

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 9895, 9896 /Lab/ 191 /2021-22    **Dated:** 26/10/2021.    **Laboratory:** Bicholim  
**Sand –T: 5186. Cement-1285**    **Sub Div:** V (QC)/WRD/Bicholim Goa.

**Sub:-Improvement to road behind circle –II garage at T.I.P complex Karaswada Bardez Goa.**

**Ref to requisition No.:** SDIII/WDVIII/WRD /WF.80/2021-22/180    **Dated:** 08/10/2021.

**Qty. Received:** 1 bags each    **Date of Receipt:** 11/10/2021    **Tested on:** 14,16 &18/10/2021    **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:** Sand, 20mm, **O.S. N.:** -7018, 7019, 7023 & 7020 /SS    **Lab. Sample No.:** 2271 To 2274    **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>20.00 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:</b> After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of <b>1:2</b> by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	<b>Sand:</b> (L.S.No.2273)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.20% : - 5.55% : - 2.74 : - II		
	To be used for----	<b>REMARK:</b> The observed results are within the permissible limits of the coarse sand.			
4.	<b>Cement:</b> JK.Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W- 40 M- 10, Year'2021 CM/L =0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.05% : 32.50% : 175 minutes : 325 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**