

GOVERNMENT OF GOA  
QUALITY CONTROL LABORATORY  
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T : 3513,3514,3539,3540,3580,3581,/ Lab / **28**/ 2022 - 23 Dated:- 12/04/2022. Laboratory : Bicholim - Goa.  
3576,3577,3578,3579,3609,3610,3643,3644,3645,3646,3685,3686,3687,3734,3735,3736,3781,3782 Sub Division V (QC)/WRD/ Bicholim- Goa.  
3783,3799,3800,3801,3825,3826,3827,3861,3862,3877 & 3878

**Name of work : Development and repair of bunds, Fish tanks and Water channel of Estuarine Fish farm at Ela-Old Goa in Tiswadi Taluka.**

Ref. to Requisition No.: SDIV/WDI/WRD/F.38/21-22/781 Dt.:- 14/ 03/ 2022

Qty. Received. : 35 Sets of cube Date of Receipt:- 19/ 03 / 2022. Tested on: 19,22,24,26,28,30/03/2022 & 01,03,04,06,08 & 09/04/2022as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix 1:1.5:3 O.S No. :7974 & 7975/SS , 211,212,259,260,255,256,257,258,294,295,330,331,332,333,372,373,374,421,422,423,468,469 & 470/R.K , 7993,7994,7995,8027,8028,8029,8080,8081,8100 & 8101/SS Lab. Sample No.: 3383 to 3417 Tested By: Mrs. R.R.Kadam A.E. & Mrs. S. B. Naik Shirodkar. J.E.

**REPORT PAGE 01 OF 05**

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Cement concrete cube of mix 1:1.5:3, cast on 19/02/2022. For Foundation & Plinth.	28 th day compressive strength	280.89	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	11.70	Qty represents - 15.00 M3 for two sets of cubes.
			308.08	Kg/Cm <sup>2</sup>			
			299.01	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>295.99</b>			
2	Cement concrete cube of mix 1:1.5:3, cast on 19/02/2022. For Foundation & Plinth.	28 th day compressive strength	269.57	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	5.14	----- do -----
			294.48	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>278.63</b>			
3	Cement concrete cube of mix 1:1.5:3, cast on 22/02/2022. For Foundation & Plinth.	28 th day compressive strength	285.42	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	7.71	Qty represents - 33.00 M3 for four sets of cubes.
			278.63	Kg/Cm <sup>2</sup>			
			292.22	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>285.42</b>			
4	Cement concrete cube of mix 1:1.5:3, cast on 22/02/2022. For Foundation & Plinth.	28 th day compressive strength	308.08	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.85	----- do -----
			283.16	Kg/Cm <sup>2</sup>			
			274.10	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>288.44</b>			
5	Cement concrete cube of mix 1:1.5:3, cast on 22/02/2022. For Foundation & Plinth.	28 th day compressive strength	294.48	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	10.27	----- do -----
			305.81	Kg/Cm <sup>2</sup>			
			276.36	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>292.22</b>			
6	Cement concrete cube of mix 1:1.5:3, cast on 22/02/2022. For Foundation & Plinth.	28 th day compressive strength	299.01	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.28	----- do -----
			287.69	Kg/Cm <sup>2</sup>			
			274.10	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>286.93</b>			

Junior Engineer

Assistant Engineer

REPORT PAGE 02 OF 05

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Cement concrete cube of mix 1:1.5:3, cast on 24/02/2022. For Foundation & Plinth.	28 th day compressive strength	305.81	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	11.13	Qty represents - 33.00 M3 for four sets of cubes.
			299.01	Kg/Cm <sup>2</sup>			
			278.63	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>294.48</b>			
8	Cement concrete cube of mix 1:1.5:3, cast on 24/02/2022. For Foundation & Plinth.	28 th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	12.55	----- do -----
			303.55	Kg/Cm <sup>2</sup>			
			308.08	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>298.26</b>			
9	Cement concrete cube of mix 1:1.5:3, cast on 24/02/2022. For Foundation & Plinth.	28 th day compressive strength	274.10	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	11.98	----- do -----
			305.81	Kg/Cm <sup>2</sup>			
			310.34	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>296.75</b>			
10	Cement concrete cube of mix 1:1.5:3, cast on 24/02/2022. For Foundation & Plinth.	28 th day compressive strength	294.48	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.28	----- do -----
			278.63	Kg/Cm <sup>2</sup>			
			287.69	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>286.93</b>			
11	Cement concrete cube of mix 1:1.5:3, cast on 26/02/2022. For Foundation & Plinth.	28 th day compressive strength	267.30	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	2.86	Qty represents - 15.00 M3 for two sets of cubes.
			271.83	Kg/Cm <sup>2</sup>			
			278.63	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>272.59</b>			
12	Cement concrete cube of mix 1:1.5:3, cast on 26/02/2022. For Foundation & Plinth.	28 th day compressive strength	274.10	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	3.43	----- do -----
			283.16	Kg/Cm <sup>2</sup>			
			265.04	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>274.10</b>			
13	Cement concrete cube of mix 1:1.5:3, cast on 28/02/2022. For Foundation & Plinth.	28 th day compressive strength	289.95	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	5.14	Qty represents - 33.00 M3 for four sets of cubes.
			262.77	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>278.63</b>			
14	Cement concrete cube of mix 1:1.5:3, cast on 28/02/2022. For Foundation & Plinth.	28 th day compressive strength	278.63	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.86	----- do -----
			285.42	Kg/Cm <sup>2</sup>			
			269.57	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>277.87</b>			
15	Cement concrete cube of mix 1:1.5:3, cast on 28/02/2022. For Foundation & Plinth.	28 th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	6.57	----- do -----
			292.22	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>282.40</b>			

REPORT PAGE 03 OF 05

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
16	Cement concrete cube of mix 1:1.5:3, cast on 28/02/2022. For Foundation & Plinth.	28 th day compressive strength	276.36	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	6.28	Qty represents - 33.00 M3 for four sets of cubes.
			299.01	Kg/Cm <sup>2</sup>			
			269.57	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>281.65</b>	<b>Kg/Cm<sup>2</sup></b>			
17	Cement concrete cube of mix 1:1.5:3, cast on 02/03/2022. For Foundation & Plinth.	28 th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	3.15	Qty represents - 20.00 M3 for three sets of cubes.
			265.04	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>273.34</b>	<b>Kg/Cm<sup>2</sup></b>			
18	Cement concrete cube of mix 1:1.5:3, cast on 02/03/2022. For Foundation & Plinth.	28 th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.00	----- do -----
			287.69	Kg/Cm <sup>2</sup>			
			267.30	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>275.61</b>	<b>Kg/Cm<sup>2</sup></b>			
19	Cement concrete cube of mix 1:1.5:3, cast on 02/03/2022. For Foundation & Plinth.	28 th day compressive strength	278.63	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	5.71	----- do -----
			289.95	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>280.14</b>	<b>Kg/Cm<sup>2</sup></b>			
20	Cement concrete cube of mix 1:1.5:3, cast on 04/03/2022. For Foundation & Plinth.	28 th day compressive strength	269.57	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	3.72	Qty represents - 20.00 M3 for three sets of cubes.
			274.10	Kg/Cm <sup>2</sup>			
			280.89	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>274.85</b>	<b>Kg/Cm<sup>2</sup></b>			
21	Cement concrete cube of mix 1:1.5:3, cast on 04/03/2022. For Foundation & Plinth.	28 th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.85	----- do -----
			294.48	Kg/Cm <sup>2</sup>			
			287.69	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>288.44</b>	<b>Kg/Cm<sup>2</sup></b>			
22	Cement concrete cube of mix 1:1.5:3, cast on 04/03/2022. For Foundation & Plinth.	28 th day compressive strength	278.63	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.57	----- do -----
			285.42	Kg/Cm <sup>2</sup>			
			267.30	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>277.12</b>	<b>Kg/Cm<sup>2</sup></b>			
23	Cement concrete cube of mix 1:1.5:3, cast on 06/03/2022. For Foundation & Plinth.	28 th day compressive strength	308.08	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.28	Qty represents - 20.00 M3 for three sets of cubes.
			269.57	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>286.93</b>	<b>Kg/Cm<sup>2</sup></b>			
24	Cement concrete cube of mix 1:1.5:3, cast on 06/03/2022. For Foundation & Plinth.	28 th day compressive strength	287.69	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	9.13	----- do -----
			303.55	Kg/Cm <sup>2</sup>			
			276.36	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>289.20</b>	<b>Kg/Cm<sup>2</sup></b>			

Junior Engineer

Assistant Engineer

REPORT PAGE 04 OF 05

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
25	Cement concrete cube of mix 1:1.5:3, cast on 06/03/2022. For Foundation & Plinth.	28 th day compressive strength	274.10	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.00	Qty represents - 20.00 M3 for three sets of cubes.
			283.16	Kg/Cm <sup>2</sup>			
			269.57	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>275.61</b>			
26	Cement concrete cube of mix 1:1.5:3, cast on 07/03/2022. For Foundation & Plinth.	28 th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.57	Qty represents - 25.00 M3 for three sets of cubes.
			276.36	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>277.12</b>			
27	Cement concrete cube of mix 1:1.5:3, cast on 07/03/2022. For Foundation & Plinth.	28 th day compressive strength	265.04	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	6.00	----- do -----
			280.89	Kg/Cm <sup>2</sup>			
			296.75	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>280.89</b>			
28	Cement concrete cube of mix 1:1.5:3, cast on 07/03/2022. For Foundation & Plinth.	28 th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	7.42	----- do -----
			289.95	Kg/Cm <sup>2</sup>			
			280.89	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>284.67</b>			
29	Cement concrete cube of mix 1:1.5:3, cast on 09/03/2022. For Foundation & Plinth.	28 th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.00	Qty represents - 19.00 M3 for three sets of cubes.
			271.83	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>275.61</b>			
30	Cement concrete cube of mix 1:1.5:3, cast on 09/03/2022. For Foundation & Plinth.	28 th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	6.28	----- do -----
			283.16	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>281.65</b>			
31	Cement concrete cube of mix 1:1.5:3, cast on 09/03/2022. For Foundation & Plinth.	28 th day compressive strength	267.30	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	6.00	----- do -----
			292.22	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>280.89</b>			
32	Cement concrete cube of mix 1:1.5:3, cast on 11/03/2022. For Foundation & Plinth.	28 th day compressive strength	287.69	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.56	Qty represents - 10.00 M3 for two sets of cubes.
			280.89	Kg/Cm <sup>2</sup>			
			294.48	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>287.69</b>			
33	Cement concrete cube of mix 1:1.5:3, cast on 11/03/2022. For Foundation & Plinth.	28 th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.57	----- do -----
			276.36	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>277.12</b>			

Junior Engineer

Assistant Engineer

**REPORT PAGE 05 OF 05**

<b>SR. NO</b>	<b>DISCRIPTION OF SAMPLE</b>	<b>TESTED FOR</b>	<b>RESULTS</b>		<b>Max./Min.Value permissable</b>	<b>% above or below</b>	<b>REMARK</b>
34	Cement concrete cube of mix 1:1.5:3, cast on 12/03/2022. For Foundation & Plinth.	28 th day compressive strength	265.04	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	7.14	Qty represents - 10.00 M3 for two sets of cubes.
			283.16	Kg/Cm <sup>2</sup>			
			303.55	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>283.91</b>	<b>Kg/Cm<sup>2</sup></b>			
35	Cement concrete cube of mix 1:1.5:3, cast on 12/03/2022. For Foundation & Plinth.	28 th day compressive strength	292.22	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	14.83	----- do -----
			312.61	Kg/Cm <sup>2</sup>			
			308.08	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>304.30</b>	<b>Kg/Cm<sup>2</sup></b>			

Copy to: 1. The Assistant Engineer , SD IV , WDI, WRD, Porvorim - Goa.

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

3. Copy submitted to The Executive Engineer , WDI ,WRD, Porvorim - Goa.

4. QC Lab File.      5. Bill File.

Junior Engineer

Assistant Engineer