

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

Test Report No.: WRD/Q.C. / F.6-4 /Aggr-T- 203,204/Lab/193/2022-23 **Dated:** 17/11/2022. **Laboratory:** Bicholim-Goa
Sand -T: 5314,5315 **Cement-T:** 1385 **Sub Div:** V (QC)/W.D.VIII/Bicholim Goa.

Sub: Construction of 10cm thick PCC lining for canal from ch.15.000 km to ch. 18.000 km of LBMC of TIP in Thivim and Sircaim Villages of Bardez Taluka.

Ref to requisition No.: S.D.II/W.D.VIII/WRD/F.154/2022-23/81 **Dated:** 01/11/2022.

Qty. Received: 1 bags each **Date of Receipt:** 10/11/2022 **Tested on:** 11,14 & 15/11/2022. **Ref to Specification:** CPWD 2009, Vol. I&IS: 4031-4-1968

Sample: Sand, 20mm, **O.S. No.** 9468,9475,9476,9466,9467/SS. **Lab. Sample No.:** 5377 To 5381 **Tested by:** Mrs. S.B. Naik Shirodkar J.E.
12.5mm size Aggr, Sand, and Cement

R E P O R T 01 OF 01

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
1.	<u>Cement:</u> Dalmia Cement, bearing IS:269 Ordinary Portland cement, Manuf. date:W-01, M-10, Y- 2022 CM/L =_6200022577 Qty. rep. -----	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	:- 1.28 % ----- (It should not be more than 10%) :- 33.50 % (It should be in the neighborhood of 35%) :- 175 minutes ---- (It should not be less than 30 minutes) :- 330 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.			
2.	<u>Crushed Sand:</u> (L.S.No.5378)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	:- 14.00% (Limit of Deleterious material is 15.00% for crushed sand) :- 12.82% :- 2.62% :- II		
		REMARK: The observed results are within the permissible limits for crushed sand (Fine Aggregate) vide table 2 of IS 383: 2016(Clause 5.2.1).			
3.	<u>Coarse Sand :</u> (L.S.No.5379)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	:- 3.50 % :- 4.65 % :- 2.97 % :- II		
		REMARK: The observed results are within the permissible limits of the Coarse sand.			
4.	<u>20 mm Size Aggregate:</u>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. ---m ³)	
5.	<u>12.5 mm Size Aggregate:</u>	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.			

Copy to:1. The Assistant Engineer, SD II, WD VIII, W.R.D. Thivim Bardez-Goa.

2. Copy Submitted to The Superintending Engineer, CPO, WRD,Sinchai Bhavan Porvorim-Goa for kind Information

3. Copy Submitted to The Executive Engineer, WD VIII, W.R.D. Karaswada Bardez-Goa.

4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer