

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 9887, 9888 /Lab/ 186 /2021-22 **Dated:** 18/10/2021. **Laboratory:** Bicholim  
**Sand –T:** 5181. Cement-1282 **Sub Div:** V (QC)/WRD/Bicholim Goa.

**Sub:-** Construction of road side drain from CADA garage to old water sump at T.I.P. Complex, Karaswada, Bardez-Goa.

**Ref to requisition No.:** SDIII/WDVIII/WRD/WF.75/2021-22/174 **Dated:** 05/10/2021.

**Qty. Received:** 1 bags each **Date of Receipt:** 05/10/2021 **Tested on:** 08 & 11/10/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:** Sand, 20mm, **O.S. N.:** 6996, 6997, 7005, 7002/SS **Lab. Sample No.:** 2249 To 2252 **Tested by:** Mrs. Shirodkar.JE.  
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 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:</b> After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of <b>1:1</b> by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	<b>Sand:</b> (L.S.No.2251)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.80% : - 5.40% : - 2.53 : - II		
To be used for----. <b>REMARK:</b> The observed results are within the permissible limits of the coarse sand.					
4.	<b>Cement:</b> Ultratech Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W – 38, M- 09, Year’2021 CM/L = <u>7171769</u> Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.42 % : 32.50% : 150 minutes : 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 –1:2:4 mix concrete. <b>REMARK:</b> The observed results are within the permissible limit for Ordinary Portland cement.					

Copy to: 1. The Assistant Engineer, SDIII, WDVIII,WRD, Karaswada-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. VIII, WRD, Karaswada-Bardez – Goa  
4. Q.C. Lab file 5. Bill File.

**Junior Engineer**

**Assistant Engineer**