

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

Govt. Boys High School , Punjpai, Quetta

Sr.No	Description of Items	QUANTITY	UNIT	RATES (Rs)	AMOUNT
C1	Dismantling works				
1	Dismantling of RCC beam/columns/slab (Slab upto 6" thick) in panels using anti-vibration technique with antivibrant core cutting, necessary scaffolding and jacking arrangement, and including separating reinforcement from concrete, shifting debris within distance of one chain (30.5 m), complete in all respect, as per drawings and instructions of the Engineer in charge.	2700	SFT		
2	Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor.	620	SFT		
3	Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors.	6500	SFT		
4	Dismantling brickwork in lime or cement mortar upto 9" width	300	SFT		
5	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chipped and cleaning of surfaces.	2900	SFT		
6	Excavation in foundation of buildings,bridges and other structures, depth upto 4 meters including dagg bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m.	150	CFT		
	Sub-total of C1			Total	
C2	Rehabilitation and Restoration works				
1	Providing and laying plain machine mixed cement concrete 1:2:4 using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing as per instruction of engineer.	108	CFT		
2	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels, slabs and cantilevers of required shape or section including formwork and its removal compacting and curing in basement and ground floor.	2700	CFT		
3	Providing and laying 1:2:4 cement concrete floor using using crushed aggregate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing.	2700	CFT		
4	Repair of small crack in walls, floor, beams and columns by chisel out the crack using wire brush or portable drill with wire arrangement and apply rich mortar (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer.	50	RFT		
5	Repair of major crack in walls, floor by chisel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stitching dogs covering with thin layer of cement plaster as per instruction of Engineer.	50	RFT		
6	The damaged crushed concrete or honey combing in concrete of columns, footing, foundation, beams and walls, are to be repaired by removing the crushed concrete in the area and re-concreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer.	350	SFT		
7	Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per instruction of engineer.	3500	SFT		
	Sub-total of C2			Total	0.00

C3	Seismic Retrofitting works				
1	Footing and Tie Beam				
1.1	Providing and laying cement concrete (1:1.5:3) using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer.	40	SFT		
1.2	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	1.5	TON		
2	Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints				
2.1	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2.5	TON		
2.2	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	400	RFT		
2.3	Providing and laying 1.5" rich concrete cement (1:1.5:3) using coarse sand and crushed aggregate 3/4" (19mm) and down gauge in columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor and 0.5" plaster using cement slurry (1:3) as per instruction of engineer.	600	SFT		
2.4	Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer.	2900	SFT		
	Sub-total of C3			Total	
C4	Finishing works				
1	Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame.	21	Nos		
2	White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	6500	SFT		
	Sub-total of C4			Total	
	Total C1+C2+C3+C4			Grand Total	

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

Govt. Boys Primary School Killi Shahdeni UC Panjpai, Quetta

Sr.No	Description of Items	QUANTITY	UNIT	RATES (Rs)	AMOUNT
C1	Dismantling works				
1	Dismantling of RCC beam/columns/slab (Slab upto 6" thick) in panels using anti-vibration technique with antivibrant core cutting, necessary scaffolding and jacking arrangement, and including separating reinforcement from concrete, shifting debri within distance of one chain (30.5 m), complete in all respect, as per drawings and instructions of the Engineer in charge.	700	SFT		
2	Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor.	508	SFT		
3	Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors.	2500	SFT		
4	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chified and cleaning of surfaces.	2400	SFT		
5	Excavation in foundation of buildings,bridges and other structures, depth upt 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m.	150	CFT		
	Sub-total of C1		Total		
C2	Rehabilitationa and Restoration works				
1	Providing and laying plain machine mixed cement concrete 1:2:4 using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing as per instruction of engineer.	60	CFT		
2	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels, slabs and cantilevers of required shape or section including formwork and its removal compacting and curing in basement and ground floor.	345	CFT		
3	Providing and laying 1:2:4 cement concrete floor using using crushed aggrgate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing.	690	CFT		
4	Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortor (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer.	20	RFT		
5	Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stiching dogs covering with thin layer of cement plaster as per instruction of Engineer.	20	RFT		
6	The damaged crushed concrete or honey combing in concrete of columns, footing, fountation, beams and walls, are to be repaired by removing the crushed concrete in the area and reconcreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer.	83	SFT		
7	Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer.	1400	SFT		

	Sub-total of C2		Total	
C3	Seismic Retrofitting works			
1	Footing and Tie Beam			
1.1	Providing and laying cement concrete (1:1.5:3) using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer.	60	SFT	
1.2	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	1	TON	
1.3	Grouting base plates, rails, anchor bolts foundation bolts and anchor frames of guide rails etc.	20	sft	
2	Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints			
2.1	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2.8	TON	
2.2	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	400	RFT	
2.3	Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer.	900	SFT	
	Sub-total of C3		Total	
C4	Finishing works			
1	Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame.	15	Nos	
2	White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	5200	SFT	
	Sub-total of C4		Total	
	Total C1+C2+C3+C4		Grand Total	

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

Govt.BHU Mohammad Khail UC Panjpai,Quetta

Sr.No	Description of Items	QUANTITY	UNIT	RATES (Rs)	AMOUNT
C1	Dismantling works				
1	Dismantling of RCC beam/columns/slab (Slab upto 6" thick) in panels using anti-vibration technique with antivibrant core cutting, necessary scaffolding and jacking arrangement, and including separating reinforcement from concrete, shifting debri within distance of one chain (30.5 m), complete in all respect, as per drawings and instructions of the Engineer in charge.	650	SFT		
2	Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors.	2400	SFT		
3	Dismantling brickwork in lime or cement mortar upto 9" width	100	SFT		
4	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chified and cleaning of surfaces.	1290	SFT		
5	Excavation in foundation of buildings,bridges and other structures, depth upt 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m.	20	CFT		
	Sub-total of C1			Total	
C2	Rehabilitationa and Restoration works				
1	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels, slabs and cantilevers of required shape or section including formwork and its removal compacting and curing in basement and ground floor.	650	CFT		
2	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor.	26	CFT		
3	Providing and laying 1:2:4 cement concrete floor using using crushed aggrgate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing.	650	CFT		
4	Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortor (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer.	25	RFT		
5	Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stiching dogs covering with thin layer of cement plaster as per instruction of Engineer.	25	RFT		
6	Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer.	3000	SFT		
	Sub-total of C2			Total	
C3	Seismic Retrofitting works				
	Footing and Tie Beam				

1	Providing and laying cement concrete (1:1.5:3) using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer.	20	SFT		
2	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2.5	TON		
3	Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints				
4	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	1.5	TON		
5	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	100	RFT		
6	Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer.	1290	SFT		
	Sub-total of C3			Total	
C4	Finishing works				
1	Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame.	6	Nos		
2	White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	3000	SFT		
	Sub-total of C4			Total	
	Total C1+C2+C3+C4			Grand Total	

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)					
Govt.BHU MAIN Hall Mohammad Khail UC Panjpai,Quetta					
Sr.No	Description of Items	QUANTITY	UNIT	RATES (Rs)	AMOUNT
C1	Dismantling works				
1	Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor.	26	SFT		
2	Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors.	2640	SFT		
3	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chipped and cleaning of surfaces.	1180	SFT		
4	Excavation in foundation of buildings,bridges and other structures, depth up to 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m.	20	CFT		
	Sub-total of C1			Total	
C2	Rehabilitation and Restoration works				
1	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor.	26	CFT		
2	Repair of small crack in walls, floor, beams and columns by chisel out the crack using wire brush or portable drill with wire arrangement and apply rich mortar (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer.	20	RFT		
3	Repair of major crack in walls, floor by chisel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stitching dogs covering with thin layer of cement plaster as per instruction of Engineer.	20	RFT		
4	The damaged crushed concrete or honey combing in concrete of columns, footing, foundation, beams and walls, are to be repaired by removing the crushed concrete in the area and reconcreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer.	220	SFT		
5	Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per instruction of engineer.	1180	SFT		
	Sub-total of C2			Total	
C3	Seismic Retrofitting works				
1	Footing and Tie Beam				
1.1	Providing and laying cement concrete (1:1.5:3)using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer.	20	SFT		
1.2	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	1	TON		
2	Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints				
2.1	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2	TON		
2.2	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	150	RFT		
2.3	Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer.	1650	SFT		
	Sub-total of C3			Total	
C4	Finishing works				
1	Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame.	10	Nos		
2	White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	5000	SFT		
	Sub-total of C4			Total	
	Total C1+C2+C3+C4			Grand Total	

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

Govt.GGPS Killi Shahdeni 3 UC Panjia,Quetta

Sr.No	Description of Items	QUANTITY	UNIT	RATES (Rs)	AMOUNT
C1	Dismantling works				
1	Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor.	70	SFT		
2	Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors.	2500	SFT		
3	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chipped and cleaning of surfaces.	1190	SFT		
4	Excavation in foundation of buildings,bridges and other structures, depth upto 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m.	91	CFT		
	Sub-total of C1			Total	
C2	Rehabilitationa and Restoration works				
1	Providing and laying plain machine mixed cement concrete 1:2:4 using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing as per instruction of engineer.	75	CFT		
2	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor.	145	CFT		
3	Providing and laying 1:2:4 cement concrete floor using using crushed aggregate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing.	500	CFT		
4	Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortar (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer.	10	RFT		
5	Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stiching dogs covering with thin layer of cement plaster as per instruction of Engineer.	10	RFT		
6	The damaged crushed concrete or honey combing in concrete of columns, footing, fountation, beams and walls, are to be repaired by removing the crushed concrete in the area and reconcreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer.	220	SFT		
7	Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer.	2000	SFT		
	Sub-total of C2			Total	
C3	Seismic Retrofitting works				
1	Footing and Tie Beam				
1.1	Providing and laying cement concrete (1:1.5:3)using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer.	16	SFT		

1.2	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2	TON		
2	Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints				
2.1	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2.5	TON		
2.2	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	150	RFT		
2.3	Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer.	1190	SFT		
	Sub-total of C3			Total	
C4	Finishing works				
1	Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame.	12	Nos		
2	White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	3500	SFT		
3	Toilets complete in all respect	3	Job		
	Sub-total of C4			Total	
	Total C1+C2+C3+C4			Grand Total	

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)**Govt. Boys High School Killi Chachazai UC Panjpai,Quetta**

Sr.No	Description of Items	QUANTITY	UNIT	RATES (Rs)	AMOUNT
C1	Dismantling works				
1	Dismantling of RCC beam/columns/slab (Slab upto 6" thick) in panels using anti-vibration technique with antivibrant core cutting, necessary scaffolding and jacking arrangement, and including separating reinforcement from concrete, shifting debri within distance of one chain (30.5 m), complete in all respect, as per drawings and instructions of the Engineer in charge.	900	SFT		
2	Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor.	620	SFT		
3	Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors.	6300	SFT		
4	Dismantling brickwork in lime or cement mortar upto 9" width	300	SFT		
5	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chified and cleaning of surfaces.	2700	SFT		
6	Excavation in foundation of buildings,bridges and other structures, depth upt 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m.	150	CFT		
	Sub-total of C1			Total	0.00
C2	Rehabilitationa and Restoration works				
1	Providing and laying plain machine mixed cement concrete 1:2:4 using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing as per instruction of engineer.	115	CFT		
2	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels, slabs and cantilevers of required shape or section including formwork and its removal compacting and curing in basement and ground floor.	900	CFT		
3	Providing and laying 1:2:4 cement concrete floor using using crushed aggrgate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing.	2500	CFT		
4	Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortor (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer.	50	RFT		
5	Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stiching dogs covering with thin layer of cement plaster as per instruction of Engineer.	50	RFT		
6	The damaged crushed concrete or honey combing in concrete of columns, footing, fountation, beams and walls, are to be repaired by removing the crushed concrete in the area and reconcreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer.	450	SFT		
7	Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer.	4500	SFT		

		Sub-total of C2		Total	0.00
C3	Seismic Retrofitting works				
1	Footing and Tie Beam				
1.1	Providing and laying cement concrete (1:1.5:3) using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer.	35	SFT		
1.2	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2.5	TON		
2	Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints				
2.1	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height	2	TON		
2.2	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	400	RFT		
2.3	Providing and laying 1.5" rich concrete cement (1:1.5:3) using coarse sand and crushed aggregate 3/4" (19mm) and down gauge in columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor and 0.5" plaster using cement slurry (1:3) as per instruction of engineer.	670	SFT		
2.4	Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer.	2700	SFT		
		Sub-total of C3		Total	
C4	Finishing works				
1	Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame.	18	Nos		
2	White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	5000	SFT		
		Sub-total of C4		Total	
Total		Total C1+C2+C3+C4		Grand Total	