Test Report No.: WRD/QC/F.6-2/ Cube -T :4968,4969,4978,4979,4986,4987./ Lab / **241** / 2018 -19 Dated: 24 /01 / 2019 Laboratory : Bicholim - Goa. Sub Division V (QC)/WRD/ Bicholim

# Name of work: Construction of Sanqueilim Distributory of L.B.M.C. of T.I.P. from Ch. 7.360 km to Ch. 10.480 km at villages Sarvan and Karapur in Bicholim Taluka.

Ref. to Requisition No.: F.232 / WRD / WD VIII / SD VI / 2018-19 / 94 dated :- 27 / 12 / 2018.

Qty. Recived.: 03 Sets of cube Date of Receipt:- 27 / 12 / 2018. Tested on: - 17,18 & 19 / 01 / 2019. Ref to CPWD: 2002, Vol. I Sample: Cube PCC 1: 2: 4 Mix O.S No.: 586,587,597,598,610,611/SS Lab. Sample No.: 2739 & 2744 Tested By:- Mrs. S.B.Naik Shirodkar. JE.

#### **REPORT PAGE 01 OF 02**

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or below	REMARK
1	Plain Cement concrete cube of mix 1:2:4, cast on 20/12/2018, for canal lining from ch. 9885 m to ch. 9945 m. Quantity represents 22.60 Cum	28 <sup>th</sup> day compressive strength <b>Average</b>	233.32 226.53 235.59 <b>231.81</b>	Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 kg/cm2	10.39	Two sets of cubes represents 22.60 Cum.
2	Plain Cement concrete cube of mix 1 : 2 : 4 , cast on 20/12/2018, for canal lining from ch. 9885 m to ch. 9945 m. Quantity represents 22.60 Cum	28 <sup>th</sup> day compressive strength	242.38 226.53 231.06 233.32	Kg/Cm2 Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 kg/cm2	11.11	Do
3	Plain Cement concrete cube of mix 1:2:4, cast on 21/12/2018, for canal lining from ch. 9945 m to ch. 9990 m. Quantity represents 17.00 Cum	28 <sup>th</sup> day compressive strength <b>Average</b>	215.20 231.06 237.85 <b>228.04</b>	Kg/Cm2 Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 kg/cm2	8.59	Two sets of cubes represents 17.00 Cum.
4	Plain Cement concrete cube of mix 1:2:4, cast on 21/12/2018, for canal lining from ch. 9945 m to ch. 9990 m. Quantity represents 17.00 Cum	28 <sup>th</sup> day compressive strength <b>Average</b>	226.53 240.12 222.00 <b>229.55</b>	Kg/Cm2 Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 kg/cm2	9.31	Do

Junior Engineer

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
	Plain Cement concrete cube of mix 1 : 2 : 4,	28 <sup>th</sup> day	262.77	Kg/Cm2			
5	cast on 22/12/2018, for canal lining from ch.	compressive	226.53	Kg/Cm2	210.00 kg/cm2	15.78	Two sets of cubes represents 17.20
J	9990 m to ch. 10035 m. Quantity represents 17.20 Cum	strength	240.12	Kg/Cm2	210.00 Ng/01112	10.70	Cum.
		Average	243.14	Kg/Cm2			
	Plain Cement concrete cube of mix 1:2:4,	28 <sup>th</sup> day	242.38	Kg/Cm2			
	cast on 22/12/2018 for canal lining from ch	compressive	226.53	Kg/Cm2	040 00 1:2/222	40.00	Do
6		strength	249.18	Kg/Cm2	210.00 kg/cm2	13.98	
		Average	239.36	Kg/Cm2			

Copy to: 1. The Assistant Engineer , SD VI , WD VIII, WRD, Bicholim - 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

Test Report No.: WRD / QC / F.6-2 / Cube -T: 5956,5974,5979,6004,6052,6064, / Lab / **33** / 2019 - 20

Dated:- 11 / 04 / 2019

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

Name of work: Construction of Outlets and Field channels for D.O.R.-11, D.O.R. -12, D.O.R. -13 and D.O.R.-14 of S.D.C. of L.B.M.C. of T.I.P. at Bicholim Taluka.

Ref. to Requisition No.: WRD /WD VIII / SD VI / F.249 / 2018-19 / 146 dated :- 19 / 03 / 2019.

Qty. Recived.: 06 Sets of cube

Date of Receipt:- 19 / 03 / 2019. Tested on: - 25 / 03 / 2019 To 02/04/2019 as per due dates. Ref to CPWD :2002, Vol. I

Sample: Cube Mix 1:2:4

O.S No.: 1436,1449,1455,1480,1523,1538 /SS.

Lab. Sample No.: 3897 To 3902

Tested By: Mrs. S.B. Naik Shirodkar. J.E.

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or <del>below</del>	REMARK
	Plain Cement concrete cube of mix 1:2:4, cast on	28 <sup>th</sup> day	226.53	Kg/Cm <sup>2</sup>			
1	25/02/2019, PCC for chambers and pedestals of Outlet	compressive	219.73	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	9.67	
_	No. 12 . Qty represents - 14.50 Cum.	strength	244.65	Kg/Cm <sup>2</sup>	210.00 kg/ciii	3.07	
	No. 12 . Qty represents 14.50 cum.	Average	230.30	Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on	28 <sup>th</sup> day	203.87	Kg/Cm <sup>2</sup>			
2	6/02/2019 PCC for chambers and pedestals of Outlet compressive 212.93 Kg/Cm <sup>2</sup>	3.91					
	No. 12 . Qty represents - 14.80 Cum.	strength	237.85	Kg/Cm <sup>2</sup>	210.00 kg/ciii	3.51	"
	No. 12 . Qty represents - 14.80 cum.	Average	218.22	Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on	28 <sup>th</sup> day	208.40	Kg/Cm <sup>2</sup>			
2	27/02/2019, PCC for chambers and pedestals of Outlet	$l$ compressive $l$ 222.00 $l$ $Va/Cm^2$	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	2.84		
3	No. 13 . Qty represents - 15.00 Cum.	strength	217.47	Kg/Cm <sup>2</sup>	210.00 kg/ciii	2.07	··
		Average	215.95	Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on	28 <sup>th</sup> day	224.26	Kg/Cm <sup>2</sup>			
1	28/02/2019, PCC for chambers and pedestals of Outlet	compressive	206.14	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	3.55	
7	No. 12 . Qty represents - 14.70 Cum.	strength	222.00	Kg/Cm <sup>2</sup>	210.00 kg/ciii		··
	14.70 cum.	Average	217.47	Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on	28 <sup>th</sup> day	231.06	Kg/Cm <sup>2</sup>			
5	04 /03/2019, PCC for chambers and pedestals of Outlet	compressive	217.47	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	5.35	
	No. 13 . Qty represents - 14.80 Cum.	strength	215.20	Kg/Cm <sup>2</sup>	210.00 kg/ciii	3.33	··
	No. 13 : Qty represents - 14.80 cum.	Average	221.24	Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on	28 <sup>th</sup> day	219.73	Kg/Cm <sup>2</sup>			
6	05 /03/2019, PCC for chambers and pedestals of Outlet	compressive	224.26	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	3.91	
	No. 14. Qty represents - 14.90 Cum.	strength	210.67	Kg/Cm <sup>2</sup>	Z 10.00 Kg/Cill	3.91	
	14.50 Cuiii.	Average	218.22	Kg/Cm <sup>2</sup>			

Copy to: 1. The Assistant Engineer, SD VI, WD VIII, WRD, Bicholim - Goa.

- 3. Copy submitted to the Executive Engineer ,WD VIII ,WRD, Karaswada -Bardez Goa.
- 4. QC Lab File. 5. Bill File.

<sup>2.</sup> Copy submitted to the Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa for kind Information.

Test Report No.: WRD/QC/F.6-2/Cube -T: 4957,4961,4970,4980,4992./Lab/ 242 / 2018 - 19

Dated: 24 / 01 / 2019

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

Name of work: Improvement to Bund from Sy. No. 129 To 137 in field of Katar in Guddem Dando in V.P. Siolim in Siolim Constituency.

Ref. to Requisition no.: - MI/SD -I/WD I/WRD/F.57 / 2018-19 / 574 dated :- 10 / 01 / 2019.

Qty. Recived.: 05 Sets of cube Date of Receipt: 15 / 01 / 2019. Tested on: - 15/01/19 To 19/01/2019. Sample: Cube Mix 1 : 2 : 4 O.S No. : 570,575,588,599,616 /SS. Lab. Sample No.: 2854 To 2858

Ref to CPWD :2002, Vol. I Tested By: Mrs. S.B. Naik Shirodkar. J.E.

REPORT PAGE 01 OF 01

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or <del>below</del>	REMARK
		28 <sup>th</sup> day	280.89	Kg/Cm2			
	Plain Cement concrete cube of mix 1:2:4, cast on 18 / 12 /2 018, for Foundation & Plinth.	compressive	267.30	Kg/Cm2	2	45.70	0 111
1		strength	181.22	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	15.78	Quantity represents 30.00 Cum .
		Average	243.14	Kg/Cm2			
		28 <sup>th</sup> day	206.14	Kg/Cm2			
	Plain Cement concrete cube of mix 1:2:4,	compressive	267.30	Kg/Cm2	. 2	0.67	0 111
2	cast on 19 / 12 /2 018, for Foundation & Plinth.	strength	217.47	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	9.67	Quantity represents 29.00 Cum .
		Average	230.30	Kg/Cm2			
	Plain Cement concrete cube of mix 1:2:4, cast on 20 / 12 /2 018, for Foundation & Plinth.	28 <sup>th</sup> day	199.34	Kg/Cm2			
3		compressive	235.59	Kg/Cm2	240.00 K - / 2	3.20	Quantity represents 20.00 Cum
3		strength	215.20	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	3.20	Quantity represents 29.00 Cum .
		Average	216.71	Kg/Cm2			
		28 <sup>th</sup> day	215.20	Kg/Cm2			
4	Plain Cement concrete cube of mix 1:2:4,	compressive	215.20	Kg/Cm2	210.00 K=/2	2 55	Quantity represents 28 00 Cum
4	cast on 21 / 12 /2 018, for Foundation & Plinth.	strength	222.00	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	3.55	Quantity represents 28.00 Cum .
		Average	217.47	Kg/Cm2			
		28 <sup>th</sup> day	215.20	Kg/Cm2			
5	Plain Cement concrete cube of mix 1:2:4,	compressive	194.81	Kg/Cm2	210.00 Kalara <sup>2</sup>	2.49	Quantity represents 20.00 Com
3	cast on 22 / 12 /2 018, for Foundation & Plinth.	strength	235.59	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	2.48	Quantity represents 29.00 Cum .
		Average	215.20	Kg/Cm2			

Copy to: 1. The Assistant Engineer, SD I, WD I, WRD, Porvorim - Goa.

4. QC Lab File. 5. Bill File.

<sup>2.</sup> The Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa for kind Information.

<sup>3.</sup> The Executive Engineer ,WD I ,WRD, Porvorim - Goa.

Test Report No.: WRD/QC/F.6-2/Cube -T: 4943 to 4945, 4949 to 4951,4966,4967,4981/Lab/ 446 / 2018 - 19

Dated: 24 / 01 / 2019

Laboratory: Bicholim -, Goa.

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

Name of work: Improvement to the existing Nallah from Uttam Salgaonkar house up to the existing pond at Bhattiwaddo and from Brendom Lobo house to Victor De Souza house in Sy. No. 90/19 of Parra village in Calangute Constituency.

Ref. to Requisition no.: - SD -II /WD I / WRD/ F.24 / 2018-19 / 583 dated :- 17 / 12 / 2018.

Qty. Recived.: 09 Sets of cube Date of Receipt: 10 / 01 / 2019. Tested on: - 14/01/19 To 18/01/2019. Ref to CPWD: 2002, Vol. I

Sample: Cube Mix 1:2:4 O.S No.: 557 to 559,562 to 564,584,585,600 /SS. Lab. Sample No.: 2825 To 2833 Tested By: Mrs. S.B. Naik Shirodkar. J.E.

# Cube test is witnessed by Shri. R.T.Shirodkar .J.E. SD II / WD I,WRD on 15/01/2019 & Shri. Rui.representative by Agency on 14 & 15/01/2019. REPORT PAGE 01 OF 02

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or <del>below</del>	REMARK
		28 <sup>th</sup> day	201.61	Kg/Cm2			
1	Plain Cement concrete cube of mix 1 : 2 : 4,	compressive	208.40	Kg/Cm2	240.00 // / 2	1.70	Three sets of cubes represents 45.00
1	cast on 17 / 12 /2 018, for Foundation.	strength	231.06	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	1.76	Cum .
		Average	213.69	Kg/Cm2			
		28 <sup>th</sup> day	224.26	Kg/Cm2			
2	Plain Cement concrete cube of mix 1 : 2 : 4,	compressive	212.93	Kg/Cm2	240.00 // 2	2.12	do
2	cast on 17 / 12 /2 018, for Foundation.	strength	206.14	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	2.12	00
		Average	214.44	Kg/Cm2			
		28 <sup>th</sup> day	226.53	Kg/Cm2			do
3	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 17 / 12 /2 018, for Foundation.	compressive	217.47	Kg/Cm2	240.00 // / 2	2.20	
3		strength	206.14	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	3.20	
		Average	216.71	Kg/Cm2			
		28 <sup>th</sup> day	199.34	Kg/Cm2			
4	Plain Cement concrete cube of mix 1 : 2 : 4,	compressive	222.00	Kg/Cm2	240.00 // 2	1.04	Three sets of cubes represents 45.00
4	cast on 18 / 12 /2 018, for I <sup>st</sup> lift of wall	strength	215.20	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	1.04	Cum .
		Average	212.18	Kg/Cm2			
		28 <sup>th</sup> day	203.87	Kg/Cm2			
5	Plain Cement concrete cube of mix 1 : 2 : 4,	compressive	219.73	Kg/Cm2	210.00 Kg/cm <sup>2</sup>	2.04	do
5	cast on 18 / 12 /2 018, for I <sup>st</sup> lift of wall	strength	224.26	Kg/Cm2		2.84	do
		Average	215.95	Kg/Cm2			

Junior Engineer

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or below	REMARK
L 6	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 18 / 12 /2 018, for I <sup>st</sup> lift of wall	28 <sup>th</sup> day compressive strength <b>Average</b>	226.53 215.20 199.34 <b>213.69</b>	Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 Kg/cm <sup>2</sup>	1.76	Three sets of cubes represents 45.00 Cum .
1 7	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 12 /2 018, for 2 <sup>nd</sup> lift of wall	28 <sup>th</sup> day compressive strength Average	217.47 206.14 228.79 <b>217.47</b>	Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 Kg/cm <sup>2</sup>	3.55	Two sets of cubes represents 25.00 Cum .
8	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 12 /2 018, for 2 <sup>nd</sup> lift of wall	28 <sup>th</sup> day compressive strength <b>Average</b>	201.61 219.73 222.00 214.44	Kg/Cm2 Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 Kg/cm <sup>2</sup>	2.12	do
ı a	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 21 / 12 /2 018, for 3 <sup>rd</sup> lift of wall	28 <sup>th</sup> day compressive strength <b>Average</b>	203.87 237.85 215.20 218.98	Kg/Cm2 Kg/Cm2 Kg/Cm2	210.00 Kg/cm <sup>2</sup>	4.27	Quantity represents 10.00 Cum .

4. QC Lab File. 5. Bill File.

Junior Engineer

Copy to: 1. The Assistant Engineer , SD II, WD I, WRD, Mapusa - Goa.

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

<sup>3.</sup> The Executive Engineer ,WD I ,WRD, Porvorim - Goa.

Test Report No.: WRD/QC/F.6-2/Cube -T: 4737,4740,4743/Lab/146/ 2018 - 19

Dated: 08/11/2018 Laboratory: Bicholim

Sub Division V (QC)/WRD/ Bicholim

Name of Work: - Improvement to Existing spring tank at Shemyeche Advan V.P. Nagzar Varkand in Pernem Taluka.

Ref. to Requisition no.: MI/SDIII/WDI/WRD/ F.20 /2018-19/361 dated :- 13/11/2018.

Qty. Recived. : 03 Sets of cube Date of Receipt: 02/11/2018. Tested on: 02,05,07/11/2018. Ref to CPWD :2002, Vol. I

Sample: Cube 1:2:4 Mix O.S No.: 315,317,323/SS Lab. Sample No.: 2550 to 2552 Tested By: Mrs. S.B. Naik Shirodkar. J.E.

		REPORT PAGE 01 OF 01 W			litnessed by Shri. Rak	kesh M/s. Jaira	Construction (agency )on 02/11/2018.
SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
		7 <sup>th</sup> day	192.55	Kg/Cm2			
	Cement concrete cube of mix 1:2:4, cast on	compressive	203.87	Kg/Cm2		20.50	Posted for 28 th day test due on
1	26/10/2018, for Foundation. Represents Quantity	strength	190.28	Kg/Cm2	140 kg/cm2	39.69	23/11/2018
	19.00 Cum	Average	195.57	Kg/Cm2			
	Cement concrete cube of mix 1:2:4, cast on 29/10/2018, for Foundation. Represents Quantity	7 <sup>th</sup> day	210.67	Kg/Cm2			Posted for 28 th day test due on
2		compressive	188.02	Kg/Cm2	140 kg/cm2	36.99	
	21.00 Cum	strength	176.69	Kg/Cm2	140 kg/cm2		26/11/2018
		Average	191.79	Kg/Cm2			
	Company conserve subsections of main 1,214 and an	7 <sup>th</sup> day	181.22	Kg/Cm2			
,	Cement concrete cube of mix 1:2:4, cast on	compressive	183.49	Kg/Cm2	140 kg/cm2	22.60	Posted for 28 th day test due on
3	31/10/2018, for Foundation. Represents Quantity 20.00 Cum	strength	192.55	Kg/Cm2	140 kg/cm2	32.68	28/11/2018
		Average	185.75	Kg/Cm2			

Copy to: 1. The Assistant Engineer, SD III, WDI, WRD, Pernem - 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 I, WRD, Porvorim Goa.
- 4. QC Lab File. 5. Bill File.

Junior Engineer

**Assistant Engineer** 

GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT

Test Report No.: WRD/QC/F.6-2/Cube -T: 4422,4431,4440,4457,4460,4463/Lab/72/2018 - 19 Dated: 04/06 / 2018 Laboratory: Bicholim

Sub Division V (QC)/WRD/ Bicholim

Ref. to Requisition no.: MI/SDII/WDVI/WRD/ F.62 /2018-19/72 dated :- 14/05/2018.

Qty. Recived.: 06 Sets of cube Date of Receipt: 18/05/2018. Tested on: 25,27,29,31/05/2018 & 02,04/06/2018. Ref to CPWD: 2002, Vol. I

Sample: 1:3:6 Mix O.S No.: 312,321,331,348/SP & 003,006/SS Lab. Sample No.: 2183 to 2188 Tested By: Mr. S.M Patri ,A.E & Mrs. S.B. Naik Shirodkar. J.E.

## REPORT PAGE 01 OF 02

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or below	REMARK
	Plain Cement concrete cube of mix 1:3:6, cast on 27/04/2018, for Pilers of Half Round Pipes and	28 <sup>th</sup> day	147.24	Kg/Cm2	100 kg/cm2		
1		compressive	163.10	Kg/Cm2		49.51	Quantity represents 10.85 Cum
1	chambers.	strength	138.18	Kg/Cm2	100 kg/Cili2	49.51	Quantity represents 10.83 cum
	Chambers.	Average	149.51	Kg/Cm2			
	Plain Cement concrete cube of mix 1:3:6, cast on	28 <sup>th</sup> day	181.22	Kg/Cm2			
2	29/04/2018, for Pilers of Half Round Pipes and	compressive	147.24	Kg/Cm2	100 kg/cm2	71.40	Quantity represents 9.50 Cum
	chambers.	strength	185.75	Kg/Cm2	100 kg/cm2		
		Average	171.40	Kg/Cm2			
	Plain Cement concrete cube of mix 1:3:6, cast on	28 <sup>th</sup> day	140.45	Kg/Cm2		60.08	Quantity represents 11.50 Cum
3	01/05/2018, for Pilers of Half Round Pipes and	compressive	181.22	Kg/Cm2	100 kg/cm2		
3	chambers.	strength	158.57	Kg/Cm2	100 kg/cm2	00.08	Quantity represents 11.50 cum
	Chambers.	Average	160.08	Kg/Cm2			
	Plain Cement concrete cube of mix 1:3:6, cast on	28 <sup>th</sup> day	181.22	Kg/Cm2			
4	·	compressive	169.89	Kg/Cm2	100 kg/cm2	72.16	Quantity represents 11 95 Cum
4	03/05/2018, for Pilers of Half Round Pipes and	strength	165.36	Kg/Cm2	TOO Kg/CIIIZ	72.10	Quantity represents 11.85 Cum
	chambers.	Average	172.16	Kg/Cm2			

Junior Engineer

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
	Plain Cement concrete cube of mix 1:3:6, cast on	28 <sup>th</sup> day	206.14	Kg/Cm2			
	05/05/2018, for Pilers of Half Round Pipes and	compressive	181.22	Kg/Cm2	100 kg/cm2	87.26	Quantity represents 9.80 Cum
	chambers.	strength	174.43	Kg/Cm2	100 kg/cm2	07.20	Qualitity represents 9.80 cum
	Chambers.	Average	187.26	Kg/Cm2			
	Plain Cement concrete cube of mix 1:3:6, cast on	28 <sup>th</sup> day	181.22	Kg/Cm2			
	07/05/2018, for Pilers of Half Round Pipes and	compressive	181.22	Kg/Cm2	100 kg/cm2	83.49	Quantity represents 10.55 Cum
	chambers.	strength	188.02	Kg/Cm2	100 kg/ciliz	05.45	
	Chambers.	Average	183.49	Kg/Cm2			

Copy to: 1. The Assistant Engineer , SD II , WD VI, WRD, Valpoi Sattari - Goa.

- 2. The Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa for kind Information.
- 3. The Executive Engineer ,WDVI ,WRD, Bicholim Goa.
- 4. QC Lab File. 5. Bill File.

Junior Engineer

**Test Report No.**: WRD/QC/F.6-2/Cube -T :5912 To 5915, 5932,5933,5944,5945,5971,5972,/Lab/ **29** / 2019-20 Dated :- 10 / 04 / 2019

Laboratory: Bicholim -Goa.

5985,5986,6008,6009,6018,6019,6031,6032,6058,6059.

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

Subject: - Providing entrance arches, Illumination, Sigange and Basic Amenities from Visscount School To Pernem Town.

**Ref. to Requisition no.:** W -103/PC/GTDC/2018-19 / A E -I / **747** 

dated :- 07 / 03 / 2019.

**Qty. Recived.**: - 20 Sets of cube **Date of Receipt:-** 08 / 03 / 2019.

Tested on: - 21/03/2019 To 01/04/2019 as per due dates. Ref to CPW .: 2002, Vol. I

Sample: C.C. Cubes of mix M-30 RMC

**O.S No.**: 1397 To 1400,1416,1417,1424,1425,1446,1447,1461,1462,1484,1485,1496,1497,1506,1507,1529,1530.

Lab. Sample No. 3743 To 3762 Tested By: Mrs. S.B. Naik Shirodkar, JE

#### **REPORT PAGE 01 OF 03**

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	ULTS	Max./Min.Value permissable	Above %	REMARK
		28 <sup>th</sup> day	353.38	Kg/Cm <sup>2</sup>			Quantity represented by each sample/
1 1	Cement concrete cube mix M-30 RMC cast	compressive	369.24	Kg/Cm <sup>2</sup>	345 kg/cm2	4.84	set of cube is not mentioned, and also
_	on 21 /02 / 2019 R.C.C. for Box Culvert Raft.	strength	362.44	Kg/Cm <sup>2</sup>	343 Kg/ CI112		excat location of work done is not
		Average	361.69	Kg/Cm <sup>2</sup>			specified.
		28 <sup>th</sup> day	362.44	Kg/Cm <sup>2</sup>			
2	Cement concrete cube mix M-30 RMC cast	compressive	355.65	Kg/Cm <sup>2</sup>	345 kg/cm2	3.30	Do
_	on 21 /02 / 2019 R.C.C. for Box Culvert Raft.	strength	351.12	Kg/Cm <sup>2</sup>	545 kg/ciliz	3.50	50
		Average	356.40	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	335.26	Kg/Cm <sup>2</sup>			
3	Cement concrete cube mix M-30 RMC cast	compressive	360.18	Kg/Cm <sup>2</sup>	345 kg/cm2	2.21	Do
	on 22 /02 / 2019 R.C.C. for Box Culvert Raft .	strength	362.44	Kg/Cm <sup>2</sup>	J4J Kg/ CITIZ	2.21	
		Average	352.63	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	366.97	Kg/Cm <sup>2</sup>		2.87	Do
1 Д	Cement concrete cube mix M-30 RMC cast	compressive	357.91	Kg/Cm <sup>2</sup>	345 kg/cm2		
_	on 22 /02 / 2019 R.C.C. for Box Culvert Raft.	strength	339.79	Kg/Cm <sup>2</sup>	343 Kg/ CI112	2.07	50
		Average	354.89	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	344.32	Kg/Cm <sup>2</sup>			
5	Cement concrete cube mix M-30 RMC cast	compressive	339.79	Kg/Cm <sup>2</sup>	345 kg/cm2	1.12	Do
	on 23 /02 / 2019 R.C.C. for Box Culvert Raft .	strength	362.44	Kg/Cm <sup>2</sup>	343 Kg/ CI112	1.12	50
		Average	348.85	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	332.99	Kg/Cm <sup>2</sup>			
6	Cement concrete cube mix M-30 RMC cast	compressive	376.03	Kg/Cm <sup>2</sup>	345 kg/cm2	3.74	Do
	on 23 /02 / 2019 R.C.C. for Box Culvert Raft .	strength	364.71	Kg/Cm <sup>2</sup>	JTJ Ng/ CITIZ	3.,4	00
		Average	357.91	Kg/Cm <sup>2</sup>			

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	Above % <del>below</del>	REMARK
		28 <sup>th</sup> day	357.91	Kg/Cm <sup>2</sup>			Quantity represented by each sample/
7	Cement concrete cube mix M-30 RMC cast	compressive	385.09	Kg/Cm <sup>2</sup>	345 kg/cm2	5.93	set of cube is not mentioned, and also
′	on 25 /02 / 2019 R.C.C. for Retaining wall.	strength	353.38	Kg/Cm <sup>2</sup>	343 kg/ciliz	3.93	excat location of work done is not
		Average	365.46	Kg/Cm <sup>2</sup>			specified.
		28 <sup>th</sup> day	407.75	Kg/Cm <sup>2</sup>			
8	Cement concrete cube mix M-30 RMC cast	compressive	385.09	Kg/Cm <sup>2</sup>	345 kg/cm2	11.62	Do
	on 25 /02 / 2019 R.C.C. for Retaining wall.	strength	362.44	Kg/Cm <sup>2</sup>	343 Kg/CIIIZ	11.02	50
		Average	385.09	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	339.79	Kg/Cm <sup>2</sup>			
9	Cement concrete cube mix M-30 RMC cast	compressive	412.28	Kg/Cm <sup>2</sup>	345 kg/cm2	4.40	Do
	on 26 /02 / 2019 R.C.C. for Retaining wall .	strength	328.46	Kg/Cm <sup>2</sup>	343 kg/ciliz	4.40	50
		Average	360.18	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	382.83	Kg/Cm <sup>2</sup>			
10	Cement concrete cube mix M-30 RMC cast on 26 /02 / 2019 R.C.C. for Retaining wall.	compressive	348.85	Kg/Cm <sup>2</sup>	345 kg/cm2	5.27	Do
10		strength	357.91	Kg/Cm <sup>2</sup>	343 kg/ciliz	3.27	
		Average	363.20	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	353.38	Kg/Cm <sup>2</sup>			
11	Cement concrete cube mix M-30 RMC cast on 27 /02 / 2019 R.C.C. for Retaining wall .	compressive	382.83	Kg/Cm <sup>2</sup>	345 kg/cm2	5.93	Do
11		strength	360.18	Kg/Cm <sup>2</sup>		3.93	DO
		Average	365.46	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	326.20	Kg/Cm <sup>2</sup>			
12	Cement concrete cube mix M-30 RMC cast	compressive	362.44	Kg/Cm <sup>2</sup>	345 kg/cm2	3.09	Do
12	on 27 /02 / 2019 R.C.C. for Retaining wall.	strength	378.30	Kg/Cm <sup>2</sup>	343 kg/ciliz	3.09	50
		Average	355.65	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	330.73	Kg/Cm <sup>2</sup>			
13	Cement concrete cube mix M-30 RMC cast	compressive	385.09	Kg/Cm <sup>2</sup>	345 kg/cm2	3.52	Do
	on 28 /02 / 2019 R.C.C. for Retaining wall.	strength	355.65	Kg/Cm <sup>2</sup>	343 Kg/CIIIZ	3.32	50
		Average	357.16	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	362.44	Kg/Cm <sup>2</sup>			
14	Cement concrete cube mix M-30 RMC cast	compressive	348.85	Kg/Cm <sup>2</sup>	345 kg/cm2	3.09	Do
	on 28 /02 / 2019 R.C.C. for Retaining wall.	strength	355.65	Kg/Cm <sup>2</sup>	J-J K8/ CITI2		50
		Average	355.65	Kg/Cm <sup>2</sup>			

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	Above %	REMARK
		28 <sup>th</sup> day	355.65	Kg/Cm <sup>2</sup>			Quantity represented by each sample/
15	Cement concrete cube mix M-30 RMC cast	compressive	362.44	Kg/Cm <sup>2</sup>	345 kg/cm2	4.18	set of cube is not mentioned, and also
13	on 01 /03 / 2019 R.C.C. for Retaining wall .	strength	360.18	Kg/Cm <sup>2</sup>	343 kg/CIII2	4.10	excat location of work done is not
		Average	359.42	Kg/Cm <sup>2</sup>			specified.
		28 <sup>th</sup> day	369.24	Kg/Cm <sup>2</sup>			
16	Cement concrete cube mix M-30 RMC cast	compressive	362.44	Kg/Cm <sup>2</sup>	245 kg/om2	3.52	D.a.
10	on 01 /03 / 2019 R.C.C. for Retaining wall .	strength	339.79	Kg/Cm <sup>2</sup>	345 kg/cm2	3.52	Do
		Average	357.16	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	362.44	Kg/Cm <sup>2</sup>			
17	Cement concrete cube mix M-30 RMC cast	compressive	351.12	Kg/Cm <sup>2</sup>	345 kg/cm2	4.62	Do
17	on 02 /03 / 2019 R.C.C. for Box culvert raft.	strength	369.24	Kg/Cm <sup>2</sup>		4.02	
		Average	360.93	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	357.91	Kg/Cm <sup>2</sup>	245 kg/om2		
18	Cement concrete cube mix M-30 RMC cast	compressive	355.65	Kg/Cm <sup>2</sup>		4.18	Do
10	on 02 /03 / 2019 R.C.C. for Box culvert raft.	strength	364.71	Kg/Cm <sup>2</sup>	345 kg/cm2		Do
		Average	359.42	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	353.38	Kg/Cm <sup>2</sup>			
19	Cement concrete cube mix M-30 RMC cast	compressive	355.65	Kg/Cm <sup>2</sup>	345 kg/cm2	3.52	Do
13	on 04 /03 / 2019 R.C.C. for Retaining wall.	strength	362.44	Kg/Cm <sup>2</sup>	3 13 Ng/ 31112	3.32	50
		Average	357.16	Kg/Cm <sup>2</sup>			
		28 <sup>th</sup> day	366.97	Kg/Cm <sup>2</sup>			
20	Cement concrete cube mix M-30 RMC cast	compressive	360.18	Kg/Cm <sup>2</sup>	345 kg/cm2	5.27	Do
20	on 04 /03 / 2019 R.C.C. for Retaining wall.	strength	362.44	Kg/Cm <sup>2</sup>	3-13 Kg/ CITIZ	3.2,	50
		Average	363.20	Kg/Cm <sup>2</sup>			

Copy to: 1. The Assistant Engineer -I, Project Cell, G.T.D.C, Paryatan Bhavan, Potto Panaji - Goa.

2. QC Lab File. 3. Bill File.

Junior Engineer

5	Plain Cement concrete cube of mix 1:2:4, cast on 11/05/2018, PCC for 1 <sup>st</sup> ( lift)step of wall between ch. 6175 m to 6245 m.	28th day	267.30 Kg/Cm <sup>2</sup>		26.21	Quantity represents 32.00 Cum
		compressive	271.83 Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>		
		strength	255.97 Kg/Cm <sup>2</sup>	210.00 kg/cm		
		Average	265.04 Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on 12/05/2018, PCC for 1 <sup>st</sup> ( lift)step of wall between ch. 6175 m to 6245 m.	28th day	226.53 Kg/Cm <sup>2</sup>		3.20	Quantity represents 16.00 Cum
6		compressive	212.93 Kg/Cm <sup>2</sup>	210 00 Kalam²		
U		strength	210.67 Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>		
		Average	216.71 Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on 13/05/2018, PCC for 2 <sup>nd</sup> ( lift)step of wall between ch. 6175 m to 6245 m.	28th day	215.20 Kg/Cm <sup>2</sup>		2.48	Quantity represents 32.00 Cum
7		compressive	203.87 Kg/Cm <sup>2</sup>	240.00 // 2		
		strength	226.53 Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>		
		Average	215.20 Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on 13/05/2018, PCC for 2 <sup>nd</sup> ( lift)step of wall between ch. 6175 m to 6245 m.	28th day	203.87 Kg/Cm <sup>2</sup>		1.04	Quantity represents 32.00 Cum
8		compressive	208.40 Kg/Cm <sup>2</sup>	240.00 K=/==2		
ŏ		strength	224.26 Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>		
		Average	212.18 Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on 14/05/2018, PCC for 2 <sup>nd</sup> ( lift)step of wall between ch. 6175 m to 6245 m.	28th day	215.20 Kg/Cm <sup>2</sup>		9.67	Quantity represents 16.00 Cum
9		compressive	226.53 Kg/Cm <sup>2</sup>	240.00 // / 2		
9		strength	249.18 Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>		
		Average	230.30 Kg/Cm <sup>2</sup>			
	Plain Cement concrete cube of mix 1:2:4, cast on 14/05/2018, PCC for 2 <sup>nd</sup> ( lift)step of wall between ch. 6175 m to 6245 m.	28th day	215.20 Kg/Cm <sup>2</sup>		9.67	Quantity represents 16.00 Cum
10		compressive	226.53 Kg/Cm <sup>2</sup>	210 00 Kg/ors <sup>2</sup>		
10		strength	249.18 Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>		
		Average	230.30 Kg/Cm <sup>2</sup>			

Junior Engineer

Test Report No.: WRD/QC/F.6-2/Cube -T : 6072 & 6080 /Lab/ **34**/ 2019 - 20 Dated: 11/04/ 2019 Laboratory : Bicholim

Sub Division V (QC)/WRD/ Bicholim

Name of Work: - Improvement to the Existing Jamblachi Tali at Bhandarwada in village Palyem in Mandrem Constituency.

Ref. to Requisition no.: MI/SDIII/WDI/WRD/ F.58 /2018-19/528 dated :- 26/03/2019.

Qty. Recived.: 02 Sets of cube Date of Receipt: 02/04/2019. Tested on: 02 & 03/04/2019. Ref to CPWD: 2002, Vol. I

Sample: Cube 1:2:4 Mix O.S No.: 1546 & 1560/SS Lab. Sample No.: 4159 to 4160 Tested By: Mrs. S.B. Naik Shirodkar. J.E.

#### **REPORT PAGE 01 OF 01**

## Witnessed by Shri. Harichandra R. Nagvekar (agency )on 02/04/2019.

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
	Plain Cement concrete cube of mix 1:2:4, cast on 05/03/2019, for Base Foundation of Lake walls.	28 <sup>th</sup> day	246.91	Kg/Cm2	210 kg/cm2	19.74	Quantity represents 15.00 Cum
1		compressive	271.83	Kg/Cm2			
1		strength	235.59	Kg/Cm2			
		Average	251.44	Kg/Cm2			
	Plain Cement concrete cube of mix 1:2:4, cast on 06/03/2019, for Base Foundation of Lake walls.  28 <sup>th</sup> day compressive strength  Average	28 <sup>th</sup> day	235.59	Kg/Cm2	210 kg/cm2	16.50	Quantity represents 16.00 Cum
,		compressive	226.53	Kg/Cm2			
~		strength	271.83	Kg/Cm2			
		Average	244.65	Kg/Cm2			

Copy to: 1. The Assistant Engineer , SD III , WD I, WRD, Pernem - 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 I ,WRD, Porvorim Goa.
- 4. QC Lab File. 5. Bill File.

Junior Engineer

Test Report No.: WRD/QC/F.6-2/Cube -T : 6041,6053,6071,6079 & 6096 /Lab/ **39**/ 2019 - 20

Dated: 16/04/2019 Laboratory: Bicholim

Sub Division V (QC)/WRD/ Bicholim

Name of Work: - Improvement to the Existing nallah from Babi Govekar house at Kaskar waddo in V.P. Soccurro in Porvorim Constituency.

Ref. to Requisition no.: MI/SDII/WDI/WRD/ F.24 /2018-19/843 dated :- 26/03/2019.

Qty. Recived.: 05 Sets of cube Date of Receipt: 30/03/2019. Tested on: 03/03/2019 To 04/04/2019. as per due dates. Ref to CPWD: 2002, Vol. I

Sample: Cube 1:2:4 Mix O.S No.: 1516,1524,1545,1559 & 1576/SS Lab. Sample No.: 4090 to 4494 Tested By: Mrs. S.B. Naik Shirodkar. J.E.

#### **REPORT PAGE 01 OF 01**

# Witnessed by Shri. Harichandra R. Nagvekar (agency )on 02/04/2019.

5	SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1		Plain Cement concrete cube of mix 1:2:4, cast on 05/03/2019, for Base Foundation of Lake walls.	28 <sup>th</sup> day	246.91	Kg/Cm2	210 kg/cm2	19.74	Quantity represents 15.00 Cum
	1		compressive	271.83	Kg/Cm2			
	_		strength	235.59	Kg/Cm2			
			Average	251.44	Kg/Cm2			