

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9985,9986/Lab/292/2021-22 **Dated:** 09/02 /2022. **Laboratory:** Bicholim
Sand –T:5245 Cement-T: 1329 **Sub Div: V (QC)/WRD/Bicholim Goa.**

Sub:- Flood mitigation measures and construction of flood water pumping station at Mala, Panaji Goa.

Ref to requisition No:- SDIV/WDI/WRD/F.38/2021-22/684 **Dated:** 27/01/2022.

Qty. Received: 1 bags each **Date of Receipt:** 01/02/2022 **Tested on:** 03,04,05 & 06/02/2022 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand, 20mm, **O.S. N:-** 7561,7562,7582 & 7555/SS **Lab. Sample No.:** 2847 To 2850 **Tested by:** Mrs. S.B. Naik Shirodkar. J.E.
 12.5mm size aggrt., Cement

R E P O R T 01 OF 01

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m ³)	
2.	12.5 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	Coarse Sand: (L.S.No.2849)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.80% : - 5.40% : - 2.10% : - III		
To be used for----. REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Cement: Ultratech Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W- 04, M- 01, Year-2022 CM/L =0008152255 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 0.98% : 31.00% : 170 minutes : 320 minutes	----- (It should not be more than 10%) (It should be in the neighborhood of 35%) ---- (It should not be less than 30 minutes) -- (It should not be more than 600 minutes)	
To be used for –. REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

- Copy to: 1. The Assistant Engineer, SDIV, WDI, WRD, Porvorim – Goa.
 2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
 3. Copy Submitted to The Executive Engineer, W.D. I, WRD, Porvorim – Goa
 4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer