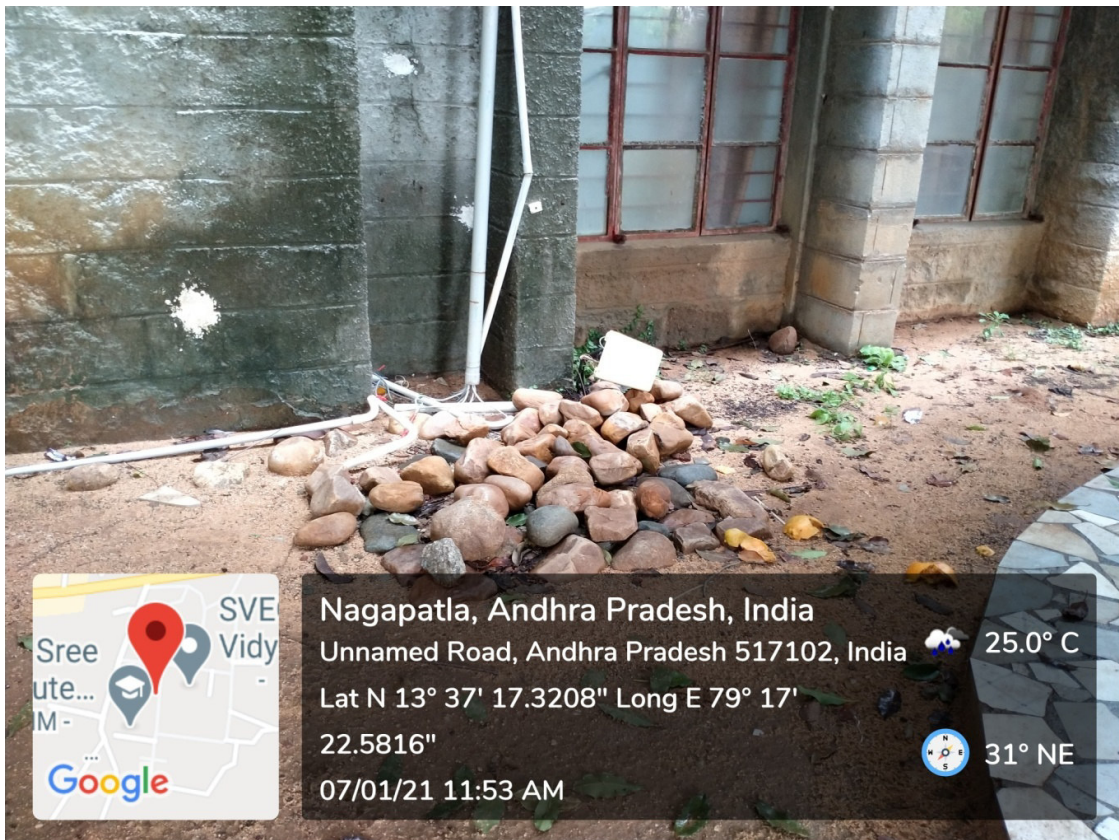
Rainwater Harvesting Pit-4 at Girls Hostel Premises
(Size: 5.42 m x 5.39 m x 3.6 m)



**Rainwater Harvesting Pit-1 at Boys Hostel Premises
(Size: 7.29 m x 4.13 m x 3.6 m)**



**Rainwater Harvesting Pit-1 at Boys Hostel Premises
(Size: 4.89 m x 3.36 m x 3.6 m)**

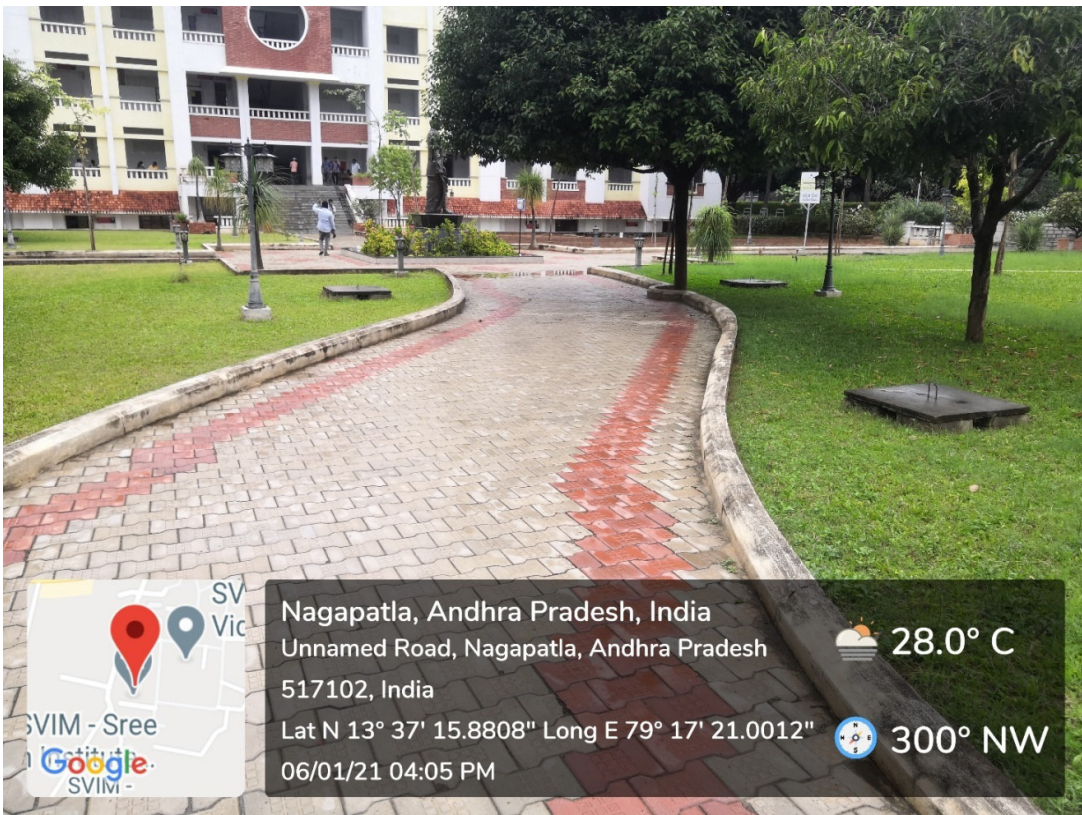


Soak Pits



Nagapatla, Andhra Pradesh, India
 Unnamed Road, Andhra Pradesh 517102, India
 Lat N 13° 37' 16.932" Long E 79° 17' 21.462"
 06/01/21 04:07 PM
 28.0° C
 187° S

Porous/Permeable Concrete Paver Tiles Separated by Joints at MNS Block to Infiltrate Rainwater



Nagapatla, Andhra Pradesh, India
 Unnamed Road, Nagapatla, Andhra Pradesh
 517102, India
 Lat N 13° 37' 15.8808" Long E 79° 17' 21.0012"
 06/01/21 04:05 PM
 28.0° C
 300° NW

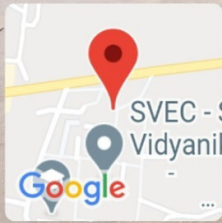
Porous/Permeable Concrete Paver Tiles Separated by Joints at MNS Block to Infiltrate Rainwater



Porous/Permeable Concrete Paver Tiles Separated by Joints in Front of Mechanical Engineering Block to Infiltrate Rainwater



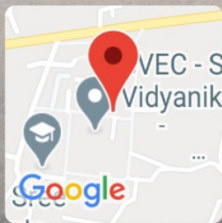
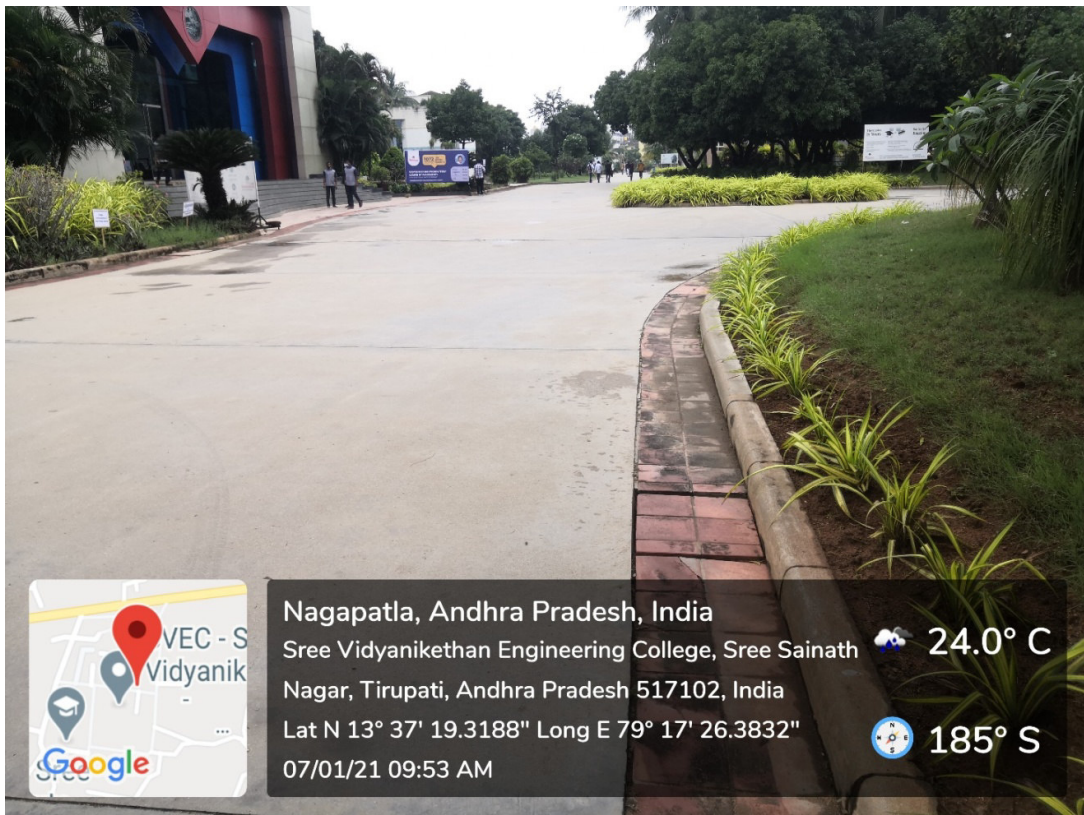
Porous/Permeable Concrete Paver Tiles Separated by Joints in Front of Civil Engineering Block to Infiltrate Rainwater



Nagapatla, Andhra Pradesh, India
SVEC Sree Sainath Nagar A. Rangampeta, Andhra Pradesh 517102, India
Lat N 13° 37' 23.034" Long E 79° 17' 25.656"
06/01/21 04:15 PM

27.0° C
95° E

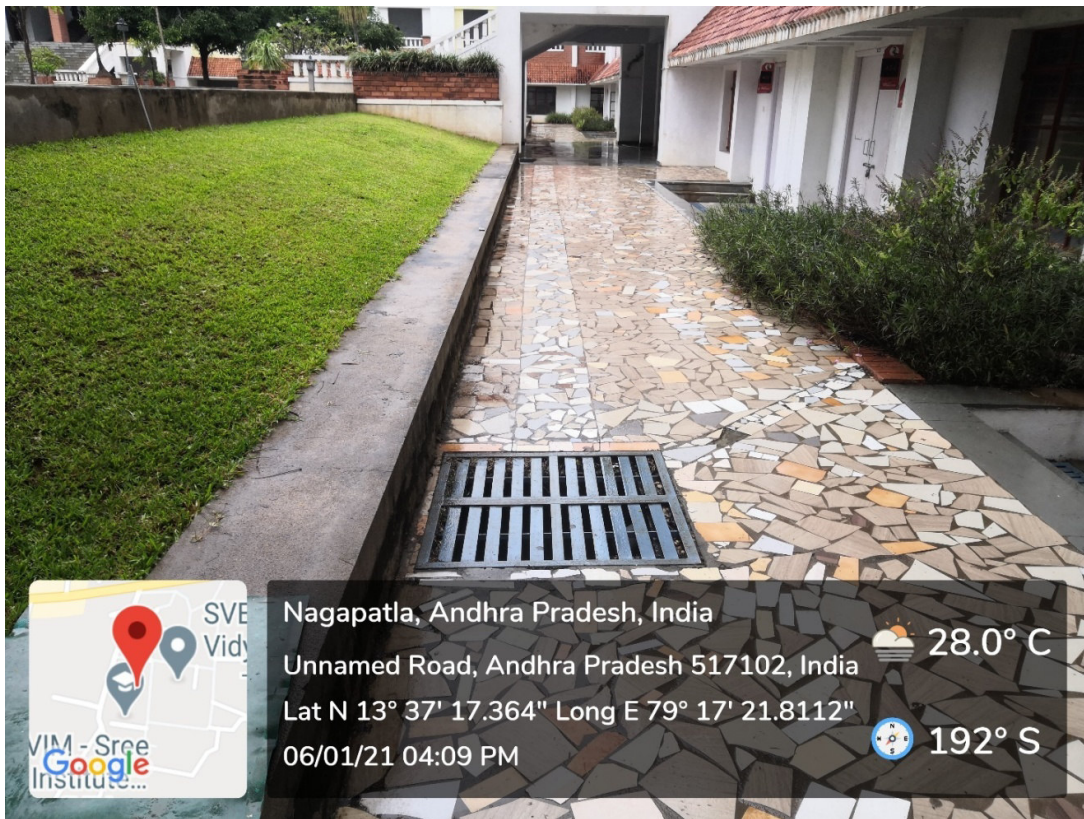
Rain Water Collection and Conveyance System in Front of M-Block



Nagapatla, Andhra Pradesh, India
Sree Vidyanikethan Engineering College, Sree Sainath Nagar, Tirupati, Andhra Pradesh 517102, India
Lat N 13° 37' 19.3188" Long E 79° 17' 26.3832"
07/01/21 09:53 AM

24.0° C
185° S

Rain Water Collection and Conveyance System beside M-Block



Nagapatla, Andhra Pradesh, India

Unnamed Road, Andhra Pradesh 517102, India

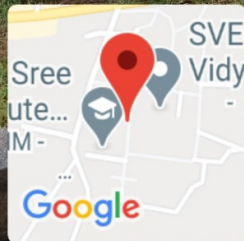
Lat N 13° 37' 17.364" Long E 79° 17' 21.8112"

06/01/21 04:09 PM

☀️ 28.0° C

🧭 192° S

Rain Water Collection and Conveyance System at MNS-Block



Nagapatla, Andhra Pradesh, India

Unnamed Road, Andhra Pradesh 517102, India

Lat N 13° 37' 16.9248" Long E 79° 17'

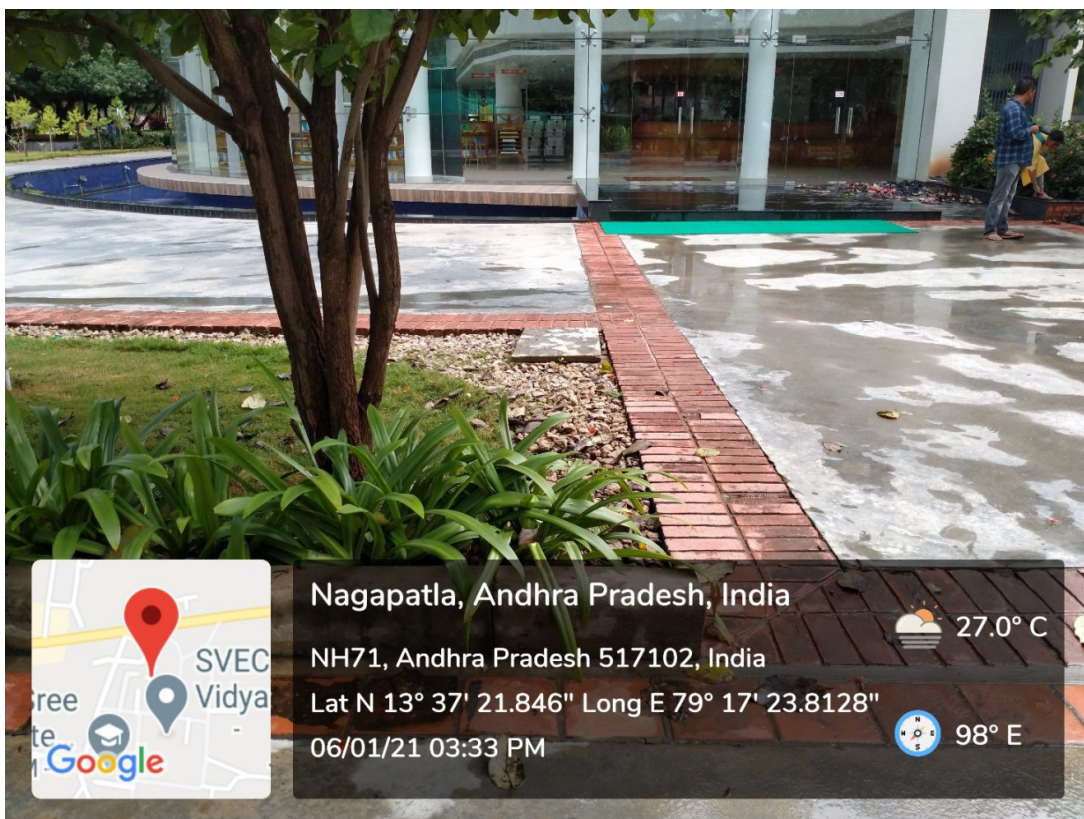
22.6032"

06/01/21 03:38 PM

☀️ 27.0° C

🧭 227° SW

Rain Water Collection and Conveyance System at MNS-Block



Rain Water Collection and Conveyance System at Central Library



Rain Water Collection and Conveyance System at Central Library



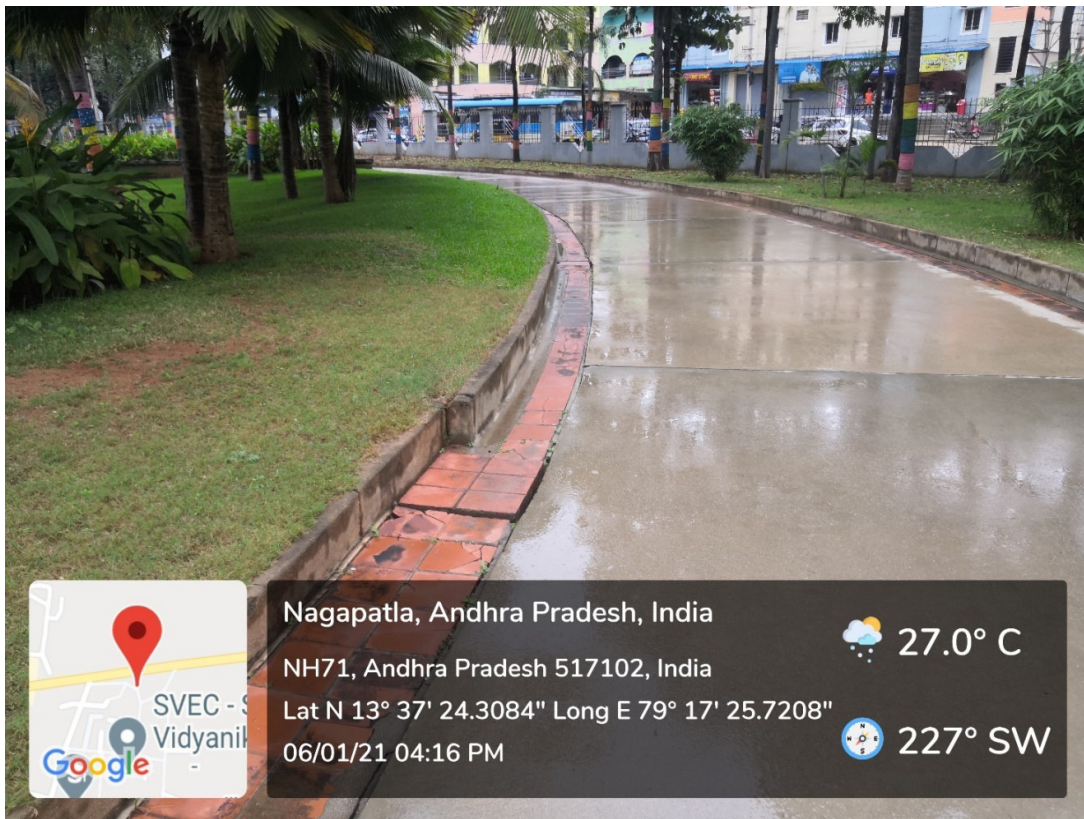
Rain Water Collection and Conveyance System at PAT Office



Rain Water Collection and Conveyance System in Front of Central Library



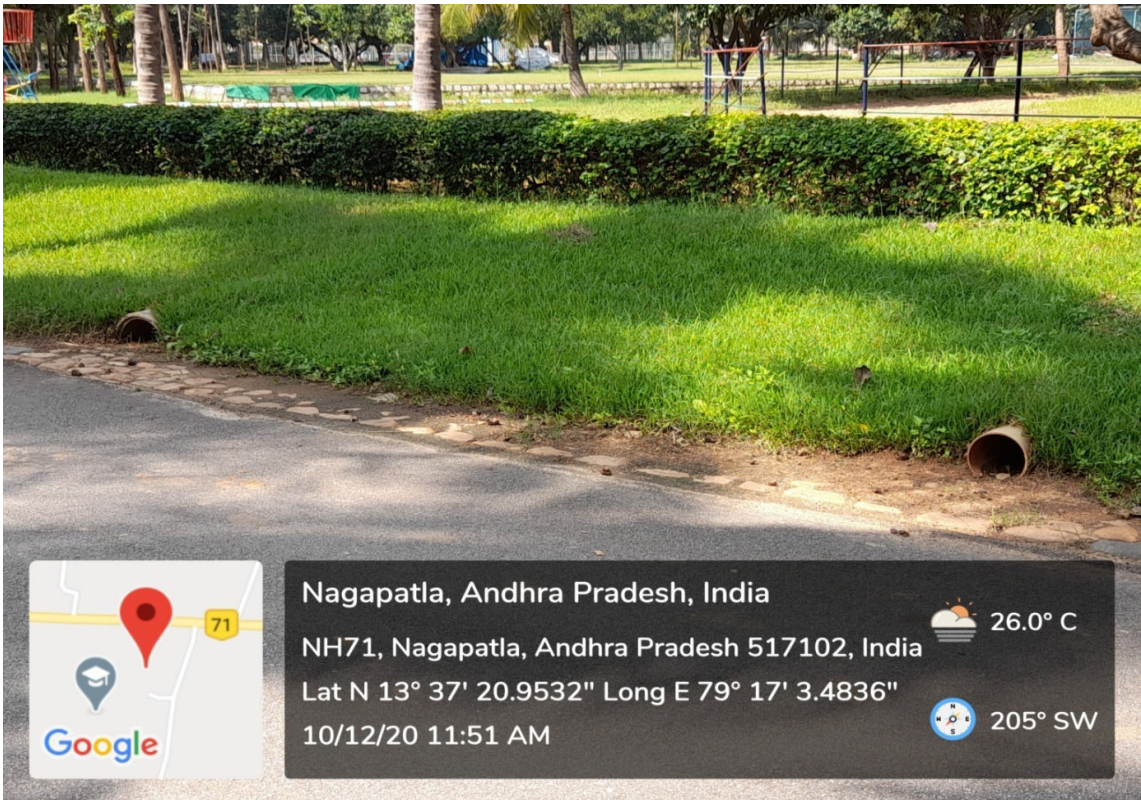
Rain Water Collection Point at Central Library



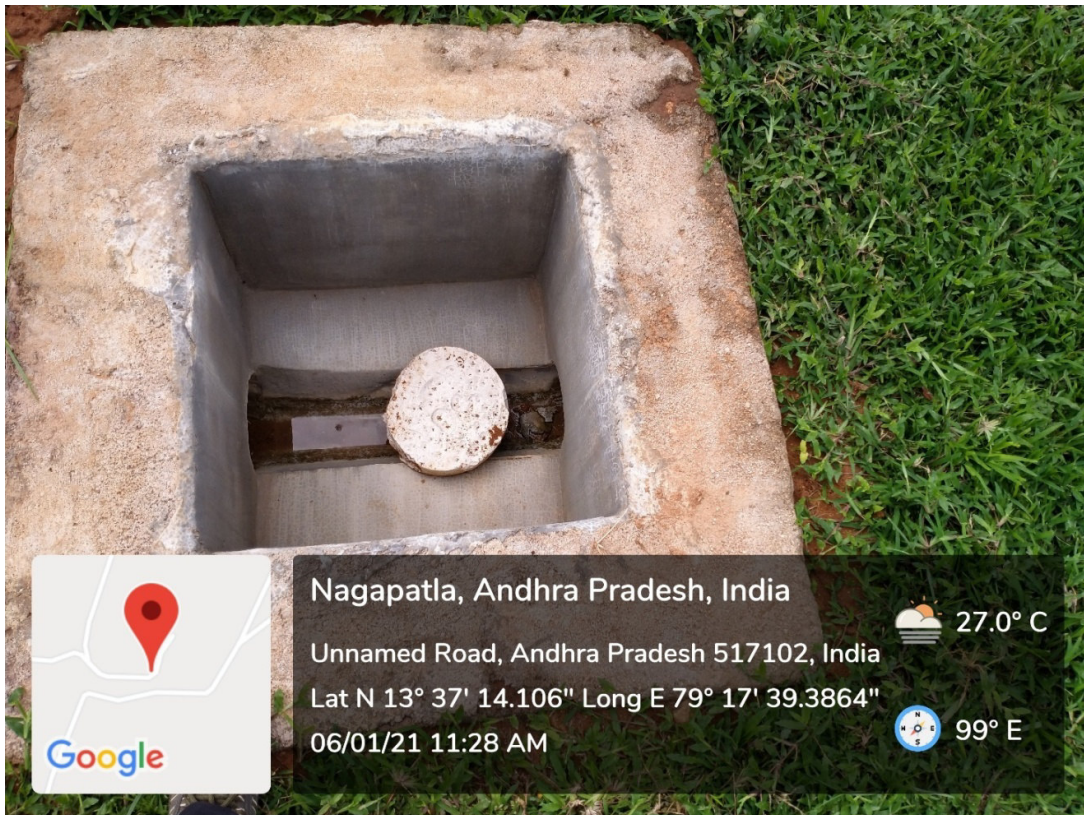
Rain Water Collection and Conveyance System on the Way to Canteen



Rain Water Collection and Conveyance System at the Canteen



Rain Water Collection and Conveyance System on the Way to Hostels



Rain Water Collection Point at V Block