GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T :2909,2910,2917,2918,2925,2926,2929,/ Lab /**272** / 2021 - 22 Dated:- 02/ 02 /2022. 2930,2935,2943,2944,2951,2965,2966,2983,2984, 3011,3012,3028,3029,3044,3045,3048 & 3049

Laboratory : Bicholim - Goa.
Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work :Construction of Anjuna Distributory taking off at Ch.28.970 km of the Left Bank Main Canal of Tillari Irrigation Project in Siolim & Anjuna Village of Bardez Taluka. Part – III : Construction of Rising main Ch.4.50Kms to Ch. 7.290 Kms, Break Pressure Tank(BPT), Gravity main from Ch.0.00 Kms to Ch.1.00 Kms and reinstatement of allied structures of Anjuna Distributory in Siolim and Assagao Village of Bardez Taluka.

Ref. to Requisition No.: SDIII/WDVIII/WRD/WF.32(PART-III)/2021-22/250 Dated :- 05/01/2022.

Qty. Recived.: 24 Sets of cube Date of Receipt:- 06/01/2022. Tested on: 07,08,10,11,12,14,15,17,19,21,22,24 & 25/01/2022as per due dates. Ref to CPWD: 2009, Vol. I Sample: Cube Mix 1: 2: 4 & 1:1.5:3 O.S No.: 7298,7299,7308,7309,7316,7317,7324,7325,7333,7341,7342,7352,7367,7368,7391,7392,7422,7423,7441,7442,7462,7463,7471&7472/SS Lab. Sample No.: 2647 To 2670 Tested By: Mrs. S.B. Naik Shirodkar. J.E.

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
	Cement concrete cube of mix 1:2:4, cast on 10/12/2021. For Retaining wall at church ground foundation.	28 th day	262.77	Kg/Cm ²	210.00 Kg/cm ²	17.94	Oty represents -36.50 Cum for two sets of cubes.
1		compressive	249.18	Kg/Cm ²			
'		strength	231.06	Kg/Cm ²			
		Average	247.67	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 10/12/2021. For Retaining wall at church ground foundation.	28 th day	203.87	Kg/Cm ²	210.00 Kg/cm ²	4.63	-do-
2		compressive	217.47	Kg/Cm ²			
		strength	237.85	Kg/Cm ²			
		Average	219.73	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 11/12/2021. For Retaining wall at church ground nr. Air valve - foundation.	28 th day	226.53	Kg/Cm ²	210.00 Kg/cm ²	6.43	Qty represents -32.00 Cum for two sets of cubes.
3		compressive	233.32	Kg/Cm ²			
		strength	210.67	Kg/Cm ²			
		Average	223.51	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 11/12/2021. For Retaining wall at church ground nr. Air valve - foundation.	28 th day	217.47	Kg/Cm ²	210.00 Kg/cm ²	7.87	-do-
1		compressive	217.47	Kg/Cm ²			
4		strength	244.65	Kg/Cm ²			
		Average	226.53	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 13/12/2021. For Retaining wall at church ground - 1st lift.	28 th day	237.85	Kg/Cm ²	210.00 Kg/cm ²	8.23	Qty represents -28.00 Cum
5		compressive	226.53	Kg/Cm ²			
		strength	217.47	Kg/Cm ²			
		Average	227.28	Kg/Cm ²			

Junior Engineer

Assistant Engineer

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SR.	SR. SIGNIFICATION OF CAMPUTE TO SECURE Max./Min.Value % above or SECURE MAX./Min.Value MAX./Min.Val						
NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		permissable	% above or below	REMARK
6	Cement concrete cube of mix 1:2:4, cast on 13/12/2021. For Retaining wall at church ground - 1st lift.	28 th day	228.79	Kg/Cm ²	210.00 Kg/cm ²	8.23	Qty represents -28.00 Cum
		compressive	222.00	Kg/Cm ²			
		strength	231.06	Kg/Cm ²			
		Average	227.28	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 14/12/2021. For Retaining wall at church ground - nr. Air valve - 1st lift.	28 th day	226.53	Kg/Cm ²	210.00 Kg/cm ²	7.51	Oty represents -25.00 Cum for two sets of cubes.
7		compressive	215.20	Kg/Cm ²			
<i>'</i>		strenath	235.59	Kg/Cm ²			
		Average	225.77	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 14/12/2021. For Retaining wall at church ground -	28 th day	235.59	Kg/Cm ²		5.35	-do-
8		compressive	219.73	Kg/Cm ²	210 00 Kg/am²		
0	nr. Air valve - 1st lift.	strength	208.40	Kg/Cm ²	210.00 Kg/cm ²		
	III. AII vaive - 1st iiit.	Average	221.24	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 15/12/2021. For Retaining wall at church ground nr. Air valve - 2nd lift.	28 th day	244.65	Kg/Cm ²	210.00 Kg/cm ²	9.67	Qty represents -15.00 Cum
9		compressive	219.73	Kg/Cm ²			
7		strenath	226.53	Kg/Cm ²			
		Average	230.30	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 17/12/2021. For 45 deg thrust bl. at church ground.	28 th day	305.81	Kg/Cm ²	265.00 Kg/cm ²	5.14	Oty represents -32.00 Cum for two sets of cubes.
10		compressive	271.83	Kg/Cm ²			
10		strength	258.24	Kg/Cm ²			
		Average	278.63	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 17/12/2021. For 45 deg thrust bl. at church ground.	28 th day	271.83	Kg/Cm ²	265.00 Kg/cm ²	6.28	-do-
11		compressive	294.48	Kg/Cm ²			
٠.		strenath	278.63	Kg/Cm ²			
		Average	281.65	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 18/12/2021. For 11.25 deg thrust bl. at church ground.	28 th day	283.16	Kg/Cm ²	265.00 Kg/cm ²	2.86	Qty represents -13.00 Cum
12		compressive	271.83	Kg/Cm ²			
12		strength	262.77	Kg/Cm ²			
		Average	272.59	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 20/12/2021. For NRV chamber at church grund. Ch. 6.30 kms - 1st lift & bed PCC for road side	28 th day	233.32	Kg/Cm ²	210.00 Kg/cm ²	8.23	Qty represents -21.00 Cum for two sets of cubes.
13		compressive	231.06	Kg/Cm ²			
13		strenath	217.47	Kg/Cm ²			
	gutter at sonarkhed.	Average	227.28	Kg/Cm ²			

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
14	Cement concrete cube of mix 1:2:4, cast on 20/12/2021. For NRV chamber at church grund. Ch. 6.30 kms - 1st lift & bed PCC for road side gutter at sonarkhed.	28 th day compressive strength Average	224.26 226.53 237.85 229.55	Kg/Cm ² Kg/Cm ² Kg/Cm ² Kg/Cm ²	210.00 Kg/cm ²	9.31	Oty represents -21.00 Cum for two sets of cubes.
15	Cement concrete cube of mix 1:2:4, cast on 22/12/2021. For NRV chamber at church grund. Ch. 6.30 kms - 2nd lift & bed PCC for road side gutter at sonarkhed.	28 th day compressive strength Average	217.47 231.06 226.53 225.02	Kq/Cm ² Kq/Cm ² Kq/Cm ² Kq/Cm ²	210.00 Kg/cm ²	7.15	Oty represents -20.00 Cum for two sets of cubes.
16	Cement concrete cube of mix 1:2:4, cast on 22/12/2021. For NRV chamber at church grund. Ch. 6.30 kms - 2nd lift & bed PCC for road side gutter at sonarkhed.	28 th day compressive strength Average	226.53 222.00 237.85 228.79	Kq/Cm ² Kq/Cm ² Kq/Cm ² Kq/Cm ²	210.00 Kg/cm ²	8.95	-do-
17	Cement concrete cube of mix 1:2:4, cast on 24/12/2021. For road side gutter at sonarkhed. 0.75 m.	28 th day compressive strenath Average	217.47 233.32 242.38 231.06	Kq/Cm ² Kq/Cm ² Kq/Cm ² Kq/Cm ²	210.00 Kg/cm ²	10.03	Oty represents -32.00 Cum for two sets of cubes.
18	Cement concrete cube of mix 1:2:4, cast on 24/12/2021. For road side gutter at sonarkhed. 0.75 m.	28 th day compressive strength Average	208.40 215.20 226.53 216.71	Kq/Cm ² Kq/Cm ² Kq/Cm ² Kq/Cm ²	210.00 Kg/cm ²	3.20	-do-
19	Cement concrete cube of mix 1:2:4, cast on 25/12/2021. For road side gutter at sonarkhed. 75-150m.	28 th day compressive strenath Average	260.51 244.65 235.59 246.91	Kq/Cm ² Kq/Cm ² Kq/Cm ² Kq/Cm ²	210.00 Kg/cm ²	17.58	Oty represents -32.00 Cum for two sets of cubes.
20	Cement concrete cube of mix 1:2:4, cast on 25/12/2021. For road side gutter at sonarkhed. 75-150m.	28 th day compressive strength Average	237.85 253.71 226.53 239.36	Kg/Cm ² Kg/Cm ² Kg/Cm ² Kg/Cm ²	- 210.00 Kg/cm ²	13.98	-do-
21	Cement concrete cube of mix 1:2:4, cast on 27/12/2021. For road side gutter at sonarkhed. 150-235m.	28 th day compressive strength Average	249.18 246.91 222.00 239.36	Kg/Cm ² Kg/Cm ² Kg/Cm ²	210.00 Kg/cm ²	13.98	Oty represents -36.00 Cum for two sets of cubes.

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22	Cement concrete cube of mix 1:2:4, cast on 27/12/2021. For road side gutter at sonarkhed. 150-235m.	28 th day	253.71	Kg/Cm ²	210.00 Kg/cm ²	14.70	Qty represents -36.00 for two sets of cubes.
		compressive	226.53	Kg/Cm ²			
		strength	242.38	Kg/Cm ²			
		Average	240.87	Kq/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 28/12/2021. For road side gutter at sonarkhed. 0-75m.	28 th day	226.53	Kg/Cm ²	210.00 Kg/cm ²	9.67	Qty represents -40.00 Cum for two sets of cubes.
23		compressive	219.73	Kg/Cm ²			
		strenath	244.65	Kg/Cm ²			
		Average	230.30	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on 28/12/2021. For road side gutter at sonarkhed. 0-75m.	28 th day	226.53	Kg/Cm ²	210.00 Kg/cm ²	7.87	-do-
24		compressive	215.20	Kg/Cm ²			
		strength	237.85	Kg/Cm ²			
		Average	226.53	Kg/Cm ²			

Copy to: 1. The Assistant Engineer , SD III , WD VIII, WRD- Karaswada, 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 ,WRD, Karaswada-Bardez- Goa.
- 4. QC Lab File. 5. Bill File.

Junior Engineer

Assistant Engineer