MUNICIPAL **CORPORATION OF GREATER MUMBAI** Proposed MCGM General Hospital and Staff Quarters, Village Chandivali, Sangharsha Nagar, Kurla, Mumbai, 400072 CSMC CIVIL WORK - HOSPITAL & RESIDENTIAL BUILDING SR. **SECTION DESCRIPTION AMOUNT** NO. SEWAGE TEATMENT PLANT CSMC WORKS 2,02,94,820.00 A 2 B WATER TREATMENT PLANT CSMC WORKS 25,83,000.00 3 \mathbf{C} PLUMBING & SANITARYWARE CSMC WORKS 1,60,36,380.00 RAIN WATER HARVESTING CSMC WORKS 11,89,600.00 4 D 4,01,03,800.00 **Total for CSMC CIVIL work**

MUNICIPAL CORPORATION OF GREATER MUMBAI PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS **BILL OF QUANTITIES - STP & ETP PLANT** S/I/T/C S/I/T/C SR.NO REF. CODE **DESCRIPTION** QTY | UNIT RATE **TOTAL AMOUNT** STP-400KLD & ETP-115KLD STP & ETP Capacity 515 cum/day (STP Cap400 KLD, ETP Cap.115 KLD) MBR process STP of cap.515 CUM/DAY with all Necessary Equipments listed below 2 nos SS 304 Bar screne. Punched hole screen of 2mm size,2 nos. Sewage lift pump SS construction, 2 nos. Twin lobe Air blower, 4 nos. FAIR-PMMsludge pumps,2 nos. Filter feed pumps,2 nos. Nos 3,22,14,000 3,22,14,000 STP-2019 Treated water transfer pump, Control panel, Membrane removing & reinstallation., Ozone / UV Dosing arrangement, Necessary multiport valve filters, Filter Press / Centrifuge, NECESSARY PIPING OF UPVC SCH 80 or HDPE except Air Blower WHICH WILL BE IN GI/MS, Membrane porosities of 0.035 microns: GE / Siemens INLET WATER QUALITY QUARTERS -ETP (Cap -115cum.) BOD-500 PPM,COD-1000 PPM,TSS-300 PPM,OIL&GREASE-50 PPM,PH-5 to 8

	ELECTRICAL WORKS (In Rs.)		3,22, : 4,000
	TOTAL AMOUNT GRAND TOTAL FOR STP, ETP PLANT WITH ALL MECHANICAL &		3,22,14,000
	(all RCC work including pump foundations will be done by the Civil Contractor). Lab Test Report for total parameters as per IS 10500 for First 3 months each & at 6th and 12th Month. As per detail specification and directed by engineer-in charge. (as per drawing)		
	TREATED WATER QUALITY BOD < 5, COD < 30, TSS < 2, OIL & GREASE < 2, PH- 6.5 TO 8, ODOUR – Unobjectionable, COLI FORM < 01		
	INLET WATER QUALITY QUARTERS-STP (Cap-400cum.) BOD-300PPM,COD-600PPM,TSS-200 PPM OIL&GREASE-50PPM,PH-5 to 8,TREATED WATER QUALITY,BOD<5,COD<30,TSS<2,OIL&GREASE-50PPM,PH-6.5to 8,		

FAIR ITEM	SEWAGE TEATMENT PLANT CSMC WORKS			
	TOTAL AMOUNT FOR STR WORK			2 22 44 000 00
	TOTAL AMOUNT FOR STP WORK			3,22,14,000.00
FAIR ITEM	Operation cost for STP 1st Year 5%			16,10,700.00
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FAIR ITEM	2nd Year 5.5%			17,71,770.00
FAIR ITEM	3rd Year 6%			19,32,840.00
FAIR ITEM	4th Year 6.5%			20,93,910.00
FAIR ITEM	5th Year 7%			22,54,980.00
FAIR ITEM	6th Year 7.5%			24,16,050.00
FAIR ITEM	7th Year 8%			25,77,120.00
				4 40 0-0
	TOTAL		Α	1,46,57,370.00
	IOTAL		A	1,46,57,370.00
	Annual Comprehensive Maintenance Cost for S	TP	A	1,46,57,370.00
		TP	A	1,46,57,370.00 0.00
	Annual Comprehensive Maintenance Cost for S	TP	A	
FAIR ITEM	Annual Comprehensive Maintenance Cost for S 1st Year (Included)	TP	A	0.00
FAIR ITEM FAIR ITEM	Annual Comprehensive Maintenance Cost for S 1st Year (Included) 2nd Year (Included)	TP	A	0.00
	Annual Comprehensive Maintenance Cost for S 1st Year (Included) 2nd Year (Included) 3rd Year 3%	TP	A	0.00 0.00 10,46,955.00
FAIR ITEM	Annual Comprehensive Maintenance Cost for S 1st Year (Included) 2nd Year (Included) 3rd Year 3% 4th Year 3.25 %	TP	A	0.00 0.00 10,46,955.00 11,27,490.00
FAIR ITEM FAIR ITEM	Annual Comprehensive Maintenance Cost for S 1st Year (Included) 2nd Year (Included) 3rd Year 3% 4th Year 3.25 % 5th Year 3.5 %	TP	A	0.00 0.00 10,46,955.00 11,27,490.00 12,08,025.00
FAIR ITEM FAIR ITEM FAIR ITEM	Annual Comprehensive Maintenance Cost for S 1st Year (Included) 2nd Year (Included) 3rd Year 3% 4th Year 3.25 % 5th Year 3.5 % 6th Year 3.75%	TP	B	0.00 0.00 10,46,955.00 11,27,490.00 12,08,025.00 12,88,560.00

		BILL OF QUANTITIES	- WTP			
SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
2	FA-BMH-21-06	WATER TREATMENT PLANT				
		Supply, installation, testing and commissioning of dual media, deep bed vertical down flow pressure filter consisting of Stainless steel vertical Self Supporting type pressure vessel with Supporting Media frontal pipe(MS/GI) work and valves, differential pressure gauges and all required accessories.				
		Flow- 60 m3/hr				
		Filteration Velocity-15 m3/m2/Hr				
		Shell/Dish Thickness - 6/6 Thickness				
		Internal arrangement - Plate with PP Strainer with Box pipe support				
		Media- Sand, Pebbles,Etc.				
		Opearting Pressure-3.5 kg/cm2				
		Testing Pressure-5 kg/cm2				
		Make- PTBr				

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Supply, installation, testing and commissioning of Activated Carbon Filter, media, deep bed vertical down flow pressure filter consisting of Stainless steel vertical Self Supporting type Activated Carbon filter with carbon and supporting media, frontal pipe(MS/GI) work and valves, differential pressure gauges and all required accessories.			
Flow- 60 m3/hr			
Filteration Velocity-15 m3/m2/Hr			
Shell/Dish Thickness - 6/6 Thickness			
Internal arrangement - Plate with PP Strainer with Box pipe support			
Media- Supporting sand and Carbon			
Opearting Pressure-3.5 kg/cm2			
Testing Pressure-5 kg/cm2			
Make - PTBr			
Sodium silicate chlorine dosing system consisting of 20 lts capacity polyethylene tank mounted with adjustable flow electronic metering pump suitable for dosing 2.5 lph at 3.5 kg/cm2 pressure, complete with connecting pipe, foot valve and strainer, level tube, level switch, cable, non return valve and all accessories			

Make- Asia LMI		
WTP feed pump for rain water		
treatment		
Fixed speed In-line, vertial		
multistage, centrifugal clear water		
pumps, speed upto 2900 rpm, with C		
body, S.S 304 impeller and SS-		
304/410 shaft, C.I. Base with epoxy		
coating , connected to a TEFC motor		
(with mechanical seal) suitable for		
380 / 440 volts,		
For feeding raw water to water		
treatment plant and store in soft /		
treated domestic water tank		
Capacity/Flow Rate - 500LPM		
VERTICAL INLINE PUMP		
Head - 50.00 MWC		
1 Set = 3 Nos. Pump (2 Working + 1		
Standby) 8hr working		
Location - PUMP ROOM		
Suction head - Positive		
suction		
Make- Wilo/Kirloskar/eq		

	2nd Year 5.5%		2,25,500.00
FA-BMH-21-29	1st Year 5%		2,05,000.00
	Operation cost for WTP		41,00,000.00
	TOTAL AMOUNT FOR WTP WORK		41,00,000.00
	CSMC WORKS		
	WATER TREATMENT PLANT		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	TOTAL AMOUNT WTP (In Rs.)		41,00,000.00
	Make of Panel- PTBr		
	required instumentation complete shall be include		
	power and control cabling etc.and all		
	pressure gauge, inter connecting		
	Flow switches, pressure switches,		
	control valves, non return valves,		
	headers for suction and discharge,		
	Set of accessories such as G.I		
	automatic		
	OFF and Trip Indicating lamps,		
	leakage relay, dry run trip relay, ON-		
	Single phasing preventer, earth		
	control contactors,O/L Relay with		
	individual pump isolators, contactors,		
	one set of pumps complete with		

	Annual Comprehensive			
	Maintenance Cost for WTP			
	1st Year (Included)			0.00
	2nd Year (Included)			0.00
FA-BMH-21-36	3rd Year 3%			1,23,000.00
FA-BMH-21-37	4th Year 3.25 %			1,33,250.00
FA-BMH-21-38	5th Year 3.5 %			1,43,500.00
FA-BMH-21-39	6th Year 3.75%			1,53,750.00
FA-BMH-21-40	7th Year 4%			1,64,000.00
	TOTAL		В	7,17,500.00
	GRAND TOTAL	LS	(A+B)	25,83,000.00

		BILL OF QUANTITIES - SANITARY\	WARE			
SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		NOTE: 1) Wherever single brand is mentioned in sanitary fixtures & fittings the same should be rNod as "or approved equivalent" 2) All vertical and suspended drainage, sewer, water supply pipes should be fixed on horrizontal/ vertical suface on sutaibly design bracket as approved by Engineer in charge. No seprate payment shall be made for this acount. The contractor should note this while quoting the tender.				
	R2-CS-PS-1	with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required:				
3	R2-CS-PS-1-a	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	22.00	Nos	6,314.00	1,38,908.00
4	R2-CS-PS- 244	Providing and fixing JAQUAR MAKE metropole flush valve Dual Flow ConcNoled type with control cock operation plate 40 mm size etc. Complete		Nos	7,929.00	15,858.00
5	R2-CS-PS- 254	Providing and fixing JAQUAR MAKE,HOTELIER series Model No. 1551 Toilet Paper Holder Recessed type (S.Steel) including cutting and making goodthe wall wherever required etc complete	2.00	Nos	1,842.00	3,684.00
6	R2-CS-PS- 257	Providing and fixing GLITTERS MAKE, SLOPE series Robe hook etc complete	2.00	Nos	788.00	1,576.00

7	R2-CS-PS-76	closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting , of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	330.00	Nos	15,556.00	51,33,480.00
8	R2-CS-PS- 221	Providing and fixing cast iron Pan connectors with or without vent holes straight/ bend including providing & jointing with drip sNol joints.		Nos	1,359.00	4,48,470.00
9	R2-CS-PS- 264	Providing & fixing 2-way Bib cock JAQUAR MAKE, ORNAMIX Model No. 10041etc. complete.	330.00	Nos	2,578.00	8,50,740.00
10	R2-CS-PS- 260	Providing & fixing in position `Jacquar Continental' make CP Jet Spray with flexible CP supply pipe, and all other accessories, complete	330.00	Nos	2,113.00	6,97,290.00
11	R2-CS-PS- 244	Providing and fixing JAQUAR MAKE metropole flush valve Dual Flow Concealed type with control cock operation plate 40 mm size etc. Complete		Nos	7,929.00	26,16,570.00
12	R2-CS-PS- 254	Providing and fixing JAQUAR MAKE,HOTELIER series Model No. 1551 Toilet Paper Holder Recessed type (S.Steel) including cutting and making goodthe wall wherever required etc complete	330.00	Nos	1,842.00	6,07,860.00
13	R2-CS-PS- 257	Providing and fixing GLITTERS MAKE, SLOPE series Robe hook etc complete	330.00	Nos	788.00	2,60,040.00
14	R2-CS-PS- 246	Supplying & Fixing Hindware make flat back Urinal rNor inlet with urinal flush valve of Jaquar make including CP SS dome shaped grating C.P. west coupling, CP sprNoder, CP 'P' trap.(Urinal White color Model no.60002, Jaquar Make Push Type Valve Cat.No.PRS-077 OR consider equivalent make)	100.00	Nos	7,267.00	7,26,700.00

15	R2-CS-PS- 248	White Vitreous China of 'Hindustan & Parryware' make or equivalent under counter type Oval wash basin of size 550 x 480mm with CI brackets suitable for mounting below granite counter including waste fitting with CP brass bottle trap, angle valve with CP connection etc as specified. Oval Wash Basin Model No.10051 OR consider equivalent make.)	270.00	Nos	8,192.00	22,11,840.00
16	R2-CS-PS- 251	P/f Hindustan make white glazed Northen ware,wash basin constallation model (10032) of 55cmx43cm OR consider equivalent make	2.00	Nos	3,939.00	7,878.00
17	R2-CS-PS-8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	2.00	Nos	1,177.00	2,354.00
18	R2-CS-PS- 252	Providing and fixing stainless steel sink 600 mm x 450 mm and 200mmdeep including 32mm dia. galvanised iron waste pipe, 32mm dia. C.P.brass waste coupling, one C.P. brass screw down tap, caste ironbrackets, rubber plugs with chain etc. complete.(Kitchen Sink)	90.00	Nos	8,215.00	7,39,350.00
	R2-CS-PS-11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required. Cat no. 50001 OR consider equivalent make				
19	R2-CS-PS-11- A	Size 450x300x150mm	110.00	Nos	3,436.00	3,77,960.00
20	R2-CS-PS- 263	WASTE COUPLING :JAQUAR : NO. 705 (FULL THRNoD)	2.00	Nos	655.00	1,310.00

21	R2-CS-PS- 262	Providing & fixing chromium plated 32mm Jaguar make Series allied modelno. ALD-769 B Bottle trap (with internal partition) for Wash Basins including Waste Coupling fixed in required position with 250mm long wall connection pipes and wall flange with all necessaryfittings and fixtures, etc. complete and as directed by The Engineer incharge.		Nos	1,913.00	3,826.00
22	R2-CS-PS- 247	Providing and fixing JAQUAR MAKE, PRESSMATIC Taps Model No. 031 Pillarcock Auto closing system etc complete		Nos	2,834.00	7,65,180.00
23	R2-CS-PS- 261	Providing and fixing ISI marked make CP brass liquid soap dispensers with CP brass bracket capacity 250 ml.	600.00	Nos	2,645.00	15,87,000.00
24	R2-CS-PS- 255	Supply of Sink Mixer - Jaquar note:- J shape spout with wall flange of heavy duty Jaquqr make (Wall mounted). (Sink cock with J shape spout Cat. No. FLR-5309N OR consider equivalent make)	110.00	Nos	4,737.00	5,21,070.00
25	R2-CS-PS- 250	P/F Jaquar make shower , necessary accessories shower arm with flange continental series sr. no. 483	118.00	Nos	1,437.00	1,69,566.00
26	R2-CS-PS- 249	Providing and fixing heavy ISI marked single lever concealed diverter for bath & shower system Rain shower & its accessories. (Mixer Cat. No. CON- 421 Jaquar make OR consider equivalent make)	118.00	Nos	11,203.00	13,21,954.00
27	R2-CS-PS- 258	Providing and fixing GLITTERS MAKE, SLOPE sereis Towel Rack etccomplete	118.00	Nos	1,448.00	1,70,864.00
28	R2-CS-PS- 256	Providing and fixing JAQUAR MAKE, CONTINENTAL Model No. 1121 Towel ring including cutting and making good the wall wherever required etccomplete	118.00	Nos	1,281.00	1,51,158.00
29	R2-CS-PS- 265	Providing and fixing brass CP angle cock for mini geyser of Metro,seiko or other equivalent approved make.	750.00	Nos	721.00	5,40,750.00

30	FA-BMH-21- 41	Supplying and erecting storage / pressure type horizontal / vertical water heater 25 litres with BEE 5 star rating of mild steel body, on wall / loft complete duly tested and marking	200.00	Nos	6,912.75	13,82,550.00
31	FA-BMH-21-	sr. no. and date of erection.specification no. AP-WH/STWH Supplying and erecting storage / pressure type horizontal / vertical water heater 25 litres with BEE 5 star rating of mild	10.00	Nos	32,137.05	3,21,370.50
	42	steel body, on wall / loft complete duly tested and marking sr. no. and date of erection.specification no. AP-WH/STWH	10.00	1103	02,107.00	0,21,070.00
32	FA-BMH-21- 43	Grabbars-Providing SS grabbars set for accessible toilets comprising of 4NO. Grabbars as specified below. (1NO.wing grabbar+1NO. Lshaped grabbar+ 2NO.straight grabbars=1t ypical set)27a) Swing grabbar (1NO) Providing a S.S.304 SWING HANDICAP GRABBAR-700mm and of DIA: 32MM and thickness 1.5mm of the roved brand and make. 27b) LShaped grabbar (1NO) Providing S.S.304 LSHAPED DISABLED GRABBAR of SIZE-600MM(H)X600MM(D) and 32MMDIA. and thickness mm of the approved brand and make. 27c) Straight grabbar (2NO) Providing S.STEEL 304 GRAB RAIL (600MM),32MMDIA. and thickness 1.5mm of the approved brand and make.		Nos	25,642.50	10,25,700.00
33	FA-BMH-21- 44	SITC OF 2- Bay Scrub Sink, with Infrared Photo sensor, Digital Timer with user defined Time interval 1,3,5 and 10 minutes,1 no. mixture valve and 1 NO. solenoid valves along with Manual Option Foot Operated mechanism/ Foot switch. Anti-splash metal body construction made of Stainless Steel Grade 304 polished finished. The Scrub Sink is provided with front access panel for NOe of maintenance and repairs. 1 – Position size 1600 mm long	4.00	Nos	2,35,708.00	9,42,832.00

34	FA-BMH-21- 45	Supplying and erecting ultra violet storage type water purifier (RO+UV+UF) with softener for safe drinking water consisting of UV germicidal tube of 8W capacity choke made of copper wire and two indicator lamps with output of purified water 7 to 8 litre/min with activated carbon filter and softener operating on 230 V single phase A.C. supply.	2.00	Nos	18,487.85	36,975.70
		TOTAL SECTION 'A'				2,37,82,664.20
		RESIDENTIAL				
		NOTE: 1) Wherever single brand is mentioned in sanitary fixtures & fittings the same should be rNod as "or approved equivalent" 2) All vertical and suspended drainage, sewer, water supply pipes should be fixed on horrizontal/ vertical suface on sutaibly design bracket as approved by Engineer in charge. No seprate payment shall be made for this acount. The contractor should note this while quoting the tender.				
	R2-CS-PS-1	with 100mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required:				
34	R2-CS-PS- 244	Providing and fixing JAQUAR MAKE metropole flush valve Dual Flow ConcNoled type with control cock operation plate 40 mm size etc. Complete	200.00	Nos	7,929.00	15,85,800.00

R2-CS-PS-76	closet of size 780x370x690 mm of approved shape	198.00	EA	15,556.00	30,80,088.00
	including providing & fixing white vitreous china cistern				
	with dual flush fitting, of flushing capacity 3 litre/6 litre				
	(adjustable to 4 litre/8 litres), including seat cover, and				
	cistern fittings, nuts, bolts and gasket etc complete.				
R2-CS-PS-	Providing and fixing cast iron Pan connectors with or	198.00	Nos	1,359.00	2,69,082.00
221	without vent holes straight/ bend including providing &				
	jointing with drip sNol joints.				
R2-CS-PS-	Providing & fixing 2-way Bib cock JAQUAR MAKE,	198.00	Nos	2,578.00	5,10,444.00
264	ORNAMIX Model No. 10041etc. complete.				
R2-CS-PS-	Providing & fixing in position `Jacquar Continental' make CP	198.00	Nos	2,113.00	4,18,374.00
260	Jet Spray with flexible CP supply pipe, and all other				
	accessories, complete				
R2-CS-PS-	Providing and fixing JAQUAR MAKE, HOTELIER series	198.00	Nos	1,842.00	3,64,716.00
254	Model No. 1551 Toilet Paper Holder Recessed type				
	(S.Steel) including cutting and making goodthe wall				
	wherever required etc complete				
R2-CS-PS-	Providing and fixing GLITTERS MAKE, SLOPE series Robe	198.00	Nos	788.00	1,56,024.00
257	hook etc complete				
R2-CS-PS-	White Vitreous China of 'Hindustan & Parryware' make or	221.00	Nos	8,192.00	18,10,432.00
248	equivalent under counter type Oval wash basin of size 550				
	x 480mm with CI brackets suitable for mounting below				
	granite counter including waste fitting with CP brass bottle				
	trap, angle valve with CP connection etc as specified. Oval				
	Wash Basin Model No.10051 OR consider equivalent				
	make.)				
R2-CS-PS-	P/f Hindustan make white glazed Northen ware,wash basin	2.00	Nos	3,939.00	7,878.00
251	constallation model (10032) of 55cmx43cm OR consider				
	equivalent make				
R2-CS-PS-8		2.00	Nos	1,177.00	2,354.00
	basin completely recessed at the back for the reception of				
	pipes and fittings.				
	221 R2-CS-PS- 264 R2-CS-PS- 260 R2-CS-PS- 254 R2-CS-PS- 257 R2-CS-PS- 248 R2-CS-PS- 248	with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete. R2-CS-PS- Providing and fixing cast iron Pan connectors with or without vent holes straight/ bend including providing & jointing with drip sNol joints. R2-CS-PS- Providing & fixing 2-way Bib cock JAQUAR MAKE, ORNAMIX Model No. 10041etc. complete. R2-CS-PS- Providing & fixing in position 'Jacquar Continental' make CP Jet Spray with flexible CP supply pipe, and all other accessories, complete R2-CS-PS- Providing and fixing JAQUAR MAKE,HOTELIER series Model No. 1551 Toilet Paper Holder Recessed type (S. Steel) including cutting and making goodthe wall wherever required etc complete R2-CS-PS- Providing and fixing GLITTERS MAKE, SLOPE series Robe hook etc complete R2-CS-PS- White Vitreous China of 'Hindustan & Parryware' make or equivalent under counter type Oval wash basin of size 550 x 480mm with Cl brackets suitable for mounting below granite counter including waste fitting with CP brass bottle trap, angle valve with CP connection etc as specified. Oval Wash Basin Model No.10051 OR consider equivalent make.) R2-CS-PS- P/f Hindustan make white glazed Northen ware,wash basin constallation model (10032) of 55cmx43cm OR consider equivalent make R2-CS-PS-8 Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of	with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete. R2-CS-PS- Providing and fixing cast iron Pan connectors with or without vent holes straight/ bend including providing & jointing with drip sNol joints. R2-CS-PS- Providing & fixing 2-way Bib cock JAQUAR MAKE, ORNAMIX Model No. 10041etc. complete. R2-CS-PS- Providing & fixing in position `Jacquar Continental' make CP Jet Spray with flexible CP supply pipe, and all other accessories, complete R2-CS-PS- Providing and fixing JAQUAR MAKE,HOTELIER series Model No. 1551 Toilet Paper Holder Recessed type (S.Steel) including cutting and making goodthe wall wherever required etc complete R2-CS-PS- Providing and fixing GLITTERS MAKE, SLOPE series Robe hook etc complete R2-CS-PS- White Vitreous China of 'Hindustan & Parryware' make or equivalent under counter type Oval wash basin of size 550 x 480mm with Cl brackets suitable for mounting below granite counter including waste fitting with CP brass bottle trap, angle valve with CP connection etc as specified. Oval Wash Basin Model No.10051 OR consider equivalent make.) R2-CS-PS- Pf Hindustan make white glazed Northen ware,wash basin constallation model (10032) of 55cmx43cm OR consider equivalent make Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of	with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete. R2-CS-PS- Providing and fixing cast iron Pan connectors with or without vent holes straight/ bend including providing & jointing with drip sNol joints. R2-CS-PS- Providing & fixing 2-way Bib cock JAQUAR MAKE, ORNAMIX Model No. 10041etc. complete. R2-CS-PS- Providing & fixing in position 'Jacquar Continental' make CP 198.00 Nos 260 Jet Spray with flexible CP supply pipe, and all other accessories, complete R2-CS-PS- Providing and fixing JAQUAR MAKE, HOTELIER series Model No. 1551 Toilet Paper Holder Recessed type (S.Steel) including cutting and making goodthe wall wherever required etc complete R2-CS-PS- Providing and fixing GLITTERS MAKE, SLOPE series Robe 198.00 Nos hook etc complete R2-CS-PS- White Vitreous China of 'Hindustan & Parryware' make or equivalent under counter type Oval wash basin of size 550 x 480mm with Cl brackets suitable for mounting below granite counter including waste fitting with CP brass bottle trap, angle valve with CP connection etc as specified. Oval Wash Basin Model No.10051 OR consider equivalent make.) R2-CS-PS- Pfi Hindustan make white glazed Northen ware, wash basin constallation model (10032) of 55cmx43cm OR consider equivalent make R2-CS-PS-8 Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of	with dual flush fitting, of flushing capacity 3 litre/6 litre (adjustable to 4 litre/8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete. R2-CS-PS- Providing and fixing cast iron Pan connectors with or without vent holes straight/ bend including providing & jointing with drip sNol joints. R2-CS-PS- Providing & fixing 2-way Bib cock JAQUAR MAKE, ORNAMIX Model No. 10041etc. complete. R2-CS-PS- Providing & fixing in position 'Jacquar Continental' make CP Jet Spray with flexible CP supply pipe, and all other accessories, complete R2-CS-PS- Providing and fixing JAQUAR MAKE,HOTELIER series Model No. 1551 Toilet Paper Holder Recessed type (S. Steel) including cutting and making goodthe wall wherever required etc complete R2-CS-PS- Providing and fixing GLITTERS MAKE, SLOPE series Robe 198.00 Nos 788.00 hook etc complete R2-CS-PS- White Vitreous China of 'Hindustan & Parryware' make or equivalent under counter type Oval wash basin of size 550 x 480mm with Cl brackets suitable for mounting below granite counter including waste fitting with CP brass bottle trap, angle valve with CP connection etc as specified. Oval Wash Basin Model No.10051 OR consider equivalent make.) R2-CS-PS- P/f Hindustan make white glazed Northen ware,wash basin constallation model (10032) of 55cmx43cm OR consider equivalent make R2-CS-PS-8 Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of

44	R2-CS-PS- 252	Providing and fixing stainless steel sink 600 mm x 450 mm and 200mmdeep including 32mm dia. galvanised iron waste pipe, 32mm dia. C.P.brass waste coupling, one C.P. brass screw down tap, caste ironbrackets, rubber plugs with chain etc. complete.(Kitchen Sink)	194.00	Nos	8,215.00	15,93,710.00
45	R2-CS-PS- 263	WASTE COUPLING :JAQUAR : NO. 705 (FULL THRNoD)	2.00	Nos	655.00	1,310.00
46	R2-CS-PS- 262	Providing & fixing chromium plated 32mm Jaguar make Series allied modelno. ALD-769 B Bottle trap (with internal partition) for Wash Basins including Waste Coupling fixed in required position with 250mm long wall connection pipes and wall flange with all necessaryfittings and fixtures, etc. complete and as directed by The Engineer incharge.	2.00	Nos	1,913.00	3,826.00
47	R2-CS-PS- 247	Providing and fixing JAQUAR MAKE, PRESSMATIC Taps Model No. 031 Pillarcock Auto closing system etc complete	221.00	Nos	2,834.00	6,26,314.00

48	R2-CS-PS-	Providing and fixing ISI marked make CP brass liquid soap	419.00	Nos	2,645.00	11,08,255.00
	261	dispensers with CP brass bracket capacity 250 ml.				
49	R2-CS-PS-	P/F Jaquar make shower , necessary accessories shower	194.00	Nos	1,437.00	2,78,778.00
	250	arm with flange continental series sr. no. 483				
50	R2-CS-PS-	Providing and fixing heavy ISI marked single lever	194.00	Nos	11,203.00	21,73,382.00
	249	concealed diverter for bath & shower system Rain shower &				
		its accessories. (Mixer Cat. No. CON- 421 Jaquar make OR				
		consider equivalent make)				
51	R2-CS-PS-	Providing and fixing GLITTERS MAKE, SLOPE sereis	194.00	Nos	1,448.00	2,80,912.00
	258	Towel Rack etccomplete				
52	R2-CS-PS-	Providing and fixing JAQUAR MAKE, CONTINENTAL Model	194.00	Nos	1,281.00	2,48,514.00
	256	No. 1121 Towel ring including cutting and making good the				
		wall wherever required etccomplete				
53	R2-CS-PS-	Providing and fixing brass CP angle cock for mini geyser of	620.00	Nos	721.00	4,47,020.00
	265	Metro,seiko or other equivalent approved make.				
54	FA-BMH-21-	Supplying and erecting storage / pressure type horizontal /	194.00	Nos	6,912.75	13,41,073.50
	41	vertical water heater 25 litres with BEE 5 star rating of mild				
		steel body, on wall / loft complete duly tested and marking				
		sr. no. and date of erection.specification no. AP-WH/STWH				
		TOTAL SECTION 'B'				1,63,08,286.50
		TOTAL (A+B)				4,00,90,950.70
		SAY			-	4,00,90,951.00
	FAIR ITEM	PLUMBING & SANITARYWARE CSMC (a+b)WORKS				4,00,90,951.00
		1st Year (Included)				0.00
		2nd Year (Included)				0.00
		3rd Year (Included)				0.00
	FAIR ITEM	4th Year @ 8%				32,07,276.00
	FAIR ITEM	5th Year @ 8%				32,07,276.00
	FAIR ITEM	6th Year @ 8%				32,07,276.00
	FAIR ITEM	7th Year @ 8%				32,07,276.00

FAIR ITEM	8th Year @ 8%			32,07,276.00
	GRAND TOTAL	LS		1,60,36,380.00

	BILL OF QUANTITIES - RWH									
SR. NO.	DEEDENGE	DECODIDEION		QTY		DATE	UNIT	AMOUNT		
	REFRENCE	DESCRIPTION	HOS.	RESI.	TOTAL	RATE				
	•									
Е		RAIN WATER								
55	R2-CS-PS-215-	Supplying & Fixing 3 mm thick lead flashing								
	a	in single piece of lead sheet all around the								
		rain water outlet mouth on a layer of cold								
		bitmen including hNovy duty 5 mm thick C.I.	10.00	10.00	20.00	495.00	Nos	9,900.00		
		grating,								
		a) 150 x 150 (6" x 6") square or dia outlet								
		for 100 mm (4") pipe.								
56	R2-CS-PS-215-	11, 5								
	b	in single piece of INod sheet all around the								
		rain water outlet mouth on a layer of cold								
		bitmen including hNovy duty 5 mm thick C.I.	20.00	15.00	35.00	668.00	Nos	23,380.00		
		grating,								
		b) 230 x 230 (9" x 9") square or dia outlet								
		for 150 mm (6") pipe.								
57	R2-CS-PS-215-c	Supplying & Fixing 3 mm thick INod flashing								
		in single piece of INod sheet all around the								
		rain water outlet mouth on a layer of cold								
		bitmen including hNovy duty 5 mm thick C.I.	5.00	5.00	10.00	738.00	NOs	7,380.00		
		grating,								
		c) 300 x 300 (12" x 12") square or dia outlet								
		for 200 mm (8") pipe.								
58	R2-CS-PS-215-	Supplying & Fixing 3 mm thick INod flashing								
	d	in single piece of INod sheet all around the								
		rain water outlet mouth on a layer of cold								
		bitmen including hNovy duty 5 mm thick C.I.	1.00	1.00	2.00	495.00	Nos	990.00		
		grating,								
		d) 150 x 150 (6" x 6") square or dia outlet								
		for 75 mm (3") pipe.								

	cost of jointing materials and rubber rings labour, giving hydraulic testing upto 6 kg/sqm pressure etc complete as directed by Engineer in Charge 300 mm dia pipe						
R2-CS-RW-16-B	UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.(Make to be	150.00	150.00	300.00	406.00	Rmt	1,21,800.00
R2-C	S-RW-16-B	UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as	Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.(Make to be	UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.(Make to be	UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.(Make to be	UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.(Make to be	UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.(Make to be

	. / (GRAND TOTAL	LS					11,89,600.00
	FAIR ITEM	8th Year @ 8%						2,37,920.00
	FAIR ITEM	7th Year @ 8%						2,37,920.00
	FAIR ITEM	6th Year @ 8%						2,37,920.00
	FAIR ITEM	5th Year @ 8%						2,37,920.00
	FAIR ITEM	4th Year @ 8%						2,37,920.00
		3rd Year (Included)						0.00
		2nd Year (Included)						0.00
		1st Year (Included)						0.00
	FAIR ITEM	WORKS						29,74,000.00
		RAIN WATER HARVESTING CSMC						29,74,000.00
		TOTAL SECTION 'E'						20.74.000.00
		use Supreme / Astral / Aquafit) 150 mm dia						
		directed by Engineer In Charge.(Make to be						
		and necessary scafolding etc. complete as						
		clips filling the joints with solvent/cement						
		offsets shoes, fixing the pipes on wall with						
		pvc plug bend necessary fittings such as		150.00	450.00	756.00	Rmt	3,40,200.00
		including rain water receiving recess with		450.00	450.00			
		pressure for following pipe diameters						
		13592:1992 Type A suitable for 4kg/sqcm						
		Rainwater downtakes confirming to IS						
	С	UPVC pipes of approved make for						
62	1	Providing and fixing UV resistant selffit						