

উদ্ভাবনীমূলক ধারণা

“কড্ডা ১৫০মেঃঃঃ ডুয়েল ফুয়েল বিদ্যুৎ কেন্দ্রে বৃষ্টির পানির ফায়ার ফাইটিং, অন্যান্য কাজে ব্যবহার ও বৃষ্টির পানির উপর বিদ্যুৎ এলাকায় বায়ু দূষণের প্রভাব যাচাইকরনের নিমিত্ত প্রয়োজনীয় সরঞ্জামাদি স্থাপনা।”

2. Scope of Work:

Kodda 150 MW Dual Fuel Power is owned by B-R Powergen Ltd which is operated by HFO.

The plant has 09 Generator set, 5 Exhaust gas boilers, 1 Diesel fired boiler, 9 lube oil separators, 4 heavy fuel separators and fire fighting systems. The plant consists of different Buildings, Shade, and Room such as Engine hall, Fuel treatment room, Workshop, Warehouse, WTU, EDG room, Aux. Boiler room etc.

For engines, boilers, fuel and lube oil separators, domestic use and gardening we need to use a huge amount of water everyday which costs a lot of water and power from the system. Two of submersible pumps with 14Kw Power ratings run 1.5 hours on an average everyday throughout the year to meet the consumption of water. Which costs 42kWh power everyday.

Installation of rain water collection system for use in plant may reduce auxiliary consumption and will help in reduction of underground water and thus help to nature.

3. Implementation Procedures:

We will get water through pipe lines attach with fire fighting pond shed and fire fighting pump house shed and pour them to fire fighting ponds. For this we will need PVC pipes, gum, filter, angles, GP water proof sheets etc.

Drawing

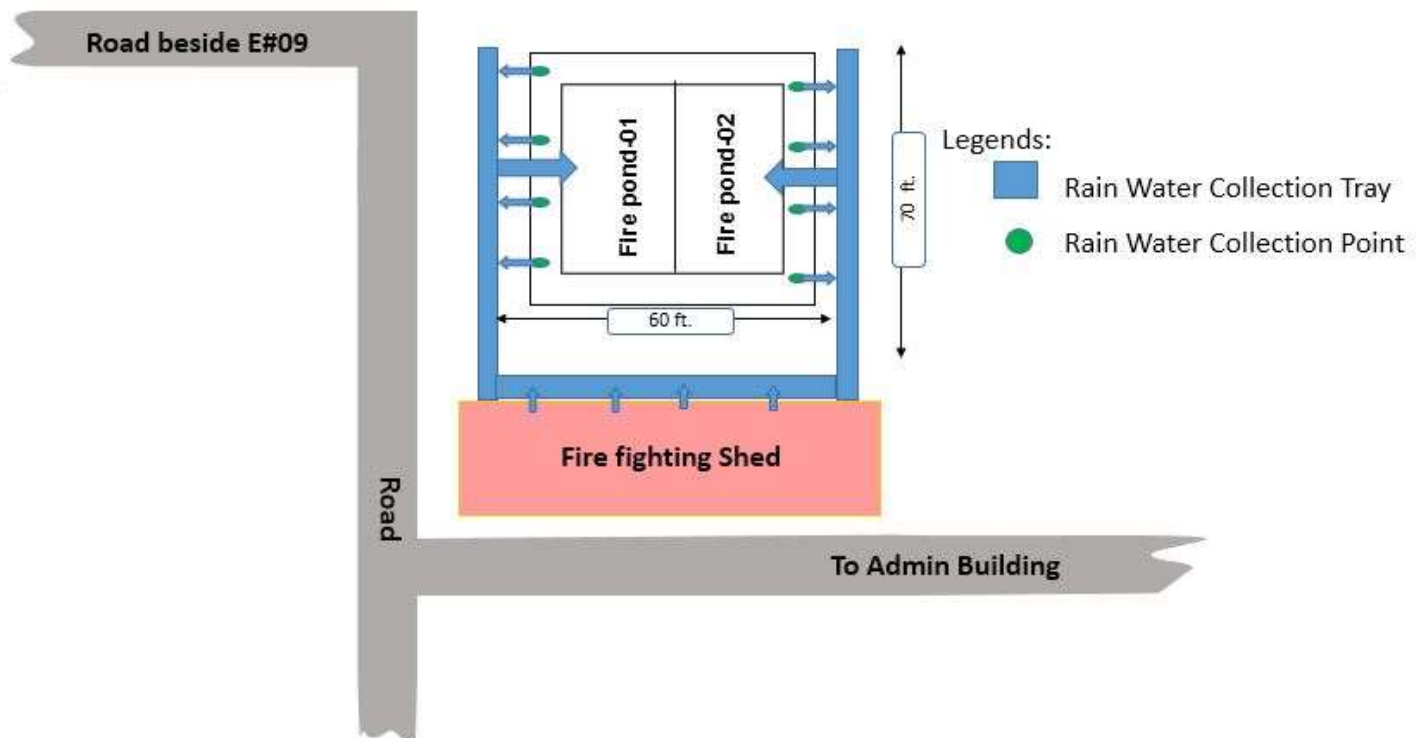


Figure: Use of Rain water for plant systems.

4. Materials List (BoQ):

Mesurement and costs:

Sl No:	Location:	Length (Feet)	Wide (Feet)	Needed Pipe Length (ft)
1.	Fire Pond Shed	70x2	N/A	140
2.	Fire Fighting shed	60	N/A	60

Total 200 ft

Sl	Item Description	NOS	Qty	Unit Rate	Total Price (BDT)
1	GP Sheet-2mm	Sft	(200*3.16)~700	230	161000
2	Angle-1.5inch *1.5inch*3mm	Feet	200	100	20000
3	UPVC pipe 4 inch thickness 4mm	Feet	(5 feet*12 pcs)=60	135	8100
4	UPVC Plan band 4 inch	Pcs	25	350	8750
5	PVC grating 4 inch	Pcs	14	290	4060
6	Solvent Cement 500 MI	Pcs	3	950	2850
7	Fitting and fixing charge of rain water & Down pipe	Lot	1	58500	58500

Vat & AIT -10.5% =26263

Total amount BDT- 289523

5. TCV (Time Cost Visit) Analysis:

To complete this project, we need 10-15 days after procurement. For implementing the idea, total cost will be around 2.9 lacs.

6. Work Process/Flow Diagram:

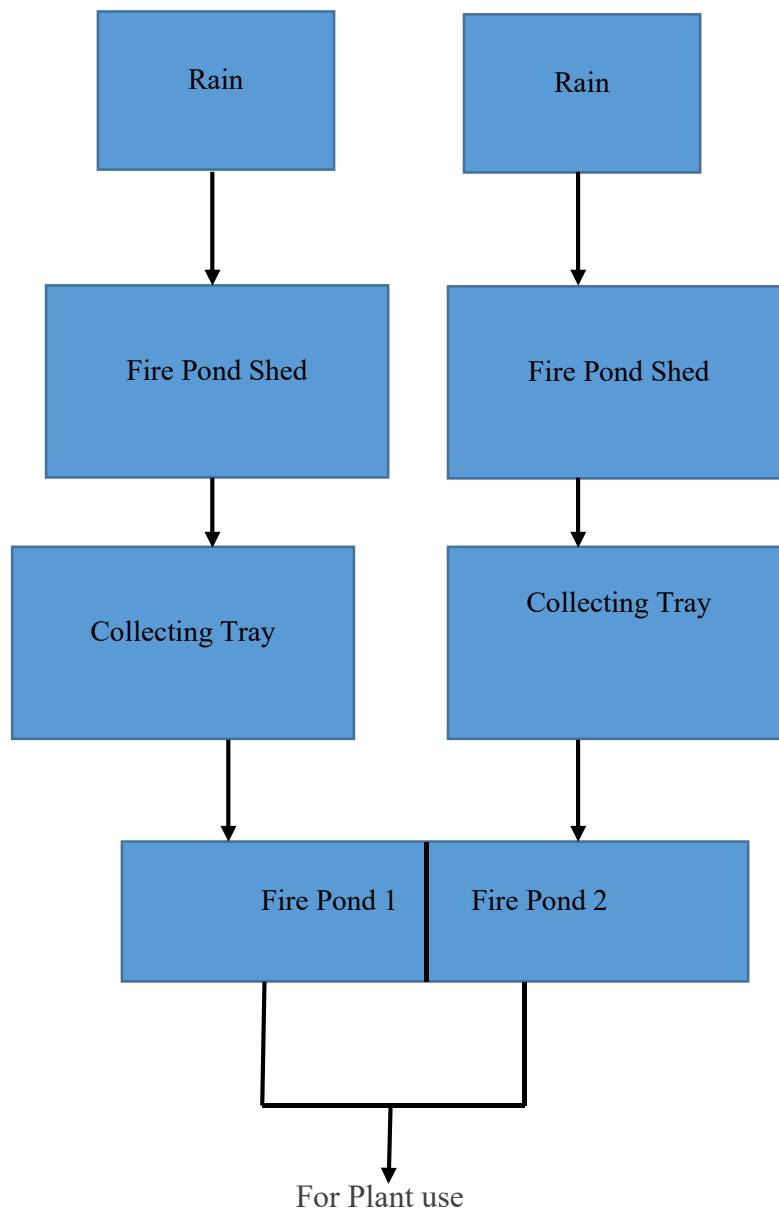


Fig: Flow Diagram of Project working process.

7. Conclusion:

Why using rain water for the system is important:

a. Reduces Electricity Bill

The most significant benefit of using rain water for the is that we don't need electricalPower use for submersible pump during the rainy season. We are getting water as required but without the electrical bill to pay.

b. Less Use of Undergrond water.

It will help to balance the Enverionment by keeping ground water level

c. Quick and Practical Installation

In an experienced worker's hands the total work will be completed within 10-15 days only.

d. Low Installation Cost

The total installtion will be within 5 laks.

By utilizing the Use of Rain water for plant systems which is getting from nature, will help us econmically and the Use of Rain water for plant systems is one of the most effective way to utilize it. Also by installing Use of Rain water for plant systems power plant auxiliary consumption can be reduced which isvery important to achieve the APA goal

Submitted By:

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