

HEALTH SYSTEM ENHANCEMENT PROJECT

Funded by

ASIAN DEVELOPMENT BANK

FIELD HEALTH CENTERS – KANDY DISTRICT

BILLS OF QUANTITIES

**CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET
FOR**

CENTRAL CLINIC AT GALAGEDARA

BOQ REF NO: HSEP/RDC/CP/KD/FHC/08 (03.10.2022)

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**BILLS OF QUANTITIES****CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT
GALAGEDARA KANDY DISTRICT****GRAND SUMMARY**

ITEM NO.	DESCRIPTION	AMOUNT (LKR)
	BILL NO - 1 PRELIMINARIES	
	BILL NO -2 - CONSTRUCTION OF EXTERNAL WAITING AREA	
	BILL NO -3 - CONSTRUCTION OF TOILET BLOCK	
	BILL NO -4 - SWERAGE DISPOSAL SYSTEM	
	SUB TOTAL 01	
	Less	
	DISCOUNT IF ANY	
	SUB TOTAL 02	
	Add	
	CONTINGENCIES 10% (FROM SUB TOTAL 02)	
	BILL NO -5 -DAY WORK	
	SUB TOTAL 03	
	Add	
	VAT 15% (FROM SUB TOTAL 03)	
	GRAND TOTAL	

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**BILLS OF QUANTITIES****CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT****BILL NO - 1 PRELIMINARIES**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Preliminaries				
	Note : Following items to be priced as appropriate.				
1.1	Insurance and Securities				
1.1.1	Allow lump sum for Providing a Performance Security	Item			
1.1.2	Allow lump sum for providing an Advance Payment Security	Item			
1.1.3	Allow lump sum for insurance of Works, Machinery & Equipment, Plant, Materials, third party persons & property and Employer's personnel & property at site as per the Contract.	Item			
1.1.4	Allow lump sum for insurance against accidents and injury to Contractor's personnel as per the Contract.	Item			
1.2	Management of the works				
1.2.1	Allow lump sum for providing Project Management services	Item			
1.3	Engineer's /Contractor's Facilities				
1.3.1	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, a temporary building for Contractor's site office and workers' accommodation including necessary furniture, sanitary facilities, electricity and other facil	Item			
1.3.2	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, buildings to be used as workshops and stores for materials.	Item			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
1.3.3	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, a temporary building for Engineer's site office (Minimum floor area of 9m ²) in conformity with Engineer's requirements including necessary furniture , sanit	Item			
1.4	Quality, Standards and Progress				
1.4.1	Allow lump sum for provision of progress reports including photographs, progress charts, progress records, schedules as directed by the Engineer.	Item			
1.4.2	Allow lump sum for all cost in connection with testing materials/works, preparing samples for testing, making arrangements for testing of Materials, Goods etc., as stipulated in the specification, obtaining test reports and submitting the same to the Eng	Item			
1.4.3	Allow lump sum for provision of 3 sets of (A1 size hard copies and soft copies) as-built drawings of all services, as directed by the Engineer.	Item			
1.4.4	Allow lump sum for submission of shop drawings in triplicate with an electronic copy as directed by the Engineer.	Item			
1.5	Health, Safety and Environment				
1.5.1	Allow lump sum for providing and maintaining first aid box and regular supply of medicine, linen etc.	Item			
1.5.2	Allow lump sum for providing all necessary safety measures to workmen at site conforming to the latest industrial safety regulations and as directed by the Engineer.	Item			
1.5.3	Allow lump sum for making adequate provision against air and noise pollution of surrounding areas. Hoarding and dust screens shall be provided to control dust escaping to surrounding areas.	Item			
1.5.4	Allow lump sum for maintaining the site in a clean and orderly manner at all times and during the entire contract period. The Contractor shall take due care to prevent water stagnation, element mosquitos breeding places at the site and this is to be ensur	Item			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
1.5.5	Allow lump sum for demobilization, removal of all rubbish & debris and clearing up site on completion, leaving all in good order and handing over.	Item			
1.6	Security and Protection				
1.6.1	Allow lump sum for providing and maintaining necessary fencing, hoarding and gates for safeguarding the Works, Materials and Plant, as directed by the Engineer.	Item			
1.7	Services and Facilities				
1.7.1	Allow lump sum for supply of water for the Works and paying all charges and other expenses in connection with the supply from water mains or any other alternative method of water supply, storage and reticulation.	Item			
1.7.2	Allow lump sum for supplying temporary electricity (3 phase connection) for the Works including connection, distribution system for the Works, internal arrangements and all payments to the authorities for consumption.	Item			
1.7.3	Allow lump sum for providing & maintaining telephone facility	Item			
1.8	Miscellaneous				
1.8.1	Allow lump sum for providing and maintaining a name board to the specifications and / or as directed by the Engineer.	Item			
	TOTAL CARRIED TO GRAND SUMMARY				

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP

**CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT
GALAGEDARA KANDY DISTRICT**

BILL NO -2 - CONSTRUCTION OF EXTERNAL WAITING AREA

SUMMARY OF WAITING AREA

NO	DESCRIPTION		AMOUNT
1	Demolition, Alteration, Repair and Maintenance works	Rs.	
2	Excavation and Earth Work	Rs.	
3	Concrete	Rs.	
4	Masonry Works	Rs.	
5	Water Proofing Work	Rs.	
6	Structural Steel Work	Rs.	
7	Roof Covering and Roof Plumbing	Rs.	
8	Floor, Walls and Ceiling Finishes	Rs.	
9	Aluminum Work	Rs.	
10	Painting Works	Rs.	
	TOTAL CARRIED TO GRAND SUMMARY	Rs.	

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**BILLS OF QUANTITIES****CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT****BILL NO -2 - CONSTRUCTION OF EXTERNAL WAITING AREA**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.1	Demolition, Alteration, Repair and Maintenance works				
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	The bidders are advised to visit site and make careful study of all conditions and the nature of work to be done under this contract, as no extras will be allowed on the plea of want of information due to negligence of on their part in this regard.				
	All demolished materials, except those required to be stacked shall be carted away during the demolition operation.				
	Obtain confirmation from the Employer and Engineer that all power cables and power lines within the site have been disconnected and removed.				
	Obtain in writing clear from the Employer and Engineer as to of demolition and provide adequate protection to other parts of the building which is requires to be protected.				
	Rate shall include necessary supporting works which required to complete the works.				
	Demolished material which are not usable shall be the property of the Contractor				
	Usable materials arising from demolitions shall be the property of Employer and instruction given by the Engineer or the Employer.				
2.1	Hacking up Paving				
2.1.1	Breaking & Removing the existing Cement Pavement including base around the Building as directed by the Engineer	m ²	10.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.1.2	Breaking & Removing the existing drain with concrete base and brick walls with section up to 0.3m ² around the Building as directed by the Engineer	m	5.00		
2.1.3	Breaking & Removing the existing cement rendered floor area as directed by the Engineer	m ²	5.00		
2.1.4	Breaking & Removing the brick floor including cement rendered floor area as directed by the Engineer	m ³	5.00		
2.1.5	Breaking & Removing the concret floor including cement rendered floor area as directed by the Engineer	m ³	5.00		
2.2	Masonry work				
2.2.1	Demolishing bricks walls 112.5mm thick inclusive of plaster and any fixtures including debris cleared away.	m ²	1.00		
2.2.2	Demolishing bricks walls above 225mm thick inclusive of plaster and any fixtures including debris cleared away.	m ²	1.00		
2.2.3	Demolishing Random rubble masonry walls	m ³	2.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.3	Excavation and Earth Work				
	The Tenderer is requested to refer the General Note, Pricing Preambles, Drawings, Specification, Condition of Contract and other relevant documents prior to pricing of the following items.	note			
	Rates for excavations shall include for:	note			
	1) Leveling bottom of excavated surfaces.				
	2) Bulking after excavation.				
	3) Earth work supporting if required.				
	4) Working spaces if required.				
	Tenderer shall provide due protection to avoid any damages to any new or old structures during excavation.	note			
2.3	Site Preparation				
2.3.1	Site clearing including removing all debris, small trees up to 0.5 m girth, vegetation including top soil up to 150 mm depth and dispose to suitable locations.	m ²	10.00		
2.4	Excavation				
	Earth excavation in any material except rock requiring blasting, part return fill rammed and well consolidated. All excavations to be protected from rain/storm water runoff falling into the same by suitable means. Unsuitable material shall dispose to approved locations	note			
2.4.1	Excavation for foundation pits.	m ³	4.00		
2.4.2	Excavation for foundation trench	m ³	7.80		
2.4.3	Disposal of excavated earth and debris to a suitable locations including relevant approvals and depositing without disturbing to the public.	m ³	11.80		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.5	Earth Filling				
	Earth filling and compaction up to required level to be carried out as per specification.	note			
2.5.1	Filling with avalabal earth suitable excavated material and compacting in layers up to required level.	m ³	20.00		
2.5.2	Filling with sand and compacting in layers up to required level.	m ³	1.50		
2.6	Surface Treatment				
2.6.1	Anti termite treatment with Biflex for ground floor area of the building according to the manufacturers specifications by a specialist pest control service provider approved by the engineer. 10 year warranty for material and workmanship from the date of handing over the work shall be provided.	m ²	55.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.7	Concrete				
	The Bidder shall refer the followings prior to pricing the items in this trade.	note			
	a. All relevant drawings				
	b. Specifications				
	c. Pricing preambles				
	d. Location				
	All concrete shall be made dense with a vibrator. Rate shall include for plant for mixing , handling, hoisting, depositing, compacting ,vibrating, curing, making good after removal of form work and for any tests when necessary.	note			
	Ordinary Portland cement (OPC) cement complied with relevant Sri Lanka standards and approved by Engineer shall be used.	note			
	Rates shall include for forming expansion joints, construction joints, and the like including necessary sealant and other accessories, unless otherwise separately measured.	note			
	Rates shall include for forming holes in concrete, cutting chases and the like as necessary.	note			
	<u>Grade 15 mass concrete as per the detail drawings and specifications.</u>				
2.7.1	50 mm Thick screed	m ²	19.00		
	<u>Reinforced in-situ Grade 25 concrete as per the detail drawings and specifications.</u>				
	<u>Up to ground slab</u>				
2.7.2	Column base	m ³	1.10		
2.7.3	Columns Shaft	m ³	0.26		
2.7.4	Tie beams	m ³	1.75		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.7.5	Beds on ground	m ³	4.50		
2.7.6	Drain & slab	m ³	0.60		
	<u>Ground floor slab level to roof level</u>				
2.7.7	Columns Shaft	m ³	1.00		
2.7.8	In slab Beam , eave Levels , Gabal beam ,Roof beams & kerbs	m ³	2.75		
2.7.9	Slab & Curb	m ³	1.75		
2.8	Formwork				
	Form work shall be provided with adequate struts, braces, ties, clamps and the like so as to maintain the dimensions, lines and levels shown in the drawings during the entire operation of placing and compacting the concrete and to prevent any sagging under the weight of wet concrete including any other supper imposed loads which would be subjected to during construction.	note			
	<u>Up to Ground floor slab</u>				
2.8.1	Column base	m ²	5.50		
2.8.2	Wall base	m ²	4.00		
2.8.3	Columns Shaft	m ²	4.40		
2.8.4	Tie beams	m ²	13.00		
2.8.5	Drain & slab	m ²	3.75		
	<u>Ground floor slab level to roof level</u>				
2.8.6	Sides of columns	m ²	15.50		
2.8.7	In slab Beam , eave Levels , Gabal beam ,Roof beams & kerbs	m ²	31.30		
2.8.8	Slab & Curb	m ²	13.50		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.9	Reinforcement				
	Tor Steel characteristic strength 460 N/mm ² and Mild Steel characteristic strength 250 N/mm ² as reinforcement to RCC works.	note			
	Rates shall be included for cutting, bending, fabricating, placing in position, holding and temporary fixing supports. E.g. chairs, benches, stools, spaces, ties, hangers and binding wires.	note			
	<u>Up to Ground floor level</u>				
2.9.1	In column bases	kg	412.00		
2.9.2	In column	kg	25.00		
2.9.3	In Tie beams & slab beams	kg	202.00		
2.9.4	In Drain	kg	69.00		
	<u>Ground floor slab level to roof level</u>				
2.9.5	In column	kg	95.00		
2.9.6	In slab Beam , eave Levels , Gabal beam ,Roof beams & kerbs	kg	317.00		
2.9.7	In Slab	kg	202.00		
2.9.8	In ground floor slabSupply and laying A142 steel mesh including adequate laps	m ²	45.00		
2.9.9	225x150 mm high sill beams including 02 nos. 10 mm dia T/S bars and 6mm dia mild steel stirrups @ 100c/c with necessary formwork and concreting in Grade 25	m	18.00		
2.10	Joints				
2.10.1	Forming 10 mm thick 100 mm high isolation joint filled with backer rod & approved sealant on top	m	26.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.10.2	Drains 225mmX150mm in cement concrete 1:2 1/2:5(25mm),, 75mm thick sides and base, inclusive of 12mm cement rendering 1:3 with necessary 3000mm c/c expansion joints and rate including excavation , form work laying polythene	m	1.00		
2.10.3	750mm wide ramp and 225mmX150mm complete with 75 mm concrete slab to ramp, 12mm thick rendering in 1:3 cement & sand finished with neat cement floating and Drains with 75mm thick sides and base, in cement concrete 1:2 1/2:5(25mm), inclusive of 12mm cement rendering 1:3 in cement & sand with necessary expansion joints 3000mm c/c and rate including excavation , form work laying polythene including cover slab 75mm thick G 25 concret , 10mm R/F 150 C/C Both ways	m	8.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.11	Masonry Works				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Rates for masonry works shall include for plumbing angles, forming rebates revels, square, cutting and racking of joints for plastering.	Note			
	Rate shall include for all necessary types of scaffolding whether specified separately or not.	Note			
	Rate shall include for expansion joint construction, anchoring between RC structure and masonry as necessary.	Note			
2.11.1	Random rubble masonry work in cement sand mortar 1:5. in wall foundations.	m ³	10.00		
2.11.2	225 mm thick brick work in cement and sand 1:5	m ²	32.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.12	Water Proofing Work				
	The tenderers are requested to refer Bills of Quantities, Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Work shall be carried out strictly according to manufacture's specification and to the engineer's approval.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of water proofing.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work.	Note			
	(a) Type of waterproofing.				
	(b) Brand name.				
	(c) Country of origin.				
	(d) Method of application.				
	(e) Detail of guarantee (format)				
	(f) Suitability to the nature of the surfaces.				
	(g) Technical literature				
	Rate shall include for forming 25 x 25mm angle fillets in 1:3 cement and sand at all right angled edges.	Note			
	Rates shall include for preparation of surfaces, cutting, notching, bending, curing and extra material for lapping, working into recesses, inserts, pipes and the like and for working to falls and cross falls and protecting as per manufacturer's instruct.	Note			
	Rate shall include for ponding tests as per specifications and to the approval of the Engineer.	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Damp proof membrane				
2.12.1	Supplying and laying 1000 gauge polythene under foundations and floor slabs	m ²	70.00		
	Water proofing treatment to toilets including preparation of the surface and application with Barralastic as per the manufacture's instructions & specifications, including leveling screed and protective screed Rate including Angle filled 25mmX 25mm at edges using non shrinkage grout and fiber mash (200mm) after clearing at edges				
2.12.2	In Sunshade	m ²	35.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.13	Structural Steel Work				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Rate shall include for painting to all exposed faces of structural steel members with two coats Zinc phosphate QD primer . (paint approved by Engineer)	Note			
	Drg No RDC/HSEP/CTRL/KDY/GLG/S04 RDC/HSEP/CTRL/KDY/GLG/S04 -1 RDC/HSEP/CTRL/KDY/GLG/S04-2 RDC/HSEP/CTRL/KDY/GLG/S04-3 RDC/HSEP/CTRL/KDY/GLG/S04-4 RDC/HSEP/CTRL/KDY/GLG/S05 RDC/HSEP/CTRL/KDY/GLG/S05 -1 RDC/HSEP/CTRL/KDY/GLG/S05 -2 RDC/HSEP/CTRL/KDY/GLG/S05 -3				
2.13.1	<u>Rafter (RF-4) 200 x 100 mm(18.2Kg/m) including necessary accessories as per detail drawings & Engineers approval.</u>	kg	200.00		
2.13.2	<u>2 mm thick hot dipped galvanized C150/20(4.51kg/m)purlins fixed to rafters and gable beam complete with necessary bracings and lapping, including plates, bolts and all necessary accessories as per detail drawings & Engineers approval.</u>	m	50.00		
2.13.3	<u>12 mm dia hot dipped galvanized anti sag rods (Grade 4.6) fixed to purlins including all necessary accessories as per detail drawings& Engineers approval.</u>	nr	7.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.14	Roof Covering and Roof Plumbing				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	work shall be carried out strictly according to manufacture's specification and approval to the engineer.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of the work.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work. a)Brand name b)Country of origin c)Technical specifications d)Detail of guarantee	Note			
	Rates shall include for the cost of following:	Note			
	1. Scaffoldings and arrangements in erections.				
	2. All necessary cuttings, drillings, bolting, reverting, welding, grinding, delivering, unloading, hoisting, erecting and fixing in position, leveling, plumbing and preparation, submission and getting approval of all shop drawings.				
	3. All necessary laps, seams, ends, up stands and down stands, aprons, sills etc.				
	4. Method of fixing, work to falls and cross falls, underlay in contact with the covering, forming voids ? 0.1m ² dressing/welding into grooves, hollows, recesses cutting laps and the like.				
	5. All necessary roofing nuts and bolts, washers, brackets, welding rods & paint etc.				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Drg No RDC/HSEP/CTRL/KDY/GLG/S04 RDC/HSEP/CTRL/KDY/GLG/S04 -1 RDC/HSEP/CTRL/KDY/GLG/S04-2 RDC/HSEP/CTRL/KDY/GLG/S04-3 RDC/HSEP/CTRL/KDY/GLG/S04-4 RDC/HSEP/CTRL/KDY/GLG/S05 RDC/HSEP/CTRL/KDY/GLG/S05 -1 RDC/HSEP/CTRL/KDY/GLG/S05 -2 RDC/HSEP/CTRL/KDY/GLG/S05 -3				
2.14.1	Supplying and fixing color bonded 30mm Zn /Al sandwich panel roofing sheet (BMT - 0.42mm TCT - 0.47mm,5.58Kg/m2)	m ³	38.00		
2.14.2	Supplying and fixing color bonded ridge panel (BMT - 0.42mm TCT - 0.47mm) of girth 700mm.	m	6.25		
2.14.3	Supplying and fixing Zn/ Al eave gutter , (405mm girth) including 500mm girth gutter bracket and all necessary accessories	m	12.50		
2.14.4	100 x 100 mm Down pipe in 0.47mm thick color bonded Zn/Al sheet or equivalent metal sheet, suitably jointed and fixed as per drawings.	m	16.00		
2.14.5	Supplying and fixing Zn/ Al valance including strap fasteners, eve trims and all necessary accessories 470mm including 20X6mm flat iron valance board bracket at 0.6m c/c including welding , painting	m	12.50		
2.14.6	Supplying & fixing 0.47mm thick color Zn /Al. barge capping with self drilling screws (Fasteners) . including 20X6mm flat iron valance board bracket at 0.6m c/c including welding , painting	m	6.20		
TOTAL CARRIED TO COLLECTION					

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.15	Floor, Walls and Ceiling Finishes				
	The Contractor is advised to refer the Drawings, Specification, pricing preambles and the finishes schedule prior to pricing of this section of work.	Note			
	Rates shall include for temporary rules, screeds, ground etc., all normal cutting arises, raking out knots of brick work, hacking knots of concrete, rounded angles and the like, bedding, pointing, forming joints making good between different surfaces, around pipes, sanitary fittings and other fixtures and cleaning down upon completion.	Note			
	Extra over provision for narrow widths such as door/ window reveals have not been measured separately for all types of finishes. Rates shall include for narrow widths unless otherwise included in the BOQ.	Note			
	Rates shall include for builders work in connection with electrical/mechanical installation and plumbing unless measured otherwise.	Note			
	Ensure that all floor finishes are laid to falls as indicated or towards external sides so as to prevent stagnation of water.	Note			
	Tile samples shall be provided for approval by the Engineer prior to purchase of materials.	Note			
	Rate for tiles shall include for preparation of sub-surface, setting out, sub-screeds, bedding, protection of tiles etc. as per specification.	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Rates for plaster work shall include for reinforcing joints between different types of construction material (e.g. Brick work and concrete work) with 150mm wide galvanized steel mesh as directed by the Engineer.	Note			
	Rates shall include for covering and protection of finishes from weather and construction operation.	Note			
	Rates for ceiling finishes shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
	Floor Finishes				
	Locally manufactured porcelain floor tiles of approved quality, color and variety with all specials in specified areas as per the BOQ straight joints in both ways including all shapes, corner and angles set in 12mm thick cement and sand (1:3) screed bedding with neat cement floating level and to slopes < 15° from horizontal and all joints shall be pointed with colored tile grout to match with tiles.				
	<u>Cement rendering</u>				
2.15.1	Plinth plastering 20mm thick, Cement rendering in cement & sand (1:3) screed, level, finished smooth	m ²	6.75		
2.15.2	100mm high skirting 20mm thick, Cement rendering in cement & sand (1:3) screed, level, finished smooth	m	27.00		
2.15.3	Floor rendering 20mm thick, Cement rendering in cement & sand (1:3) screed, level, finished smooth	m ²	48.00		
2.15.4	Slab rendering 20mm thick, Cement rendering in cement & sand (1:3) screed, level, finished smooth	m ²	16.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Wall Finishes				
	<u>Wall Plastering</u>				
2.16	16mm thick plastering to wall in cement and sand (1:5), finish smooth on brick / concrete surfaces (Internally)	m ²	35.00		
2.16.1	16mm thick plastering to isolated coloumn & beams in cement and sand (1:5), finish smooth on brick / concrete surfaces (Internally)	m ²	8.00		
2.16.2	16mm thick plastering tosoift & beams in cement and sand (1:5), finish smooth on brick / concrete surfaces (Internally)	m ²	10.00		
2.16.3	16mm thick plastering to wall in cement and sand (1:5) finished semi rough on brick / concrete surfaces.(Externally).	m ²	35.00		
2.16.4	16mm thick plastering to isolated coloumn & beams in cement and sand (1:5), finish smooth on brick / concrete surfaces (Externally).	m ²	15.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.17	Aluminum Work				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	All Aluminum sections shall present clear, straight and sharply defined lines. They shall be free from defects impairing strength, appearance and durability.	Note			
	All Aluminum sections shall be fully treated extruded Aluminum alloy sections manufactured in accordance with specifications attached herewith.	Note			
	All Aluminum sections to be locally manufactured and should be of make approved by the engineer. ("Alumax" or similar products of equivalent technical parameters)	Note			
	The contractor shall submit samples of materials and shop drawings for prior approval	Note			
	Doors & Windows				
	All doors, windows & partitions items described here under shall be fabricated with powder coated aluminum extrusions conforming in all respects to the specification and detail drawings unless otherwise specified. The powder coating thickness of aluminum extrusions shall be 60 - 80 micron and in a color approved by the engineer.	Note			
	The Contractor shall submit certificates from the Aluminum manufacture and/or an approved testing laboratory which attest that the coating thickness offered is as specified.	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Aluminum extrusions of Doors, windows & Partitions, should be with correct sizes and thickness and fabricated as specified by the manufacturer to suit with the actual dimensions of openings and strength enough to stand for wind pressure of the environment in the building area.	Note			
	Rates shall include for all necessary fixings, fittings, ironmongery of approved quality and manufacture.	Note			
	Glazing for all glazed aluminum doors & windows shall be 6mm thick clear float glass and for fanlights shall be 5 mm thick "Pinheaded" or frosted glass.	Note			
	All glass shall be approved make.	Note			
	Glass shall be secured at all edges with compression gaskets and glazing beads. When fixing glass, all glazing sealant shall be carefully applied and cleaned off properly.	Note			
	Concealed screws, nuts, bolts, rivets and other fastening devices shall be of Aluminum, Non-magnetic stainless steel or other approved corrosive resistant materials. If visible, they shall blend with the finish of the framing Aluminum sections.	Note			
	Hinges, Handles, Catches, fixtures etc., shall be minimum of grade 304 stainless steel and approved make.	Note			
	Rate for aluminum doors shall include for "Yale" or equivalent S/S Rim locks with 3 keys & Stainless steel door handles.	Note			
	All Aluminium sections to be locally manufactured ("Alumex" or similar products of equivalent technical parameters)	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Ref Drg No RDC/HSEP/CTRL/KDY/GLG/AR-01 RDC/HSEP/CTRL/KDY/GLG/AR-02 RDC/HSEP/CTRL/KDY/GLG/AR-03 RDC/HSEP/CTRL/KDY/GLGL/AR-04 RDC/HSEP/CTRL/KDY/GLG/AR-05				
	Doors				
2.17.1	Supply and fixing Zn/Al powder coated roller door consisting 0.6mmthick zink aluminium Powder coated sheet, pulleys, side plate with the racers and necessary U channels. All complete to working order. Including the covering box and electrical motor.NDR 2000mmX2550mm (1 Nos)	nr	1.00		
2.17.2	Steel cover grating for drain out fram in ,40mm X40mm (5mm) L iron , 20mm tore steel 75mm C/C in both ways (one unit 1500mm Long) rate incuding with two coats Zinc phosphate QD primer . (paint approved by Engineer)	m2	1.35		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
2.18	Painting Works				
	Rate shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, patching up cracks, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
	Rate shall include for painting of reveals etc.	Note			
	Rates shall include for protection of floors, fittings and cleaning upon completion.	Note			
	Internal Faces				
2.18.1	Apply 2 coats of skim coats on cement plastered surfaces, smoothed with sand paper to receive the paint.	m ²	43.00		
2.18.2	Internal painting on internal walls; general surfaces/plain surfaces on walls/ Isolated column / reveal including prepare & apply one coat of filler/primer & two coats of emulsion paint as directed.	m ²	43.00		
	External Faces				
2.18.3	External Painting on Plastered work ; general surfaces/ plain surfaces on walls/ Isolated column / reveal including prepare and apply one coat of primer and two coats of weather shield paint as directed.	m ²	50.00		
2.18.4	Painting Floor with two coats of Quick drying floor paint including washing cleaning and smoothing down the surface	m ²	6.75		
	TOTAL CARRIED TO COLLECTION				

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP
BILLS OF QUANTITIES**

**CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR
CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT**

BILL NO -3-CONSTRUCTION OF TOILET BLOCK

SUMMARY OF TOILET

NO	DESCRIPTION		AMOUNT
1	Excavation and Earth Work		
2	Concrete		
3	Masonry Works		
4	Water Proofing Work		
5	Aluminum Work		
6	Plumbing and Sanitary Installations		
7	Electrical Installation		
8	Floor, Walls and Ceiling Finishes		
9	Painting Works		
	TOTAL CARRIED TO GRAND SUMMARY		

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP
BILLS OF QUANTITIES

CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY
DISTRICT

BILL NO -3 - CONSTRUCTION OF TOILET BLOCK

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.0	Excavation and Earth Work				
	The Tenderer is requested to refer the General Note, Pricing Preambles, Drawings, Specification, Condition of Contract and other relevant documents prior to pricing of the following items.	note			
	Rates for excavations shall include for:	note			
	1) Leveling bottom of excavated surfaces.				
	2) Bulking after excavation.				
	3) Earth work supporting if required.				
	4) Working spaces if required.				
	Tenderer shall provide due protection to avoid any damages to any new or old structures during excavation.	note			
3.1	Site Preparation				
3.1.1	Site clearing including removing all debris, small trees up to 0.5 m girth, vegetation including top soil up to 150 mm depth and dispose to suitable locations.	m ²	25.00		
3.2	Excavation				
	Earth excavation in any material except rock requiring blasting, part return fill rammed and well consolidated. All excavations to be protected from rain/storm water runoff falling into the same by suitable means. Unsuitable material shall dispose to approved locations	note			
3.2.1	Excavation for foundation pits.	m ³	3.25		
3.2.2	Excavation for foundation trench	m ³	3.75		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.2.3	Disposal of excavated earth and debris to a suitable locations including relevant approvals and depositing without disturbing to the public.	m ³	7.00		
3.3	Earth Filling				
	Earth filling and compaction up to required level to be carried out as per specification.	note			
3.3.1	Filling with available earth suitable excavated material and compacting in layers up to required level.	m ³	2.75		
3.3.2	Filling with sand and compacting in layers up to required level.	m ³	1.00		
3.4	Surface Treatment				
3.4.1	Anti termite treatment with Biflex for ground floor area of the building according to the manufacturers specifications by a specialist pest control service provider approved by the engineer. 10 year warranty for material and workmanship from the date of handing over the work shall be provided.	m ²	25.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.5	Concrete				
	The Bidder shall refer the followings prior to pricing the items in this trade.	note			
	a. All relevant drawings				
	b. Specifications				
	c. Pricing preambles				
	d. Location				
	All concrete shall be made dense with a vibrator. Rate shall include for plant for mixing , handling, hoisting, depositing, compacting ,vibrating, curing, making good after removal of form work and for any tests when necessary.	note			
	Ordinary Portland cement (OPC) cement complied with relevant Sri Lanka standards and approved by Engineer shall be used.	note			
	Rates shall include for forming expansion joints, construction joints, and the like including necessary sealant and other accessories, unless otherwise separately measured.	note			
	Rates shall include for forming holes in concrete, cutting chases and the like as necessary.	note			
	<u>Grade 15 mass concrete as per the detail drawings and specifications.</u>				
3.5.1	50 mm Thick screed	m ²	8.50		
	<u>Reinforced in-situ Grade 25 concrete as per the detail drawings and specifications.</u>				
	<u>Up to ground slab</u>				
3.5.2	Column base	m ³	0.85		
3.5.3	Columns Shaft	m ³	0.25		
3.5.4	Tie beams	m ³	1.00		
3.5.5	Beds on ground	m ³	0.72		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<u>Ground floor slab level to slab level</u>				
3.5.6	Columns Shaft	m ³	0.75		
3.5.7	In slab Beam ,	m ³	1.25		
3.5.8	Slab & Curb	m ³	3.00		
3.6	Formwork				
	Form work shall be provided with adequate struts, braces, ties, clamps and the like so as to maintain the dimensions, lines and levels shown in the drawings during the entire operation of placing and compacting the concrete and to prevent any sagging under the weight of wet concrete including any other super imposed loads which would be subjected to during construction.	note			
	<u>Up to Ground floor slab</u>				
3.6.1	Column base	m ²	4.35		
3.6.2	Wall base	m ²	1.25		
3.6.3	Columns Shaft	m ²	3.25		
3.6.4	Tie beams	m ²	8.50		
	<u>Ground floor slab level to slab level</u>				
3.6.5	Sides of columns	m ²	12.00		
3.6.6	In slab Beam ,	m ²	9.75		
3.6.7	Slab & Curb	m ²	30.50		
3.7	Reinforcement				
	Tor Steel characteristic strength 460 N/mm ² and Mild Steel characteristic strength 250 N/mm ² as reinforcement to RCC works.	note			
	Rates shall be included for cutting, bending, fabricating, placing in position, holding and temporary fixing supports. E.g. chairs, benches, stools, spaces, ties, hangers and binding wires.	note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<u>Up to Ground floor level</u>				
3.7.1	In column bases	kg	325.00		
3.7.2	In column	kg	25.00		
3.7.3	In Tie beams & slab beams	kg	115.00		
	<u>Ground floor slab level to slab level</u>				
3.7.4	In column	kg	72.00		
3.7.5	In slab Beam	kg	145.00		
3.7.6	In Slab	kg	350.00		
3.7.7	In ground floor slabSupply and laying A142 steel mesh including adequate laps	m ²	7.50		
3.7.8	225x150 mm high sill beams including 02 nos. 10 mm dia T/S bars and 6mm dia mild steel stirrups @ 100c/c with necessary formwork and concreting in Grade 25	m	2.10		
3.8	Joints				
3.8.1	Forming 10 mm thick 100 mm high isolation joint filled with backer rod & approved sealant on top	m	22.10		
3.8.2	Drains 225mmX150mm in cement concrete 1:2 1/2:5(25mm),, 75mm thick sides and base, inclusive of 12mm cement rendering 1:3 with necessary 3000mm c/c expansion joints and rate including excavation , form work laying polythene.	m	1.00		
3.8.3	750mm wide ramp and 225mmX150mm complete with 75 mm concrete slab to ramp, 12mm thick rendering in 1:3 cement & sand finished with neat cement floating and Drains with 75mm thick sides and base, in cement concrete 1:2 1/2:5(25mm), inclusive of 12mm cement rendering 1:3 in cement & sand with necessary expansion joints 3000mm c/c and rate including excavation , form work laying polythene including cover slab 75mm thick G 25 concret , 10mm R/F 150 C/C Both ways	m	10.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.9	Masonry Works				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Rates for masonry works shall include for plumbing angles, forming rebates reveals, square, cutting and racking of joints for plastering.	Note			
	Rate shall include for all necessary types of scaffolding whether specified separately or not.	Note			
	Rate shall include for expansion joint construction, anchoring between RC structure and masonry as necessary.	Note			
3.9.1	Random rubble masonry work in cement sand mortar 1:5. in wall foundations.	m ³	4.00		
3.9.2	225 mm thick brick work in cement and sand 1:5	m ²	21.50		
3.9.3	150mm thick brick work in cement and sand 1:5	m ²	6.75		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.10	Water Proofing Work				
	The tenderers are requested to refer Bills of Quantities, Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Work shall be carried out strictly according to manufacture's specification and to the engineer's approval.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of water proofing.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work.	Note			
	(a) Type of waterproofing.				
	(b) Brand name.				
	(c) Country of origin.				
	(d) Method of application.				
	(e) Detail of guarantee (format)				
	(f) Suitability to the nature of the surfaces.				
	(g) Technical literature				
	Rate shall include for forming 25 x 25mm angle fillets in 1:3 cement and sand at all right angled edges.	Note			
	Rates shall include for preparation of surfaces, cutting, notching, bending, curing and extra material for lapping, working into recesses, inserts, pipes and the like and for working to falls and cross falls and protecting as per manufacturer's instruct.	Note			
	Rate shall include for ponding tests as per specifications and to the approval of the Engineer.	Note			
	Damp proof membrane				
3.10.1	Supplying and laying 1000 gauge polythene under foundations and floor slabs	m ²	17.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Water proofing treatment to toilets including preparation of the surface and application with Barralastic as per the manufacture's instructions & specifications, including leveling screed and protective screed Rate including Angle filled 25mmX 25mm at edges using non shrinkage grout and fiber mash (200mm) after clearing at edges				
	In Toilet				
3.10.2	In Floor	m ²	8.00		
3.10.3	In Wall	m ²	19.00		
3.10.4	In Slab	m ²	27.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.11	Aluminum Work				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	All Aluminum sections shall present clear, straight and sharply defined lines. They shall be free from defects impairing strength, appearance and durability.	Note			
	All Aluminum sections shall be fully treated extruded Aluminum alloy sections manufactured in accordance with specifications attached herewith.	Note			
	All Aluminum sections to be locally manufactured and should be of make approved by the engineer. ("Alumax" or similar products of equivalent technical parameters)	Note			
	The contractor shall submit samples of materials and shop drawings for prior approval	Note			
	Doors & Windows				
	All doors, windows & partitions items described here under shall be fabricated with powder coated aluminum extrusions conforming in all respects to the specification and detail drawings unless otherwise specified. The powder coating thickness of aluminum extrusions shall be 60 - 80 micron and in a color approved by the engineer.	Note			
	The Contractor shall submit certificates from the Aluminum manufacture and/or an approved testing laboratory which attest that the coating thickness offered is as specified.	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Aluminum extrusions of Doors, windows & Partitions, should be with correct sizes and thickness and fabricated as specified by the manufacturer to suit with the actual dimensions of openings and strength enough to stand for wind pressure of the environment in the building area.	Note			
	Rates shall include for all necessary fixings, fittings, ironmongery of approved quality and manufacture.	Note			
	Glazing for all glazed aluminum doors & windows shall be 6mm thick clear float glass and for fanlights shall be 5 mm thick "Pinheaded" or frosted glass.	Note			
	All glass shall be approved make.	Note			
	Glass shall be secured at all edges with compression gaskets and glazing beads. When fixing glass, all glazing sealant shall be carefully applied and cleaned off properly.	Note			
	Concealed screws, nuts, bolts, rivets and other fastening devices shall be of Aluminum, Non-magnetic stainless steel or other approved corrosive resistant materials. If visible, they shall blend with the finish of the framing Aluminum sections.	Note			
	Hinges, Handles, Catches, fixtures etc., shall be minimum of grade 304 stainless steel and approved make.	Note			
	Rate for aluminum doors shall include for "Yale" or equivalent S/S Rim locks with 3 keys & Stainless steel door handles.	Note			
	All Aluminium sections to be locally manufactured ("Alumex" or similar products of equivalent technical parameters)	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Ref Drg No RDC/HSEP/CTRL/KDY/GLG/AR-01 RDC/HSEP/CTRL/KDY/GLG/AR-02 RDC/HSEP/CTRL/KDY/GLG/AR-03 RDC/HSEP/CTRL/KDY/GLGL/AR-04 RDC/HSEP/CTRL/KDY/GLG/AR-05				
	Doors				
3.11.1	Supplying, fabricating and fixing single sash swing, composite Aluminum panel door with aluminum frame fabricated with 100 x 45 mm (1.5mm thick) extrusions top & bottom panel in 4mm thick both side compopos aluminium board all complete as Door lock .Door handle ,per drawing and Engineers approval. Door type ND3, 750 x 2100 mm sized overall (2 Nos)	m ²	3.15		
3.11.2	Supplying, fabricating and fixing of Aluminum glazed top hung fanlight type NF1,750 x 1050mm sized overall, with aluminum frame fabricated with 70 x 30 mm extrusions, consisting of 01 no's of pinheaded glazed aluminum window sashes, aluminum louver (2 Nos)	m ²	1.58		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.12	Plumbing and Sanitary Installations				
	All unplasticized polyvinyl chloride (uPVC) pipes used in the plumbing installation must conform in every respect to the requirements of the SLS 147:1993 or BS 4514 and PVC fittings to SLS 659:1993.	Note			
	Full installation shall comply with the relevant Sri Lankan, British or any other standard as given under the specifications and with the regulations of relevant authorities.	Note			
	All fittings and specials used in the plumbing installation shall be suitable in all respects to the pipe line to which fittings and specials are fixed.	Note			
	Rates shall include for submitting samples, protecting works and getting shop drawings approved from the Architect/Engineer.	Note			
	Plumbing Work				
	Rates for plumbing work shall include for the cost of following:	Note			
	1. Cutting and waste of pipes etc. and joining pipes.				
	2. Irrespective of the pipe diameter, all specials such as elbows, bends, tees, junctions, plugs, reducers and similar pipe fittings except for valves which will be measured separately.				
	3. Necessary screws, nails, sockets, connection back nuts standard pipe fixing or supporting clips, saddles, brackets, holder bats, straps etc.				
	4. Connecting pipes to sanitary fixtures, appliances and different types of pipes.				
	5. Laying in ducts, trenches, chases, floor screeds and insitu concrete.				
	6. Excavation, backfilling, disposal of surplus soil.				
	7. Chasing to brick, cement block or concrete walls, columns, beams etc. and making good all works disturbed.				
	8. Obtaining necessary approvals from Local Authorities, CEA etc.				
	9. Testing, commissioning and disinfection after completion.				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Cold Water Supply				
	Supplying and laying of uPVC pipes of Type (PNT14) for cold water supply under slabs and along walls as described below: Rate shall include for necessary fittings.				
3.12.1	20mm dia. PVC pipe including all specials	m	10.00		
	Supplying and laying of uPVC pipes of Type (PNT11) for cold water supply under slabs and along walls as described below: Rate shall include for necessary fittings.				
3.12.2	25mm dia. PVC pipe including all specials	m	10.00		
3.12.3	32mm dia. PVC pipe including all specials	m	75.00		
3.13	Waste water pipes				
	All underground drainage pipe work shall be in UPVC (PNT7) to BS 4660	Note			
	Rate shall include for necessary fittings.	Note			
3.13.1	50mm dia. waste water pipe laid in under ground & buried in floor screed or chased to wall or laid as directed by the Engineer.	m	40.00		
3.13.2	63mm dia. waste water pipe laid in under ground & buried in floor screed or chased to wall or laid as directed by the Engineer.	m	60.00		
3.14	Soil pipes				
	All above waste pipe work shall be in PVC (PNT7) to BS 4514 and BS 5255	Note			
3.14.1	110mm dia. soil pipe laid as directed by Engineer.	m	20.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Sanitary Fittings and Fixtures				
	Unless otherwise stated all sanitary fittings and fixtures shall be of Rocell Bath ware or equivalent or Imported Manufacture, such as American standard, or alternate makes. prior written approval to be granted by the engineer for quality & performance of fittings. (Specification & samples to be produced by the contractor, whenever requested)	Note			
	Color of all sanitary fittings shall be white.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of the work.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work. a)Brand name b)Technical specifications c)Detail of guarantee	Note			
	Supply and installation of sanitary appliances include pipe specials, fittings and connection to water supply and waste and soil pipes lines and commissioning.	Note			
	Rates for sanitary fittings shall include for the cost of following:	Note			
	1. Waste water outlet, internal overflows etc., supporting brackets and incidental materials for fixing.				
	2. Assembling, jointing together fixing components parts and jointing to pipes including necessary coupling and for leaving perfectly clean and in perfect working order as on completion.				
	3. Jointing and connection pipes to sanitary fittings.				
	4. Making good the work disturbed.				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.14.2	Ceramic wash basin, pedestal type, 22" x 16" Rocell Urban D or equivalent fixed with chromium plated waste outlet, magic hose, screws, plug Chromium plated 20mm dia. angle valve, , PVC flexible hose including 40mm dia: plastic bottle trap & silicone, all completed to working order.	nr	2.00		
3.14.3	Ceramic water closet (commode) Rocell Urban D or equivalent installed on tiled floor including Chromium plated 20mm dia. angle valve, , PVC flexible hose & thread seal, commode screws, plug and Supplying and Magic bend 110mm dia. For existing W.C. set etc	nr	2.00		
3.14.4	Supply and fixing superior quality plate glass beveled mirror size 600 x 450mm free from ripples and all blemishes mounted on fiber glass frame with chromium plated brass screws.	nr	2.00		
3.14.5	Supplying and fixing Stainless steel soap tray fixed to wall with fiber plugs.	nr	2.00		
3.14.6	Supplying and fixing Stainless steel toilet paper holder fixed to wall with fiber plugs at 600mm above finished floor level.	nr	2.00		
3.14.7	25mm dia.brass gate valve fixed complete with PVC gum, faucet sockets, thread seal, silicone, connect to water supply, all completed to working order.	nr	1.00		
3.14.8	Wash basin tap Rocell VERO SD91223L or equivalent fixed complete with angle valve, flexible hose, thread seal, silicone, connect to water supply, all completed to working order.	nr	2.00		
3.14.9	Supplying & fixing 20mm dia. bib tap Rocell Z071001/011850 or equivalent with long body chromium plated. fixed complete with , thread seal, silicone, connect to water supply, all completed to working order. (Approved quality)	nr	2.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.14.10	Bidet showerfixed to wall, completed with Chromium plated 20mm dia. angle valve, thread seal, silicone, connect to water supply, all completed to working order.	nr	2.00		
3.14.11	Providing Catch pit 150mm x150mm x75mm in cement mortar. and stainless steel gully grating 150mm x150mm.	nr	2.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.15	Electrical Installation				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Contractor shall propose shop drawings/conduit layout drawings and shall obtain approval from consultant engineer before commencing work.	Note			
	Contractor shall obtain sample approval for all items before commencing the work.	Note			
	Rates shall include for all necessary materials, cables, conduits, PVC sunk box, bulbs, holders, ceiling rose, switches etc. to complete the electrical installation in good order.	Note			
	Electrical items are to be of the following makes:	Note			
	(a) Electrical switches and socket outlets: MK, Crabtree, PDL Tenby, Clipsal, Kevilton, Orange or equivalent				
	(b) Distribution boards: Consumer unit flush mount type or as specified				
	(c) Fans:				
	K.D.K., National-Japanese origins				
	(d) Exhaust Fans:				
	K.D.K., National-Japanese origins				
	(e) Switch Gear - MCCB'S				
	Schneider, Siemens, ABB, Hager, Moeller, Terasaki, Meta-MEC of LS Brand or equivalent				
	[f] RCCB , MCB'S				
	Schneider, Siemens, Crabtree, Hager, Moeller, Legrand Eaton, Meta-MEC of LS Brand or equivalent				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	[g] Fluorescent Fittings :				
	The Choke, Starter & Capacitor should be of good quality, British, French, Australia, German or equivalent & the tube should be preferably, Thorn, Philips, osram, National or equivalent. The fluorescent fittings should be fabricated in gauge Not smaller than 24 SWG Zinc coated metal. Finished with powder coating (white in color.)				
	[h] Distribution sub panels: Shall be in surface mount plastic enclosure or metal enclosure fabricated with zinc coated sheet metal of gauge Not less than 1.8mm total enclosed, with hinged door with protective cover plate for terminals. Finished with powder coating of approval color and components as specified in the BOQ				
	[i] Cable : ACL , Kalani or equivalent.				
	[j] Energy saving bulbs : 4 Star rated. Or LED Lamps				
	Wiring type in concealed conduit ,floor conduit, metal or PVC trucking	Note			
	All panel boards and consumer units should have wire numbering and a laminated circuit diagram should be pasted on the inside surface of the door.	Note			
	All types of fittings, materials, painting and finishes shall be approved by the Electrical Engineer prior to installation.	Note			
	Ref Drg No				
	Drg No RDC/HSEP/CTRL/KDY/GLG/EL -01 RDC/HSEP/CTRL/KDY/GLG/EL -02 RDC/HSEP/CTRL/KDY/GLG/EL -03				
	Point wiring				
3.15.1	Wiring for internal light points using 2x1.5mm ² , PVC/ PVC/CU drawn through securely fixed concealed PVC conduit , including 10A switch .	nr	8.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Luminaires and fixtures				
	Luminaires				
3.15.2	Supply & installation of 18W LED wall lamp fitting with all necessary accessories	nr	4.00		
3.15.3	Supply & installation of surface mounted 12W LED lamp fitting with all necessary accessories	nr	2.00		
3.15.4	Supply & installation of 18W LED mirror lamp fitting with all necessary accessories	nr	2.00		
	Fixtures				
	In recessed type plastic enclosure as specified complete with following switch gears to be supplied and installed to working order.				
3.15.5	DB-1 Comprised with No.10ASP MCB 1 No. 40A DP RCCB 1 Nos. 10A SP MCB	nr	1.00		
3.15.6	2x2.5 sq. mm +2.5 sq. mm E cable-main cable	m	30.00		
	Supply and install earthling system according to IEE wiring regulation and to achieve less than 10 Ohm Earth resistance.				
	Inspection & Testing				
3.15.7	Testing the installation & rectify any defect & submit a certificate by a chartered Electrical Engineer.	Item	1.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.16	Floor, Walls and Ceiling Finishes				
	The Contractor is advised to refer the Drawings, Specification, pricing preambles and the finishes schedule prior to pricing of this section of work.	Note			
	Rates shall include for temporary rules, screeds, ground etc., all normal cutting arises, raking out knots of brick work, hacking knots of concrete, rounded angles and the like, bedding, pointing, forming joints making good between different surfaces, around pipes, sanitary fittings and other fixtures and cleaning down upon completion.	Note			
	Extra over provision for narrow widths such as door/ window reveals have not been measured separately for all types of finishes. Rates shall include for narrow widths unless otherwise included in the BOQ.	Note			
	Rates shall include for builders work in connection with electrical/mechanical installation and plumbing unless measured otherwise.	Note			
	Ensure that all floor finishes are laid to falls as indicated or towards external sides so as to prevent stagnation of water.	Note			
	Tile samples shall be provided for approval by the Engineer prior to purchase of materials.	Note			
	Rate for tiles shall include for preparation of sub-surface, setting out, sub-screeds, bedding, protection of tiles etc. as per specification.	Note			
	Rates for plaster work shall include for reinforcing joints between different types of construction material (e.g. Brick work and concrete work) with 150mm wide galvanized steel mesh as directed by the Engineer.	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Rates shall include for covering and protection of finishes from weather and construction operation.	Note			
	Rates for ceiling finishes shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
	Floor Finishes				
	<u>Cement rendering</u>				
3.16.1	Plinth plastering 20mm thick, Cement rendering in cement & sand (1:3) screed, level, finished smooth	m ²	4.25		
3.16.2	Slab rendering 20mm thick, Cement rendering in cement & sand (1:3) screed, level, finished smooth	m ²	27.00		
	Locally manufactured porcelain floor tiles of approved quality, color and variety with all specials in specified areas as per the BOQ straight joints in both ways including all shapes, corner and angles set in 12mm thick cement and sand (1:3) screed bedding with neat cement floating level and to slopes < 15° from horizontal and all joints shall be pointed with colored tile grout to match with tiles.				
3.16.3	300 x 600 mm homogeneous Rocell 9BW-GL or equivalent glazed porcelain tiles of approved color laid to design-Toilet	m ²	8.00		
	Wall Finishes				
	Locally manufactured glazed wall tiles of approved quality, color and variety with all specials in specified areas as per the BOQ straight joints in both ways including all shapes, corner and angles set in 12mm thick cement and sand (1:3) screed backing on walls to specified height with beveled edge from floor level and all joints shall be pointed with colored tile grout to match with tiles.	Note			

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.16.4	300 x 600 mm homogeneous matte porcelain tiles EM-611 or equivalent laid to design-Toilet	m ²	19.00		
3.16.5	16mm thick plastering to wall in cement and sand (1:5), finish smooth on brick / concrete surfaces (Internally)	m ²	30.00		
3.16.6	16mm thick plastering to soift & beams in cement and sand (1:5), finish smooth on brick / concrete surfaces (Internally)	m ²	20.00		
3.16.7	16mm thick plastering to wall in cement and sand (1:5) finished semi rough on brick / concrete surfaces.(Externally).	m ²	28.00		
	TOTAL CARRIED TO COLLECTION				

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
3.17	Painting Works				
	Rate shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, patching up cracks, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
	Rate shall include for painting of reveals etc.	Note			
	Rates shall include for protection of floors, fittings and cleaning upon completion.	Note			
	Internal Faces				
3.17.1	Apply 2 coats of skim coats on cement plastered surfaces, smoothed with sand paper to receive the paint.	m ²	50.00		
3.17.2	Internal painting on internal walls; general surfaces/plain surfaces on walls/ Isolated column / reveal including prepare & apply one coat of filler/primer & two coats of emulsion paint as directed.	m ²	50.00		
	External Faces				
3.17.3	External Painting on Plastered work ; general surfaces/ plain surfaces on walls/ Isolated column / reveal including prepare and apply one coat of primer and two coats of weather shield paint as directed.	m ²	28.00		
3.17.4	Painting Floor with two coats of Quick drying floor paint including washing cleaning and smoothing down the surface	m ²	4.25		
	TOTAL CARRIED TO COLLECTION				

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP

BILLS OF QUANTITIES

CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT

BILL NO -4 - SWERAGE DISPOSAL SYSTEM

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
4.1	SWERAGE DISPOSAL SYSTEM				
	Sewage & Drainage Work				
	Rates for Drainage Work shall include for the cost of following:	Note			
	1. All pipe specials such as bends, junctions, elbows, tees etc. unless separately shown in the BOQ.				
	2. Laying of pipes to falls.				
	3. Connection to sides of manholes etc.				
	4. Providing sleeves etc., when pipes pass through walls, foundations etc.				
	5. Giving notices, obtaining necessary approvals from Local Authorities, paying fees etc.				
	6. Testing, commissioning and disinfection after completion.				
	Piping				
	Sewer and Waste Water PVC Pipe including all fittings, sleeves, accessories, supports, etc. complete as specified				
4.1.1	Supplying & fixing 110mm dia. (PNT7) P.V.C pipes as vent pipes fixed to walls with necessary wooden plugs and P.V.C saddles at 1200 mm centers.	m	4.50		
4.1.2	Supplying & fixing PVC wire dome for 110mm dia. P.V.C drainage pipes.	nr	1.00		
4.1.3	Drains, P.V.C, 110mm dia: ((PNT7)) laying on cement concrete 150mm thick bedding up to 600mm depth of invert including excavation, back filling and cement concrete hunching 1:3:6(40mm).	m	5.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
4.1.4	Drains P.V.C, 110mm dia. ((PNT7))laying on cement concrete 150mm thick bedding over 600mm. up to 1200mm. depth of invert including excavation back filling and cement concrete hunching 1:3:6(40mm).	m	5.00		
4.2	Manholes and catch pits				
4.2.1	Construction of manhole 600mm x 600mm x 600mm internally complete with cement concrete 1:2:4 (20mm) in 75mm thick base, 225mm tk.brick walls on top of base slab and channelling & benching, 1:3 cement and sand rendered in internal surfaces, 75mm thick RC. cover slab r/f with 10mm tor steel @ 150mm c/c. both ways, complete with lifting handles. Drawing No.CPC/CS/11/04/2018/TYPE-MH/01	nr	2.00		
4.2.2	extra over for each additional 0.3m depth. manhole 600mm x 600mm internally complete with brick walls 1:3 cement and sand rendered in internal surfaces,	nr	2.00		
4.2.3	Construction of manhole 1.05mm x 675mm x 600mm internally complete with cement concrete 1:2:4 (20mm) in 75mm thick base, 225mm tk.brick walls on top of base slab and channelling & benching, 1:3 cement and sand rendered in internal surfaces, 75mm thick RC. cover slab r/f with 10mm tor steel @ 150mm c/c. both ways, complete with lifting handles. Drawing No.CPC/CS/11/04/2018/TYPE-MH/02	nr	1.00		
4.2.4	extra over for each additional 0.3m depth. manhole1.05mm x 675mm x internally complete with brick walls 1:3 cement and sand rendered in internal surfaces,	nr	1.00		

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
4.2.5	Construction of 1.8m diameter internal fully built type soakage pit, built up 225mm thick brick work in 1:8 cement and sand mortar invert depth from ground level 0.90m, on 225mm x 150mm ring beam 1:2:4(20mm) concrete mix, including 1:3 cement and sand plaster finished smooth with neat gray cement (0.9m invert depth only) & 100mm high 1:2:4(20mm) concrete ring pad above ground level, complete with 75mm thick RCC cover slab with lifting handle.All as per detail drawing No.CPC/CS/11/04/2018/TYPE-SP/05.	nr	1.00		
4.2.6	Construction of septic tank for 100 persons. as per detail drawing No. CPC/CS/11/04/2018/TYPE-SEPT/01-(i) and CPC/CS/11/04/2018/TYPE-SEPT/01-(ii) Up to 1800mm high	nr	1.00		
4.2.7	Extra over for invert depth exceeding up to 1800mm, per each additional 0.3 m septic tank for 30 persons.	nr	1.00		
	TOTAL CARRIED TO GRAND SUMMARY				

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP

BILLS OF QUANTITIES

CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT

BILL NO -5 - DAY WORK

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	Day Work				
	Day Work Definition				
	The Day Work is defined as being additional or extra work not envisaged at the time of Bidding, which is carried out pursuant to instructions given by the Engineer under the Contract and further, in the opinion of the Engineer, cannot be adequately measur				
	Any work carried out as a separate contract.				
	Day Work ordered to be carried out after the date of commencement of the period of maintenance.				
	Schedule of Daywork Rates: 1. Labor				
D.1	Labor				
	The Day work rates quoted for labor are to be inclusive NET amounts payable including for use and waste of hand tools and of all ordinary non-mechanical plant, stagings, scaffoldings, tarpaulins, use of electric light and water for the Works,				
D.1.1	Laborer	hour	10.00		
D.1.2	Concreter / Mason	hour	10.00		
D.1.3	Tiller	hour	10.00		
D.1.4	Carpenter	hour	10.00		
D.1.5	Steel Fixer and Bar Bender	hour	10.00		

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP

BILLS OF QUANTITIES

CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT

BILL NO -5 - DAY WORK

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
D.1.6	Painter	hour	10.00		
D.1.7	Welder	hour	10.00		
D.1.8	Plumber	hour	10.00		
D.1.9	Electrician	hour	10.00		
	Schedule of Daywork Rates: 2. Materials				
D.2	Material				
	Materials used on Day works shall be as specified for the Works. The rates are to include delivery to the Site. Should any materials be required for use on Day works which are not included in the Schedule, the lowest current NET market				
D.2.1	Ordinary Portland cement	kg	500.00		
D.2.2	Concrete (Grade 25)	m ³	5.00		
D.2.3	Metal 20 mm	m ³	5.00		
D.2.4	Metal 25 mm	m ³	5.00		
D.2.5	Metal 40 mm	m ³	3.00		
D.2.6	Building sand	m ³	5.00		
D.2.7	Engineering bricks	nr	1,000.00		
D.2.8	225 x 150 mm Rubble	m ³	3.00		
D.2.9	1" thick planks (class 1 timber)	m ²	20.00		

HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP

BILLS OF QUANTITIES

CONSTRUCTION OF WAITING AREA & EXTERNAL TOILET FOR CENTRAL CLINIC AT GALAGEDARA KANDY DISTRICT

BILL NO -5 - DAY WORK

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
D.2.10	High yield steel reinforcement bars (any sizes)	t	0.10		
D.2.11	Structural steel members	t	0.10		
D.2.12	12 mm plywood sheets	nr	10.00		
D.2.13	Emulsion paint	ltr	10.00		
D.2.14	Enamel paint	ltr	10.00		
D.2.15	PVC Pipe 100mm diameter(gauge 600)	m	10.00		
D.2.16	PVC Pipe 75mm diameter(PNT7)	m	20.00		
D.2.17	PVC Pipe 50mm diameter(PNT7)	m	20.00		
D.2.18	PVC Pipe 40mm diameter(PNT7)	m	20.00		
D.2.19	PVC Pipe 32mm diameter(PNT7)	m	20.00		
D.2.20	PVC Pipe 25mm diameter(PNT11)	m	20.00		
D.2.21	PVC Pipe 20mm diameter(PNT11)	m	20.00		
D.2.22	6 mm thick clear glass	m ²	3.00		
D.3	Schedule of Daywork Rates: 3. Contractor's Equipment				
D.3.1	Concrete mixer, 10 /7	hrs	10.00		
D.3.2	Electric water Pump (2 dia)	hrs	2.00		
D.3.3	Concrete vibrator & Poker	hrs	10.00		
D.3.4	Welding plant with Oxyacetylene	hrs	2.00		
	TOTAL CARRIED TO GRAND SUMMARY				