

**PUNJAB AAB E PAK AUTHORITY**

**OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (MULTAN & BAHAWALPUR DIVISION)**

**BILL OF QUANTITIES**

**GRAND SUMMARY**

<b>Sr No.</b>	<b>DESCRIPTION</b>	<b>AMOUNT Rs.</b>
1	OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (MULTAN DIVISION)	
2	OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (BAHAWALPUR DIVISION)	
<i>Grand Total</i>		

**PUNJAB AAB E PAK AUTHORITY**

**OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (MULTAN DIVISION)**

**BILL OF QUANTITIES**

**SUMMARY**

<b>Bill No.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>Unit Rate</b>	<b>AMOUNT Rs.</b>
Bill No. 1	O&M for RO PLANTS (2000 LPH)	No	18.0		
Bill No. 2	O&M for MF PLANTS (2000 LPH)	No	24.0		
<b>Bill No.</b>	<b>DESCRIPTION</b>	<b>AMOUNT Rs.</b>			
Bill No. 3	Civil Works for O&M of Plant Rooms				
Bill No. 4	O&M of Mechanical Works for RO / MF PLANTS (2000 LPH)				
<b>GRAND TOTAL</b>					

**O&M for 1 No. RO PLANT (2000 LPH)****OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK  
AUTHORITY - SOUTH ZONE (MULTAN DIVISION)****BILL OF QUANTITIES****BILL NO 1 - 04 Months**

Sr. No.	Description	Unit	Reverse Osmosis - 2000 LPH		
			Qty.	Unit Cost	Total Price
1	Jumbo Filter PPF Micro 20" Prosity 1-5 Micron, Material High Pressure Plastic Melt Blown PE	No	4		
2	Plant Operator, 1 Nos.	Man Months	4		
3	Water Testing (From ISO Approved Lab)	Quarterly	1		
4	Visit of Technical Staff	Quarterly	1		
5	Antiscalent Chemical (DOSING) Dosing Rate: 5 Ppm	Kg	10		
6	Chemicals for Cleaning (CIP), Disinfection, Tank Cleaning, Site Disinfection and other cleaning material etc Acidic/Alkaline	Kg	6		
<b>TOTAL COST</b>					

**O&M for 1 No. MF PLANT (2000 LPH)**

**OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (MULTAN DIVISION)**

**BILL OF QUANTITIES**

**BILL NO 2 - 04 Months**

Sr. No.	Description	Unit	Multimedia Filtration - 2000 LPH		
			Qty.	Unit Cost	Total Price
1	Plant Operator, 1 Nos.	Man Months	4		
2	Water Testing (From ISO Approved Lab)	Quarterly	1		
3	Visit of Technical Staff	Quarterly	1		
4	Sodium Hypochlorite	Kg	6		
<b>TOTAL COST</b>					

Civil Works for O&M of Plant Rooms						
OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (MULTAN DIVISION)						
BILL OF QUANTITIES						
BILL NO 3 - 04 Months						
<i>Repair &amp; Maintenance of civil work including but not limited to repair of plaster &amp; tiles, repainting of doors, window &amp; grills, distempering, drainage etc. complete in all respects to the entire satisfaction of the Engineer Incharge</i>						
SCHEDULE ITEMS BASED ON MRS, 2nd BI-ANNUAL PERIOD (1st July, 2024 TO 31st Dec, 2024) Multan						
Sr. No.	MRS.Ref	DESCRIPTION	QTY	UNIT	RATE	AMOUNT ( In Rupees)
1	Chapter. 11 Item No. 9 b,	Cement plaster 1:4 upto 20 ft. height (b) 1/2 inch thick	160	Sft	46.65	7,464.16
2	Chapter. 6 Item No. 5.f	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate:) Ratio 1: 2: 4	100	Cft	474.21	47,421.00
3	Chapter. 4 Item No. 19(a)	Dismantling of plain cement concrete (1:4:8)	100	Cft	82.76	8,276.40
4	Chapter. 13 Item No. 4(c)	Painting old surfaces Painting doors and windows, any type: First coat & each subsequent coat	408	Sft	15.32	6,248.52
5	Chapter. 11 Item No. 23 (b ii)	Distempering on old surface. two Coats	4320	Sft	8.93	38,592.72
6	Chapter. 11 Item No. 31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	2160	Sft	11.51	24,850.80
7	Chapter. 10 Item No. 46 A(i)	Laying floor of approved white glazed tile ¼" (6 mm) thick in white cement 1:2 over ¾" (20mm) thick cement mortar 1:2, complete.	192	Sft	370.65	71,164.80
<b>CIVIL ROOM</b>					<b>Total :-</b>	<b>204,018.40</b>
_____ % Above / Below:						
<b>Total Amount:</b>						

**O&M of Mechanical Works for RO / MF PLANTS (2000 LPH)****OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (MULTAN DIVISION)****BILL OF QUANTITIES****BILL NO 4 - 04 Months**

Sr. No.	Description	Unit	BILL NO 4 - 04 Months		
			Qty.	Unit Cost	Total Price
1	Repair & maintenance of RO / MF Feed water pump 4000 LPH, for 2000 LPH RO / MF Plant, complete in all respect	No	6		
2	Repair of 3 inch submersible pump	No	6		
3	Repairing, Cleaning & Washing existing bore holes / Injection Well by using air compressor or any other equipment	No	6		
<b>TOTAL COST</b>					

**PUNJAB AAB E PAK AUTHORITY**

**OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (BAHAWALPUR DIVISION)**

**BILL OF QUANTITIES**

**SUMMARY**

<b>Bill No.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>Unit Rate</b>	<b>AMOUNT Rs.</b>
<b>Bill No. 1</b>	<b>O&amp;M for RO PLANTS (2000 LPH)</b>	No	<b>48.0</b>		
<b>Bill No. 2</b>	<b>O&amp;M for MF PLANTS (2000 LPH)</b>	No	<b>10.0</b>		
<b>Bill No.</b>	<b>DESCRIPTION</b>	<b>AMOUNT Rs.</b>			
<b>Bill No. 3</b>	<b>Civil Works for O&amp;M of Plant Rooms</b>				
<b>Bill No. 4</b>	<b>O&amp;M of Mechanical Works for RO / MF PLANTS (2000 LPH)</b>				
<b>GRAND TOTAL</b>					

**O&M for 1 No. RO PLANT (2000 LPH)****OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK  
AUTHORITY - SOUTH ZONE (BAHAWALPUR DIVISION)****BILL OF QUANTITIES****BILL NO 1 - 04 Months**

Sr. No.	Description	Unit	Reverse Osmosis - 2000 LPH		
			Qty.	Unit Cost	Total Price
1	Jumbo Filter PPF Micro 20" Prosity 1-5 Micron, Material High Pressure Plastic Melt Blown PE	No	4		
2	Plant Operator, 1 Nos.	Man Months	4		
3	Water Testing (From ISO Approved Lab)	Quarterly	1		
4	Visit of Technical Staff	Quarterly	1		
5	Antiscalent Chemical (DOSING) Dosing Rate: 5 Ppm	Kg	10		
6	Chemicals for Cleaning (CIP), Disinfection, Tank Cleaning, Site Disinfection and other cleaning material etc Acidic/Alkaline	Kg	6		
<b>TOTAL COST</b>					



**O&M for 1 No. MF PLANT (2000 LPH)****OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (BAHAWALPUR DIVISION)****BILL OF QUANTITIES****BILL NO 2 - 04 Months**

Sr. No.	Description	Unit	Media Filtration - 2000 LPH		
			Qty.	Unit Cost	Total Price
1	Plant Operator, 1 Nos.	Man Months	4		
2	Water Testing (From ISO Approved Lab)	Quarterly	1		
3	Visit of Technical Staff	Quarterly	1		
4	Sodium Hypochlorite	Kg	6		
<b>TOTAL COST</b>					

**Civil Works for O&M of Plant Rooms**

**OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (BAHAWALPUR DIVISION)**

**BILL OF QUANTITIES**

**BILL NO 3 - 04 Months**

*Repair & Maintenance of civil work including but not limited to repair of plaster & tiles, repainting of doors, window & grills, distemping, drainage etc. complete in all respects to the entire satisfaction of the Engineer Incharge*

**SCHEDULE ITEMS BASED ON MRS, 2nd BI-ANNUAL PERIOD (1st July, 2024 TO 31st Dec, 2024) Bahawalpur**

Sr. No.	MRS.Ref	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
					( In Rupees)	
1	Chapter. 11 Item No. 9 b,	Cement plaster 1:4 upto 20 ft. height (b) 1/2 inch thick	240	Sft	46.65	11,196.24
2	Chapter. 6 Item No. 5.f	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):) Ratio 1: 2: 4	150	Cft	474.21	71,131.50
3	Chapter. 4 Item No. 19(a)	Dismantling of plain cement concrete (1:4:8)	150	Cft	82.76	12,414.60
4	Chapter. 13 Item No. 4(c)	Painting old surfaces Painting doors and windows, any type: First coat & each subsequent coat	612	Sft	15.315	9,372.78
5	Chapter. 11 Item No. 23 (b ii)	Distemping on old surface. two Coats	6480	Sft	8.93	57,889.08
6	Chapter. 11 Item No. 31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	3240	Sft	11.51	37,276.20
7	Chapter. 10 Item No. 46 A(i)	Laying floor of approved white glazed tile 1/4" (6 mm) thick in white cement 1:2 over 3/4" (20mm) thick cement mortar 1:2, complete.	288	Sft	370.65	106,747.20
<b>CIVIL ROOM</b>					<b>Total :-</b>	<b>306,027.60</b>
_____ % Above / Below:						
<b>Total Amount:</b>						

**O&M of Mechanical Works for RO / MF PLANTS (2000 LPH)****OPERATIONS AND MAINTENANCE OF WATER FILTRATION PLANTS COMMISSIONED BY PUNJAB AAB-E-PAK AUTHORITY - SOUTH ZONE (BAHAWALPUR DIVISION)****BILL OF QUANTITIES****BILL NO 4 - 04 Months**

Sr. No.	Description	Unit	BILL NO 4 - 04 Months		
			Qty.	Unit Cost	Total Price
1	Repair & maintenance of RO / MF Feed water pump 4000 LPH, for 2000 LPH RO / MF Plant, complete in all respect	No	9		
2	Repair of 3 inch submersible pump	No	9		
3	Repairing, Cleaning & Washing existing bore holes / Injection Well by using air compressor or any other equipment	No	9		
<b>TOTAL COST</b>					