

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 9993, 9994/Lab/ 303/2021-22    **Dated:-** 19 / 02 / 2022.    **Laboratory:** Bicholim

**Sand –T:** 5249.    **Cement-T:** 1333.

**Sub Div:** V (QC)/WRD/Bicholim Goa.

**Sub:-** Improvement to existing nallah from Cyril Perrera house up to Umakant Dhargalk house in ward No. 01 Mapusa Municipal Council Cuchelim in Mapusa Constituency.

**Ref to requisition No:-** SDII/WDI/WRD/F.24/20-21/370

**Dated :-** 22/12/2021

**Qty. Received:** 1 bags each    **Date of Receipt:** 10/02/2022    **Tested on:-** 15 & 16/02/2022    **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:** Sand, 20mm, **O.S. N:-** 7672, 7673, 7683 & 7654 /SS    **Lab. Sample No.:-** 2954 To 2957    **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.	<b>20.00 mm Size Aggregate:</b>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m <sup>3</sup> )	
2.	<b>12.5 mm Size Aggregate:</b>	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m <sup>3</sup> )	
<b>REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:2 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.</b>					
3.	<b>Coarse Sand:</b> (L.S.No.2956)		i) Silt & Clay by S.A. method : - 5.60% ii) Silt by sedimentation : - 5.26% iii) Fineness Modulus : - 2.11% iv) Grading Zone : - III		
	To be used for----	<b>REMARK: The observed results are within the permissible limits of the coarse sand.</b>			
4.	<b>Cement:</b> J.K. Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W- 05, M- 02, Year -2022 CM/L = 0003401033 Qty. rep. –.		i) Fineness of Cement : 1.21% ii) Consistency of cement : 31.00% iii) Initial Setting Time : 155 minutes iv) Final Setting Time : 300 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	<b>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</b>			

Copy to: 1. The Assistant Engineer, SDII, WDI, WRD, Mapusa, Bardez – 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**