GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DFEPARTMENT

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9865,9863,9864 /Lab/ 91 /2021-22 Dated: 31/05/2021. **Laboratory:** Bicholim
Sand –T: 5165 .Cement-1269 **Sub Div: V (QC)/WRD/Bicholim Goa.**

Sub: Improvement to waterway of Nallah by construction of protection wall in the field of Shri.Purushottam Khadilkar in Sy.No 12/1 at Brahmakarmali in V.P.Nagargao in Sattari Taluka.

Ref to requisition No: MIN/WDVI/WRD/SDII/F.62/21-22/79 Dated: 20/05/2021.

Qty. Received: 1 bags each **Date of Receipt**: 25/05/2021 **Tested on**: 27,28 & 29/05/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand,20mm,40mm, 12.5mm size aggrt., Cement **O.S. No** 6308,6309,6310,6327,6302 /SS **Lab. Sample No**.: 1606 To 1610 **Tested by**: Mrs. Shirodkar.JE.

R E P O RT 01 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
1.	**40 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 40 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 40 mm nominal size.

3.	**20 mm Size Aggregate:**	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m^3)	
4.	**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 therequired criteria for graded aggregate of 20 mm nominal size.

5.	**Sand:** (L.S.No.1609)	i) Silt & Clay by S.A. method	: -	5.40%
		ii) Silt by sedimentation	: -	5.68%
		iii) Fineness Modulus	: -	2.36
		iv) Grading Zone	: -	III

REMARK: The observed results are within the permissible limits of the coarse sand.

Junior Engineer **Assistant Engineer**

R E P O RT 02 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
6.	**Cement:** Ultratech.Cement, bearing IS:269 Ordinary Portland cement, Manuf. date:Week 16, Month --, Year'2021 CM/L =7171769 Qty. rep. – To be used for – 1:2:4 mix concrete	i)Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 2.12% : 31.00% : 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)	**REMARK: The observed results are within the permissible limit for Ordinary Portland cement.**

Copy to: 1. The Assistant Engineer, SDII, WDVI,WRD, Valpoi-Sattari – Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, W.D. VI, WRD,Bicholim – Goa
4. Q.C. Lab file 5. Bill File.

Junior Engineer **Assistant Engineer**