GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DFEPARTMENT

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9957,9959,9958,9960/Lab/259/2021-22 Dated:- 10 / 01 /2022. **Laboratory:** Bicholim
Sand –T:-5227,5228. Cement-T:- 1316. **Sub Div: V(QC)/WRD/Bicholim Goa.**

Sub:- "Improvement to CAD network of field channels of Minor-1, Minor-2 and Minor-5 and Extension of field channels of Minor-1 and Minor-5 of B-6 Distributory at Torshem Village in Pernem Taluka".

Ref to requisition No:- SD II/WDVII/WRD/F.18/2021-22/94 Dated :- 29/12/2021

Qty. Received: 1 bags each **Date of Receipt**:- 31/12/2021 **Tested on**:-05,06 & 07/01/2022 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand,20mm, 12.5mm size aggrt., Cement **O.S. No.:-** 7279,7281,7280,7282,7291,7300 & 7278/SS **Lab. Sample No**.: 2587 To 2593 **Tested by**:- Mrs. S. B. Naik Shirodkar J.E.

R E P O RT 01 OF 01

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
1.	**20 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**: (L.S.No.2587 – 2589)	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.				
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**: (L.S.No.2588 – 2590)	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.	**Coarse Sand:** (L.S.No.2591)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.80% : - 5.55% : - 2.88% : - II		
6.	**Coarse Sand:** (L.S.No.2592)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.40% : - 5.71% : - 2.40% : - III		
	REMARK:- The observed results are within the permissible limits of the coarse sand.				
4.	**Cement:** J.K. Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W- 50, M- 12, Year-2021 CM/L = 0003401033 Qty. rep. –____--. To be used for CC 1:2:4	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.23% : 32.00% : 155 minutes : 310 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, SDIV,WDVII,WRD, Dhargal, Pednem– Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Sanchai Bhavan, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, WDVII, WRD, Dhargal, Pednem – Goa
4. Q.C. Lab file 5. Bill

Junior Engineer **Assistant Engineer**