# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

# **BILL OF QUANTITIES**

# MAIN SUMMARY OF BALANCE WORKS

S.#	DESCRIPTION	AMOUNT
1	TOTAL COST OF CIVIL WORKS	
2	TOTAL COST OF MEP WORKS	
OVEF	RALL COST OF BALANCE WORKS OF TK OFFICE:	

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

# BILL OF QUANTITIES SUMMARY - CIVIL WORKS

S.#	DESCRIPTION	AMOUNT
1	BALANCE CIVIL WORK	-
2	ADDITIONAL CIVIL WORK	ı
	TOTLA COST OF CIVIL WORKS:	-

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

S.#	Description	Unit	Qty	Rate	Amount
BAL	ANCE CIVIL WORK AT ROOF TOP FLOOR				
Α	WALL FINISHES				
1	BLOCK MASONRY				
	Block Masonry with providing and laying of machine made CC Blocks of 1000 psi				
	cubic strength, setting in 1:4 cement sand mortar, raked joints including curing,				
	scaffolding, reinforcing & anchors from RCC columns ( if required ) & grouting				
	with cement sand mortar), hacking of existing surface for bonding where				
	necessary, wastage, etc., complete in all respects as per specifications and				
	drawings.				
i	4" thick	SFT	214		-
ii	6" thick	SFT	197		_
2	Internal Plaster				
_	Providing and applying 1/2 inch thick cement sand plaster 1:4 on internal wall &				
	slab of minimum thickness as specified including G.I. corner beads / plaster stops				
	(all horizontal and vertical exposed corner edges up to 8' height from FFL), 1'				
	wide galvanized metal lathe of 18 SWG at the junctions of concrete and block				
	masonry, conduit chases, etc., fixed with masonry nails and washer, rounded				
	edges where required, grooves where required, smooth finished in line, level,				
	plumb, curing, scaffolding, hacking / chipping of existing surface for bonding				
	where necessary, etc., complete in all respects as per specifications and				
	drawings.(For Payment exposed area will be measured).	СГТ	1 262		
_		SFT	1,262		-
3	External Plaster Same as item # 2 above but with 3/4" thickness for external plaster	Sft	279		
4	Plastic Emulsion Paint.	311	2/9		-
4					
	Providing and applyingthree coats of Plastic Emulsion paint of approved quality and shade (Berger, ICI or equivalent) on walls & other surfaces over one coat of				
	primer and base preparation upto any height and level including preparing the				
	surfaces smooth by putty filling, scraping with sand paper, cleaning the surface				
	et., complete as per drawings, specifications and as directed bythe Engineer incharge.	Sft	2,482		
5	Weathershield Paint	JIL	2,402		
	Same as item # 4 above but with weathershield paint of approved brand (Berger,				
	ICI) on Roof Parapet and External Façade including the cost of scafolding etc.				
	ici) on Roof Parapet and External Paçade including the cost of scalolding etc.				
а	External Wall of Room at Roof Top	Sft	1,300		-
b	Parapett Wall Inner Side	Sft	346		-
С	External Building sides [Front+Side Streets+Backside)	Sft	9,429		-
6	Fixed Glazing.				
	Providing, fabrication and installation in position fixed clear glazing consisting of				
	8mm tempered clear glass fixed with 2" x 3" Black Anodised Aluminum Frame as				
	shown in detail including all hardware's, neoprene gasket, rubber gasket seal /				
	silicone sealant, fixing arrangements, etc., complete in all respect. For payment				
	exposed Elevation area will be measured.	Sft	70		_
7	MDF Dropped Beam	5.0	, ,		
	Providing, fabricating and fixing 4"th x 6" high Mdf box beam comprasing of				
	1/2"th Mdf both side's of rough partal wood structure fixed on existing slab				
	including harware, nail, glue, scaffolding, wastage, etc., complete in all respect				
	as per drawing & as directed by the Engineer Incharge.	Sft	30		_
8	Frosted Film	5.1	30		
	provide and install frosted film by 3M or equivalent, using best quality adhesive				
	as per specifications. Complete installation including cutting, placing, fixing,				
	pasting, wastage etc. complete in all respect, as per drawings, specifications and				
	as as directed by the Engineer Incharge.	Sft	40		_
	and an extension of the endineer memory.	٥, ١			

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

S.#	Description	Unit	Qty	Rate	Amount
9	Openable Windows				
	Providing, fabrication and installation in position openable window comprising				
	of 6mm tempered clear glass fixed with 2" x 3" Black Anodised Aluminum Frame				
	as shown in detail including all hardware's, openable fly mesh shutter, neoprene				
	gasket, rubber gasket seal/silicone sealant, fixing arrangements complete in all				
	respect. For payment exposed Elevation area will be measured.	Sft	32		_
10	Porcelain Tile Dado				
	Providing and fixing Porcelain Tile Dado/Cladding of approved sample on walls,				
	with 1:4 cement sand mortar and base with approved bond of required				
	thickness, setting the tiles with neat cement mortar, butt joints if required with				
	approved grout & color of equivalent as per manufacturer's specifications &				
	instructions, including curing, cleaning, hacking / chipping of existing surface for				
	bonding where necessary, etc, complete in all respect.				
	T-14W Basic Rate: 175/Sft	SFT	375		-
11	PVC Skirting				
	Providing and fixing of approved PVC skirtingof approved hight including cutting,				
	adhesive, all fixing accessories and arrangements, etc. Complete in all respect				
	and as per drawings, details &as directed by the Engineer Incharge.	Rft	110		-
B-	FLOORING FINISHES:				
12	Vinyl Flooring Planks. (Rubberized Flooring)				
	Providing & fixing in position line & level of approved Vinyl flooring of approved				
	thickness over CC floor complete in all respects, as per drawings, details & as				
	directed by the Engineer.	SFT	427		-
13	C.C Floor				
	Provide and lay 3" thick 1:3:6 cement concrete floor finished of required				
	thickness including curing, hacking of existing surface for bonding where				
	necessary, etc, Complete in all respect as per drawings, specifications & as				
	directed by the Engineer Incharge.	SFT	427		-
14	Porcelain Tile Flooring.				
	Providing and Laying of Porcelain tile flooring including the cutting of tile as per				
	specified size in the drgs with 1:4 cement sand mortar base & bond of required				
	thickness so as to achieve a minimum overall finished floor thickness of 3",				
	setting the tiles with neat cement mortar, butt joints if required with approved				
	waterproof grout, curing, cleaning, hacking / chipping of existing surface for				
	bonding where necessary, etc. Complete in all respect, as per drawing and				
	instruction of the Architect. For Payment Net tile area will be measured.	Sft	187		-
C-	CEILING FINISH.				
15	Gypsum Suspended False-Ceiling.				
	Providing and installing in position gypsum board false ceiling 12mm thick				
	(Elephant brand, Thermec or equivalent) best quality gypsum sheet including the				
	cost of galvanized iron adjustable clutch wire hanging system, horizontal and				
	vertical framework of approved material, making cove/Bulkheads/light pelmet,				
	fiber tape on joints, provision of openings for all lights fixtures, linear grills and				
	diffusers and providing aluminum flush band for protection of edges/corners				
	where ever required including cost of minimum 3 coats of matt enamel paint				
	(ICI/Berger/Nippon), all hardware, wastage, cutting, lifting etc., complete in all				
	respect as per drawing, specifications & as directed by the Engineer Incharge.				
	(For payment horizontal surface LxB will be measured)				
а	Hall	Sft	427		-
b	Kitchen	Sft	108		-

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

S.#	Description	Unit	Qty	Rate	Amount
16	Distemper Paint.				
	Provide and apply Distemper paint minimum three coats of approved quality				
	and shade (Burger/Kansai/ICI) on RCC ceiling/beams over one coat of primer and				
	base preparation up to required height and level, including preparing the				
	surfaces smooth with carborandum stone, filling the depression with putty,				
	scraping with sand paper, cleaning the surfaces etc., complete in all respects as				
	per drawings, specifications & as directed by Engineer Incharge.	Sft	275		-
E-	Misc. Work.				
17	Vanity in Kitchen & Washroom				
	Providing and fixing of vanity counter consisting of $\mbox{\em 4}\mbox{\em 7}$ thick pre-polished Marble				
	top surface with drop ledge, over 3"th RCC slab (Plaster finished (where				
	required) to be constructed on site as per detail & Architect specification				
	including the cost of reinforcement in RCC Slab structure, cutting space of wash				
	basin, filling the joints with neat slurry, using matching colour / pigment, nail,				
	glue, wastage, etc, complete in all respects as per drawings, specifications & as				
	directed by the Engineer Incharge.	Sft	50.00		-
	Laminate Doors				
	Providing, making and installing in position wooden doors, consisting of 1-1/2"				
	thick solid core flush shutter (for flush door shutters partal wood infill framing),				
	approved formica finish (Patex by Formite or approved equivalent) on both sides				
	of shutter with solid oak wood lipping on edges with approved polish finish,				
	100mm wide black alumunium frame for door of approved sections & sample,				
	including of approved, hardwares, hinges, lock, handle, glue, silicone sealant,				
	wastage, lifting, cutting, fixing, etc., complete in all respect as per drawing,				
	specifications & as directed by the Engineer Incharge. (Base Price of Hardware				
	Rs 12,000 per Door). (For payment frame to frame size will be measured.)				
		Sft	195		-
19	Mirror in Toilet				
	Providing and Installation in position 6mm thick imported Belgium mirror with				
	ply backing fixed on MS Frame to be fixed in existing finish wall as shown in				
	drawings and details, including hardware's, wastage, lifting, etc., complete in all				
	respects.	Sft	25		-
20	Rollup Blinds (Manual Operated)				
	Provide and install in position Roll-up window blinds with 3% sunscreen in white				
	/blackout of approved sample (Thermec or approved equivalent) including				
	wastage, lifting, etc, complete in all respect as per drawing, specifications & as				
	directed by the Engineer Incharge. Net Blind (including top & bottom channel)				
	area will be measured for payment.	Sft	72		-
	Pantry Cabinet				
	Providing, making and fixing in position wooden cabinets, consisting of 1-1/2"x				
	1"thick partal wood structure solignum treated internal frame, with 3/4"th				
	laminated board (Alnoor) finishes shelfs, partition & 1/2" thick laminated				
	shutter (Alnoor) with approved lipping, 3/4" thick chemically pre-polished				
	granite resting on rough wood frame as shown in drawing as per required size,				
	thickness & design pattern, including all hardwares, hinges, handles, lockset,				
	wastage, cutting, lifting, etc., complete in all respect as per drawing,				
	specifications & as directed by the Engineer Incharge. For Payment Front				
	Elevation area will be measured with-out any depth and thickness.				
i	Base Cabinet	Sft	40		-
	Hanging Cabinet	Sft	60		-

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

S.#	Description	Unit	Qty	Rate	Amount
22	Precast Slab Roofing				
	Providing, laying, placing in position Precast Slab Roofing with Precast Girders (I-				
	Beams) as per site requirements including placing of plastic sheet over the slab				
	and Laying of 1" thick PCC 1:2:4 Screeding over entire roof surface maintaining				
	required slope and surface finish with steel trowel complete in all respects as per				
	drawing, specificatins & as directed by the Engineer. For Payment net surface				
	area of Slab will be measured.	Sft	624		-
23	Fibre Glass Shed work				
	Providing and installation of Fibre Glass Shed over open area comprising of the				
	following				
	a) For Dimensions: L=27' x W17', 7' x 21'				
a)	Vertical Pillers of MS Iron Pipe 3"x3" (Rectangle X-Section) or 3" Dia (circular				
	pipe) in 14 gauge with Base & Top Plates welded with pipe and including all				
	hardware & 3 coats of synthetic enemal paint at different locations as shown on				
	drawing, complete in all respects & as directed by the Engineer Incharge.				
b)	Frame resting over the vertical pillers made of MS Iron Pipe of x-section 2"x4" in				
	14 gauge with all hardware & 3 coats of synthetic enemal paint complete in all				
	respects & as directed by the Engineer Incharge.				
c)	Providing, laying, placing in position over the frame & fixing of 4mm thick Fibre				
	Glass sheet of approved brand & quality including all accessories etc. complete				
	in all respects & as directed by the Engineer Incharge.				
d)	Complete installation & Finishing with all labour etc.	Sft	606		-
24	b) For Dimensions: L=16' x W=6'.6"				
a)	Vertical Pillers of MS Iron Pipe 3"x3" (Rectangle X-Section) or 3" Dia (circular				
	pipe) in 14 gauge with Base & Top Plates welded with pipe and including all				
	hardware & 3 coats of synthetic enemal paint at different locations as shown on				
	drawing, complete in all respects & as directed by the Engineer Incharge.				
b)	Frame resting over the vertical pillers made of MS Iron Pipe of x-section 2"x4" in				
	14 gauge with all hardware & 3 coats of synthetic enemal paint complete in all				
	respects & as directed by the Engineer Incharge.				
c)	Providing, laying, placing in position over the frame & fixing of 4mm thick Fibre				
	Glass sheet of approved brand & quality including all accessories etc. complete				
	in all respects & as directed by the Engineer Incharge.				
d	Complete installation & Finishing with all labour etc.	SFT	104		-
F-	Roof Treatment				
25	Waterproofing				
	Providing, placing & overlaping Hy-Grip Bitumenous-Water Proofing Membrane				
	4 mm thick over entire roof area with surface preparation, primer coat,				
	overlaping, straightening, cutting & fixing with gas heater complete in all				
	respects and as directed by the Engineer Incharge.				
	Room with Toilets	Sft	550		
	Guard Room with Toilet & Store	Sft	195		
	TOTAL COST OF BALANCE CIVIL WORK AT ROOF TOP FLOOR:				-

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

S.#	Description	Unit	Qty	Rate	Amount
BAL	ANCE CIVIL WORK AT FIRST FLOOR				
Α	WALL FINISHES:				
A-1	Plastic Emulsion Paint.				
	Providing and applying final coat of Plastic Emulsion paint of approved quality				
	and shade (Berger, ICI or equivalent) on walls & other surfaces after				
	surafce/base preparation upto any height and level including preparing the				
	surfaces smooth by putty filling, scraping with sand paper, cleaning the surface				
	(where required), complete in all respects, as per specifications, drawings, and				
	as directed by the Engineer incharge.	Sft	7,840		-
В	CEILING FINISH.				
B-1	Distemper Paint				
	Providing and applying Distemper Paint minimum single/final coat of approved				
	quality and shade (Burger/Kansai/ICI) on RCC ceiling/beams after surafce/base				
	preparation upto any height and level including preparing the surfaces smooth				
	with carborandum stone, filling the depression with putty, scraping with sand				
	paper, cleaning the surfaces etc. complete in all respects, as per specifications,				
	drawings, and as directed by the Engineer incharge.	Sft	2,450		-
	Distemper Paint  Providing and applying Distemper Paint minimum single/final coat of approved quality and shade (Burger/Kansai/ICI) on RCC ceiling/beams after surafce/base preparation upto any height and level including preparing the surfaces smooth with carborandum stone, filling the depression with putty, scraping with sand paper, cleaning the surfaces etc. complete in all respects, as per specifications,				-
	TOTAL COST OF BALANCE CIVIL WORKS:				-

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office

## **BILL OF QUANTITIES (ADDITIONAL CIVIL WORKS)**

S.#	Description	Unit	Qty	Rate	Amount
ADDIT	IONAL CIVIL WORKS AT GROUND FLOOR				
i)	Demolition				
	Dismantling of existing Tiles/Marble or other flooring and Sub floor including				
	removal/disposal up to any lead of debris complete as per site conditions and				
	as directed by the Engineer	JOB	1		-
ii)	Ceramics Tile Flooring.				
	Laying Floor of ¼" thick Glazed Ceramic Tiles of approved quality, size &				
	colour set white cement 1:2 over ¾" thick cement mortar 1:2 including				
	finishing, polishing etc. complete in all respect as shown on drawings or as				
	directed by the Engineer.	SFT	240		-
iii)	C.C Floor				
	Provide and lay 3" thick (avg.) 1:3:6 cement concrete floor finished of				
	required thickness including curing, hacking of existing surface for bonding				
	where necessary, etc, complete in all respect as shown on drawings or as	C.C.	240		
	directed by the Engineer.	Sft	240		-
ADDIT	IONAL CIVIL WORKS AT FIRST FLOOR				
1	MDF Stud Partition.				
	Providing, making and fixing of 4" thick MDF Board low height partition				
	comprising of 1/2" thick MDF boards (both side) over rough wood framing				
	structure fixing of frame on floor including all fixing accessories and				
	arrangements, scaffolding, making openings, cutting of electric switch board				
	etc., as shown in drawing & details, complete in all respect amd as instructed				
	by the Architect. (This job will be coordinated with electrical works. (For				
	Payment one side exposed Partition area will be measured).	Sft	200		-
2	Soft Board over MDF Partition				
	Provide and install soft board over MDF partition incuding the cost of				
	approved quality fabric, pasted over soft board, including cutting, ifting,				
	wastage etc complete in all respect, as per drawings, specifications and as	c.c.	440		
	instruted by Architect	Sft	110		-
ADDIT	IONAL CIVIL WORKS AT ROOF TOP FLOOR				
1	DEMOLITION				
	Cutting, chiseling, dismentling, removing & disposal up to any lead of				
	following existing elements including block masonry, stud partition, doors,				
	floor tiles, false ceiling, light fixtures, plumbing fixtures pipe and fittings, etc.				
	Complete as per site conditions and and as directed by the Engineer.				
a	Masonry Walls	SFT	126		-
b	All Tiles/Marbles or other flooring	SFT	492		-
С	False Ceiling & Roof with Gutters	SFT	492		-
2	MDF Stud Partition.  Providing, making and fixing of 4" thick MDF board low height partition 7ft x				-
	7ft comprising of 1/2" thick MDF boards (both side) over rough wood framing				
	structure fixing of frame on floor including all fixing accessories and				
	arrangements, scaffolding, making openings, cutting of electric switch board				
	etc., as shown in drawing & details, complete in all respect amd as instructed				
	by the Architect. (This job will be coordinated with electrical works. (For				
	Payment one side exposed Partition area will be measured.)	Sft	100		-
	TOTAL COST OF ADDITIONAL CIVIL WORKS:				-
	TOTAL COST OF ADDITIONAL CIVIL WORKS.				_

# **Karachi Bus Rapid Transit Red Line Project**

# RFR for Balance Civil & MEP Works of TransKarachi Corporate Office **BILL OF QUANTITIES**

# **SUMMARY OF COST (MEP WORKS)**

S. #.	Description	Amount (Rs)	Remarks
ELECTI	RICAL & ALLIED WORKS ( LV & ELV WORKS)		
Α	WIRING / WIRING ACCESSORIES ETC.	-	
В	SWITCHES, SOCKETS, OUTLET & ACCESSORIES	-	
С	LIGHT FIXTURES & FANS	-	
D	MAIN. SUB-MAIN CABLES, CONDUIT & CABLE TRAY	-	
Е	SWITCH BOARDS AND DISTRIBUTION BOARDS	-	
F	UN-INTRRUPTED POWER SUPPLY		Already Completed
G	EARTHING SYSTEM		Already Completed
Н	WIRING & ACCESSORIES FOR DATA / VOICE SYSTEM	-	
- 1	WIRING & ACCESSORIES FOR FIRE ALARM SYSTEM	-	
J	WIRING & ACCESSORIES FOR CCTV SYSTEM	-	
AC WC			
1	A/C POWER AND PIPING WORKS	-	
	SUB-TOTAL ELECTRICAL & A/C WORKS:	-	
PLUMI	BING WORKS		
1	WATER SUPPLY	-	
2	ISOLATION VALVE		Already Completed
3	WATER TANK CONNECTION		Already Completed
4	DRAINAGE	-	
5	DRAINAGE SPECIALITIES	-	
6	GRATINGS, MANHOLES AND GULLY TRAPS	-	
7	EXTERNAL CONNECTIONS		Already Completed
8	PLUMBING FIXTURES	-	
	SUB-TOTAL PLUMBING WORKS:	-	
	TOTAL COST OF MEP WORKS	-	
	SST @ 8% / As per Government applicable Taxes	-	
	FINAL COST OF MEP WORKS:	-	

## Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office **BILL OF QUANTITIES**

#### MEP - Remaining works (ELECTRICAL & ALLIED WORKS)

Note: Contractor must visit the site and must notify in written if any additional works required for complete operation of site (Basement / Ground / 1st / Roof / External) and not covered in below items. Same must be quoted seperately and attached with the quote complete in all respects. Once quote is received, no quantity / financial variation to be provided. (Applicable for Electrical / AC & Plumbing Works)

									1	
	em	Description	Unit	Qty		apply	Inst	tallation	Co	mposite
N	0.	200.151.01.		٦٠,	Rate	Amount	Rate	Amount	Rate	Amount
ELE	СТ	RICAL & ALLIED WORKS ( LV & ELV WORK	S)							
SEC	TIO	N - A : WIRING / WIRING ACCESSORIES ETC MAK	E : PAK	ISTAN CABI	.ES					
1	а	Wiring of light circuit from DB to switch, and switch to switch or switch to first light point directly controlled from DB with single core PVC insulated 2x1C-2.5 Sq.mm + 1x1C-2.5 (ECC) in 25mm dia pvc conduit.	Nos.	4		-		-	-	-
	b	Wiring from switch to first light point with 2 x 1C - 1.5 sq.mm + 1 x 1C - 1.5 sq.mm (ECC) wires in 25 mm dia PVC conduit complete in all respect.	Nos.	50		-		-	-	-
	С	Same as above item b but from point to point.	Nos.	25		-		-	-	-
	d	Wiring of power circuit from DB to first power socket with $2 \times 1C - 2.5$ sq.mm + $1 \times 1C - 2.5$ Sq.mm PVC cables in 20 mm dia PVC conduit as shown in drawings complete in all respect.	Nos.	6		-		-	-	-
	е	same as above but outlet to outlet (Back to Back and Point to point upto 4' shall be considered as one).	Nos.	25		-		-	-	-
	f	Wiring of Single phase A.C power circuit from DB to A.C with $2 \times 1C - 4 \text{ sq.mm} + 1 \times 1C - 4 \text{ Sq.mm}$ PVC wires in 25 mm dia PVC conduit as shown in drawings complete in all respect.	Nos.	4		-		-	-	-
		Sub-Total A:				-		-		-
SEC	TIO	N - B: SWITCHES, SOCKETS, OUTLET & ACCESSOR	IES MA	KE : ORANG	SE ELECT	RIC / CLIPS	<b>AL</b>			
1		Following Switches etc. with M.S back box complete in all respect. Make Orange or Equivalent. (Note: Weather-proof required for external areas)								
	а	1 - Gang. (1-way)	Nos.	5		-		-	-	-
	b	2 - Gang. (1-way)	Nos.	11		-		-	-	-
		3 - Gang. (1-way)	Nos.	5		-		-	-	-
2	d	5 - Gang. (1 -way) Following Sockets with all accessories complete in all respects	Nos.	2		-		-	-	-
	а	13 A International Switch socket outlet	Nos.	55		-		-	-	-
	b	Flat pin switch socket outlet simplex	Nos.	20		-		-	-	-
		13 A International Switch socket outlet (WP)	Nos.	10		-		-	-	-
		Ceiling/Wall Mounted Spur Outlet for CCTV	Nos.	5		-		-	-	-
3		Following type Data outlet with all accessories complete in all respects								
	а	Telephone / Data outlet Simplex RJ-45 including I.O's with face plate, back box and all installation accessories complete in all respects.		8		-		-	-	-
	b	Telephone / Data outlet Duplex RJ-45 including I.O's with face plate, back box and all installation accessories complete in all respects.	Nos.	30		-		-	-	-
	С	TV outlet with RG-6 Coaxial cable and all installation accessories complete in all respects.	Nos.	2		-		-	-	-
l		Sub-Total B:				-		-		-

## Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office **BILL OF QUANTITIES**

#### MEP - Remaining works (ELECTRICAL & ALLIED WORKS)

Note: Contractor must visit the site and must notify in written if any additional works required for complete operation of site (Basement / Ground / 1st / Roof / External) and not covered in below items. Same must be quoted seperately and attached with the quote complete in all respects. Once quote is received, no quantity / financial variation to be provided. (Applicable for Electrical / AC & Plumbing Works)

Ite	em				Su	pply	Inst	allation	Co	omposite
	0.	Description	Unit	Qty	Rate	Amount	Rate	Amount	Rate	Amount
SEC	TIO	N- C : LIGHT FIXTURES & FANS								
		Supply, Installation, Testing & Commissioning of the								
		following Lights including all hanging, mounting and								
		installation arrangements, rods, fixtures etc.								
1		required for successful completion of scope of								
		works as per GEP and as per detail shown on								
		drawing incoordination with all trades and								
		complete in all respect.								
	а	8W LED RECESSED LIGHT - 2500K	Nos.	38		•		•	-	-
	b	15W LED Pandenant light	Nos.	2		-		-	-	-
	С	LED wall light	Nos.	12		-		-	-	-
	d	LED Bulk Head light - 10 Watts	Nos.	12		•		•	-	-
	е	Flood Light for external lighting - 100 Watts	Nos.	4		-		-	-	_
	f	Exhaust Fan 6"Dia (in w/rooms) with Glass & Frame	Nos.	5		-		•	-	-
		Exhaust Fan 6"Dia (in w/rooms) without Glass &	Nos.	7		_		_	_	_
		Frame								
	g	Wall Bracket Fan	Nos.	3		-		-	-	-
		Sub-Total C:				-		-		-
EC	CTIO	N - D : POWER CABLES / CONDUITS & CABLE TRA	·Υ	1					1	
		Supply, Installation of following sizes of cables								
1		including terminations of both ends compelete with								
_		all accessories i.e lugs, glands etc as per directed by								
		consutant / client.								
		5x1C - 10 Sq.mm as ECC Cu/PVC cable From MDB to	_							
	а	DB-External/Roof in 38mm dia PVC conduit Class-D.	Rm	16		-		-	-	-
		Following sizes of DVC conduits complete in all								
2		Following sizes of PVC conduits complete in all								
	1	respect 32 mm dia.	Rm	Rate Only						
	_	25 mm dia.	Rm	Rate Only					-	
	_	20 mm dia.	Rm	Rate Only					_	
	_	Following sizes of Cable Trays: Solid/Perforated	11111	Nate Only						
		powder coated cable tray including all hanging/								
3		supporting accessories, complete in all respects, as								
		per site requirement and satisfaction of client.								
	а	300x100 mm	Rm	2		-		-	-	-
		450x75 mm	Rm	3		-		-	-	-
		Sub-Total D:				-		-		-
EC	TIO	N - E : DISTRIBUTION BOARDS								
		Installation, testing and commissioning of existing								
		DB-ROOF including addition of following breakers								
		including termination and mounting arrangements,								
1		etc, complete in all respects as per satisfaction of	Job	1						
т		the client/consultant .	าดถ	1		-		-	-	-
		a) 40 Amp TP MCB								
		b) 16 Amp SP MCB								
		c) 20 Amp SP MCB								
	l	Sub-Total E:		1		_		-	1	_

## Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office **BILL OF QUANTITIES**

#### MEP - Remaining works (ELECTRICAL & ALLIED WORKS)

Note: Contractor must visit the site and must notify in written if any additional works required for complete operation of site (Basement / Ground / 1st / Roof / External) and not covered in below items. Same must be quoted seperately and attached with the quote complete in all respects. Once quote is received, no quantity / financial variation to be provided. (Applicable for Electrical / AC & Plumbing Works)

No. Destription   City   Rate   Amount   Rate		Description	Unit	Otv	31	ıpply	inst	allation	Co	mposite
Supply, installation, Testing and Commissioning of Inciloving complete in all respects as per drawings / spees, including Fluke Test Reports.  Wiring of CAT-6 cables for Data/Voice System in 25mm Dia PVC Conduit from each data/voice point to network switch/patch panel in already existing server room at 1st Floor (upto 4 Nos. CAT-6 cables in 1 conduit). Make: 3M / Schneider  Sub-Total I:  ECTION - I: WIRING & ACCESSORIES FOR FIRE ALARM SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / spees. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 sq. mm PVC/PVC (Fire Resistance Cable - 2 hours fire rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors  b Smoke Detectors  c Heat Detectors  d Manual Call Point (Break Glass)  e Sounder - Flasher  fire Alarm Control Panel - 4 Zone Coventianal  Fire Alarm Control Panel - 4 Zone Coventianal  Fire Alarm Control Panel - 4 Zone Coventianal  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from points to device complete in all respects as per drawings / spees.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects in all respects in all respects in all proper drawings and specifications complete in all respects in all prespects in all prespects in all prespects as per drawings / spees.  2 Miring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects in all prespects in all prespects as per drawings / spees.  2 Miring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects in all prespects in	No.	Description	Onit	Qty	Rate	Amount	Rate	Amount	Rate	Amount
Supply, installation, Testing and Commissioning of following complete in all respects as per drawings / spees, including Fluke Test Reports.  Wiring of CAT-6 cables for Data/Voice System in 25mm Dia PVC Conduit from each data/voice point to network switch/patch panel in already existing server room at 1st Floor (upto 4 Nos. CAT-6 cables in 1 conduit). Make: 3M / Schneider  Sub-Total I:  ECTION - I: WIRING & ACCESSORIES FOR FIRE ALARM SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 and in the process of the special proce										
1 following complete in all respects as per drawings / specs, including Fluke Test Reports.  Wiring of CAT-6 cables for Data/Voice System in 25mm Dia PVC Conduit from each data/voice point on the to network switch/patch panel in already existing server room at 1st Floor (upto 4 Nos. CAT-6 cables in 1 conduit). Make: 3M / Schneider  Sub-Total I:  ECTION - I: WIRING & ACCESSORIES FOR FIRE ALARM SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 sq. mm PVC/PVC (Fire Resistance Cable- 2 hours fire components  b. Smoke Detectors  c. Heat Detectors  d. Manual Call Point (Break Glass)  Nos.  e. Sounder - Flasher  f. Fire Alarm Control Panel - 4 Zone Coventiaonal  Sub-Total I:  ECTION - J: SUPPLY, INSTALLATION, TESTING & COMMISSIONING - WIRING & ACCESSORIES FOR CCTV SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects as per drawings / specs.  D. 2 MP camera Dome/Bullet Type with verifocal lens b. 2.5 mm - 8 mm. Make, Hik-vision  Nos.  7	ECTIC	N - H: WIRING & ACCESSORIES FOR DATA/VOICE	<u> </u>							
25mm Dia PVC Conduit from each data/voice point to network switch/patch panel in already existing server room at 1st Floor (upto 4 Nos. CAT-6 cables in 1 conduit). Make: 3M / Schneider  Sub-Total I:  CECTION - I: WIRING & ACCESSORIES FOR FIRE ALARM SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduit from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5. Sq.,mm PVC/PVC (Fire Resistance Cable-2 hours fire rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors  c Heat Detectors  Nos. 15  Nos. 15	1	following complete in all respects as per drawings /								
ECTION - I: WIRING & ACCESSORIES FOR FIRE ALARM SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 Sq.mm PVC/PVC (Fire Resistance Cable- 2 hours fire rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors Nos. 15	а	25mm Dia PVC Conduit from each data/voice point to network switch/patch panel in already existing server room at 1st Floor (upto 4 Nos. CAT-6 cables		28		-		-	-	-
Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 and a rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors  c Heat Detectors  Nos. 15  c Heat Detectors  Nos. 11  d Manual Call Point (Break Glass)  e Sounder - Flasher  f Fire Alarm Control Panel - 4 Zone Coventiaonal  Sub-Total I:  ECTION - J: SUPPLY, INSTALLATION, TESTING & COMMISSIONING - WIRING & ACCESSORIES FOR CCTV SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7		Sub-Total I:				-		-		-
Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 and a rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors  c Heat Detectors  d Manual Call Point (Break Glass)  e Sounder - Flasher  f Fire Alarm Control Panel - 4 Zone Coventiaonal  Sub-Total I:  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7										
following including flexible conduits from points to device complete in all respects as per drawings / specs. Make: Honeywell  Wiring of complete Fire Alarm System with 2C 1.5 So, mm PVC/PVC (Fire Resistance Cable- 2 hours fire rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors Nos. 15 Nos. 50	ECTIC	ON - I: WIRING & ACCESSORIES FOR FIRE ALARM S	SYSTEM							
a Sq.mm PVC/PVC (Fire Resistance Cable- 2 hours fire rating) in 25 mm dia PVC Conduit including fire components  b Smoke Detectors Nos. 50	1	following including flexible conduits from points to device complete in all respects as per drawings /								
c Heat Detectors Nos. 1	а	Sq.mm PVC/PVC (Fire Resistance Cable- 2 hours fire rating) in 25 mm dia PVC Conduit including fire	Nos.	15		-		-	-	-
d Manual Call Point (Break Glass)  e Sounder - Flasher  f Fire Alarm Control Panel - 4 Zone Coventiaonal  Nos. 9  Sub-Total I:  Sub-Total I:  Sub-Total I:  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	b	Smoke Detectors	Nos.	50		-		-	-	-
e Sounder - Flasher f Fire Alarm Control Panel - 4 Zone Coventiaonal Nos. 1 Sub-Total I:  ECTION - J: SUPPLY, INSTALLATION, TESTING & COMMISSIONING - WIRING & ACCESSORIES FOR CCTV SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	С	Heat Detectors	Nos.			-		-	-	-
f Fire Alarm Control Panel - 4 Zone Coventiaonal Nos. 1 Sub-Total I: Sub-Total I:	_	, ,				-		-	-	-
Sub-Total I:  ECTION - J: SUPPLY, INSTALLATION, TESTING & COMMISSIONING - WIRING & ACCESSORIES FOR CCTV SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	_					-		-	-	-
ECTION - J: SUPPLY, INSTALLATION, TESTING & COMMISSIONING - WIRING & ACCESSORIES FOR CCTV SYSTEM  Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	f		Nos.	1		-		-	-	
Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	+	Sub-Total I.				-		-		-
Supply, installation, Testing and Commissioning of following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	FCTIC	I N - I: SUPPLY, INSTALLATION, TESTING & COMM	ISSIONII	NG - WIRIN	IG & ACC	FSSORIES E	OR CCT	/ SYSTEM		
following including flexible conduits from points to device complete in all respects as per drawings / specs.  Wiring of CCTV cameras with Cat-6 cable in 25 mm dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	1							7 31312.01		
a dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects including all accessories.  b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision  Nos. 7	1	following including flexible conduits from points to device complete in all respects as per drawings /								
b 2 MP camera Dome/Bullet Type with verifocal lens 2.5 mm - 8 mm. Make. Hik-vision Nos. 7	а	dia PVC conduit from switch to each camera as per drawings and specifications complete in all respects	Nos.	7		-		-	-	-
Sub-Total J:   -   -	b	2 MP camera Dome/Bullet Type with verifocal lens	Nos.	7		-		-	-	-

## Karachi Bus Rapid Transit Red Line Project

# RFR for Balance Civil & MEP Works of TransKarachi Corporate Office BILL OF QUANTITIES

#### MEP - BILL OF QUANTITIES (ROOF TOP AIR CONDITIONING WORKS)

#### A/C UNITS:

Supply, Installation, testing and Commissioning of Conventional Split Type Air Conditioning Units, including unloading, Lifting, Placing and Supply, installation, testing and comissioning of the supporting arrangements for outdoor units in the external area with proper coating of paints to prevent rusting due to environment conditions, Fixing as shown on the drawings / as per site including Gas charging (if required), complete in all respects

#### COPPER AND DRAIN PIPING:

Supply, Installation, testing and comissioning of copper and drain piping incliduing supporting arrangements and race way as per drawings or as per site complete in all respects.

Sr.	DESCRIPTION	Unit	Qty	Supplying		Installation		Composite	
No.	No. DESCRIPTION			Rate	Amount	Rate	Amount	Rate	Amount
	WALL MOUNTED UNIT (Conventional Type Units) - Including Control wiring of indoor to outdoor.								
1	WM - 1.0 TR	Nos.	2		0		0	0	0
2	WM - 1.5 TR	Nos.	2		0		0	0	0
Total Amount (inclusive of all applicable Taxes):									

# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office BILL OF QUANTITIES

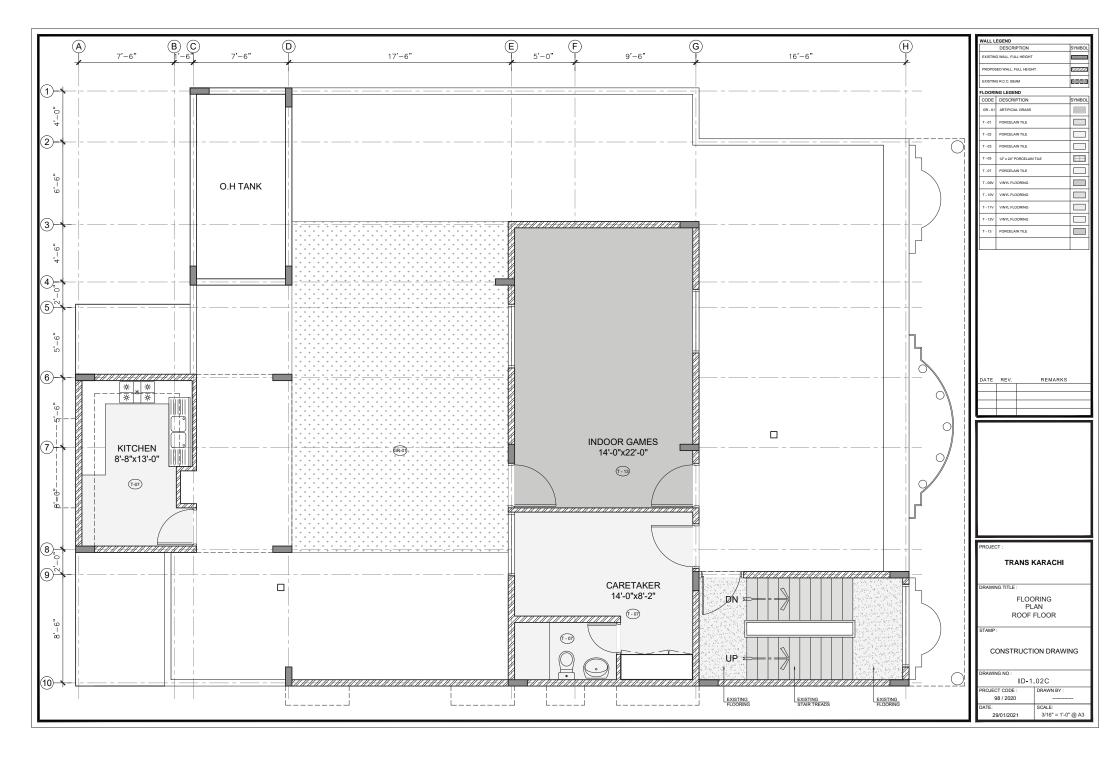
# **MEP - Remaining works (PLUMBING)**

1 S SI P CO P a 3/4 b 1 C 1: d 1:	BING WORKS  SECTION - A: WATER SUPPLY: Cold Water Supply Piping Supply, installation, testing and Commissioning of uPVC plumbing Dipe, including pipe supports, U clamps, cutting, filling, testing/ Commissioning and all accessories as indicated on the drawing, as Der specifications or consultant / client representative approval.  4" dia L" dia L" dia L" dia L" dia L" dia L" DESCRICTOR - D: DRAINAGE		12 12 5 10	-
Si   p   cc   p   cc   p   cc   1   c   1   c   1   c   4   S	Supply, installation, testing and Commissioning of uPVC plumbing pipe, including pipe supports, U clamps, cutting, filling, testing/commissioning and all accessories as indicated on the drawing, as per specifications or consultant / client representative approval.  4" dia L" Sub-Total A:	Rm Rm Rm	12 5	-
Si   p   cc   p   cc   p   cc   1   c   1   c   1   c   4   S	Supply, installation, testing and Commissioning of uPVC plumbing pipe, including pipe supports, U clamps, cutting, filling, testing/commissioning and all accessories as indicated on the drawing, as per specifications or consultant / client representative approval.  4" dia L" Sub-Total A:	Rm Rm Rm	12 5	-
b 1 c 1 d 1 4 S	L" dia L¼" dia L½" dia Sub-Total A:	Rm Rm	12 5	-
c 11 d 11 4 S	L¼" dia L½" dia Sub-Total A:	Rm	5	-
d 1:	1½" dia Sub-Total A:			
4 S	Sub-Total A:	Rm	10	-
				-
	SECTION - D. DRAINAGE			-
1 1-	DECTION D. DIVANIAGE			
Pi cl V p e	Froviding and fixing, uPVC pipes and fittings as per instruction of client / consultant for above ground installations for Soil, Waste & Vent pipes with Kite mark on pipes and fittings including cleanout plug, clamps, hanger collars, supports, specials (bend, tees, Y-tee etc.) as indicated on the drawing, as per specifications and Engineers approval.			
a 1	L-1/2" dia	Rm	10	-
b 2	2-1/2" dia	Rm	20	-
	B" dia	Rm	20	-
d 4	l" dia	Rm	35	-
	Sub-Total D:			-
5 S	SECTION-E: DRAINAGE SPECIALITIES			
a d	Providing and fixing of cleanout plug of the approved self cleaning design with S.Steel grating as specified by the architect, as indicated on the drawing, as per specifications, architectural finishing schedule and Engineers approval.		5	-
ı nı	Providing and fixing UPVC cowl for vent pipe of the following dia ncluding all accessories complete in all respects.			
i 2'	2" dia	Nos.	1	
ii 3	3" dia	Nos.	1	-
iii 4	l" dia	Nos.	3	-
	Sub-Total E:			-
6 S	SECTION-F: GRATINGS, MANHOLES AND GULLY TRAPS			
a as	Construction of $450  \text{mm} \times 450  \text{mm}$ (18" x 18") gully trap with $150  \text{mm}$ P- trap and $300  \text{mm} \times 300  \text{mm}$ (12" x 12")cover (min Weight = $55  \text{kg}$ ) as specified and shown on the drawing, as per specifications and Engineers approval.	Nos.	1	-
	Sub-Total F:			-

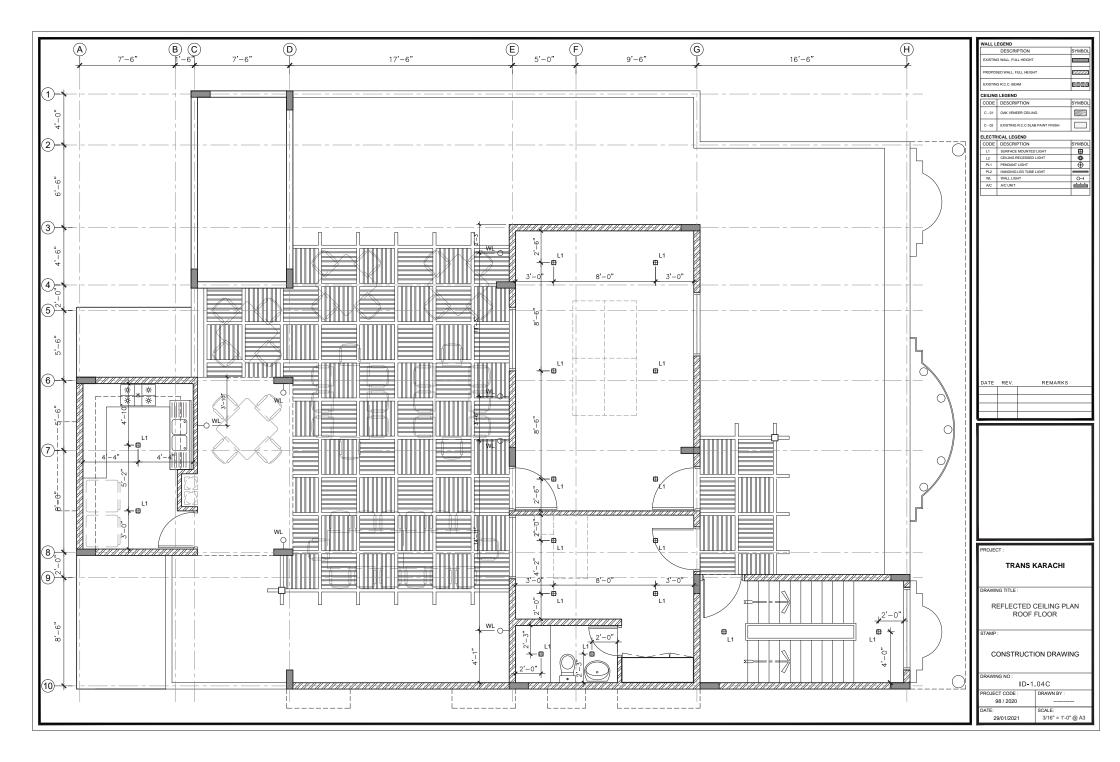
# Karachi Bus Rapid Transit Red Line Project RFR for Balance Civil & MEP Works of TransKarachi Corporate Office BILL OF QUANTITIES

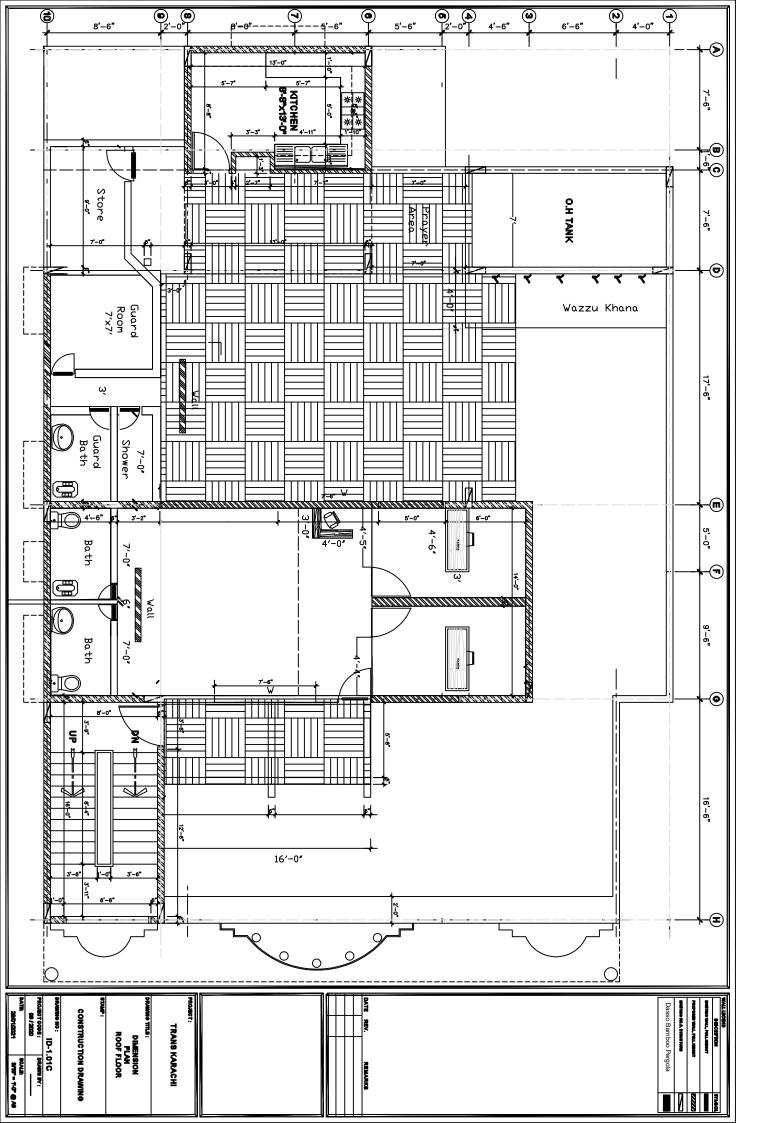
# **MEP - Remaining works (PLUMBING)**

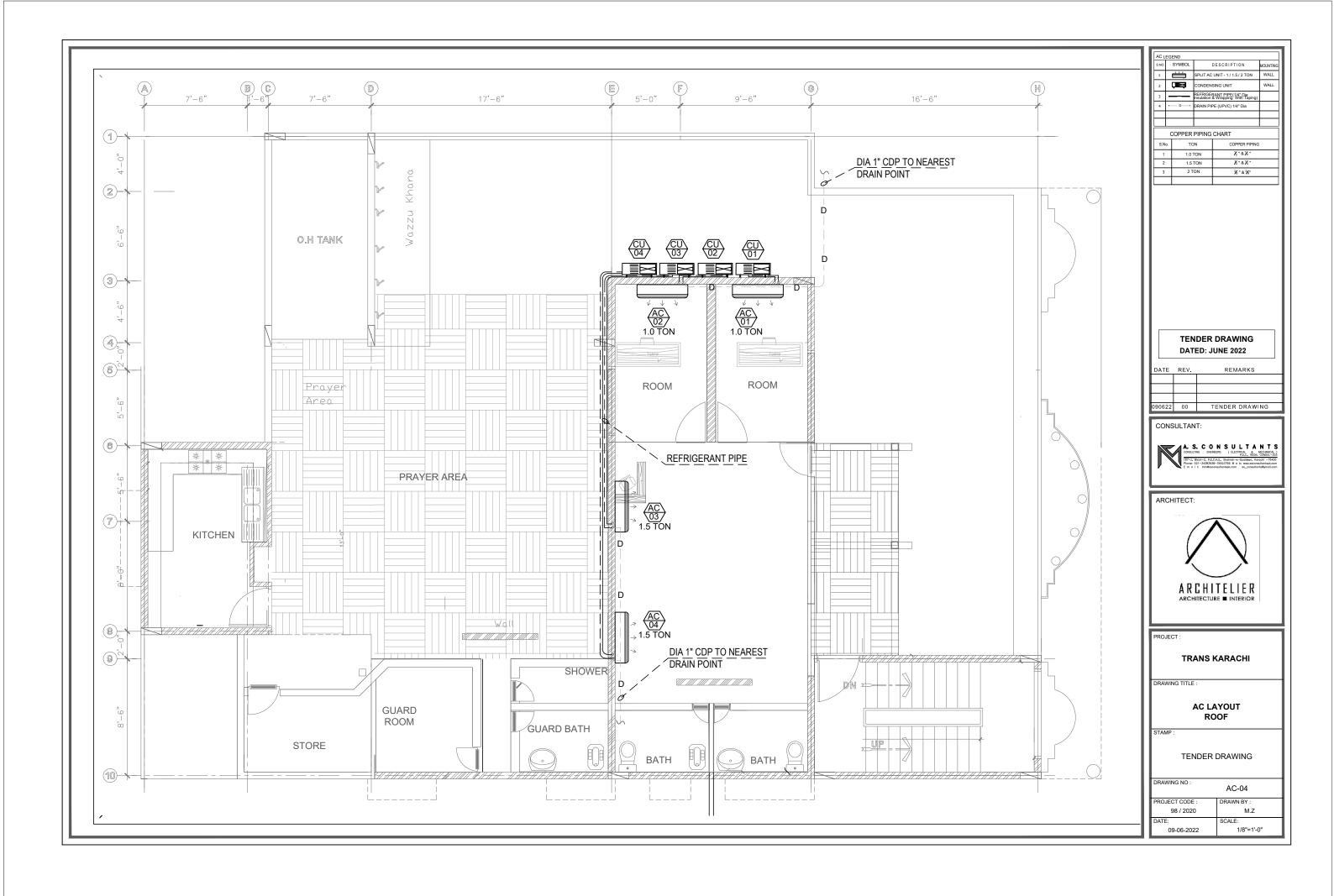
Item No.	Description	Unit	QTY	Rate (Rs.)	Amount (Rs)
8	SECTION-H: PLUMBING FIXTURES:				
a	Providing and fixing of S.Steel Single compartment kitchen/Pantry Sink with mixer, waste trap, Stop cocks with flexible pipes, Flexible drain pipe as per site, specifications and engineer's approval - Local Make	Nos	3		-
b	Indian WC with Flush Tank Complete in all respects incl all acceessories	Nos.	2		-
С	Europian WC with Flush Tank (Coupled Set) Complete in all respects incl all acceessories	Nos.	1		-
	Providing and fixing bath toilet accessories as under:				-
е	Toilet Paper Holder	Nos.	7		-
f	Muslim shower	Nos.	5		-
g	Robe Hooks	Nos.	7		-
h	Towel Railing	Nos.	3	·	-
	Sub-Total H:				-
	TOTAL COST OF PLUMBING WORKS:				-

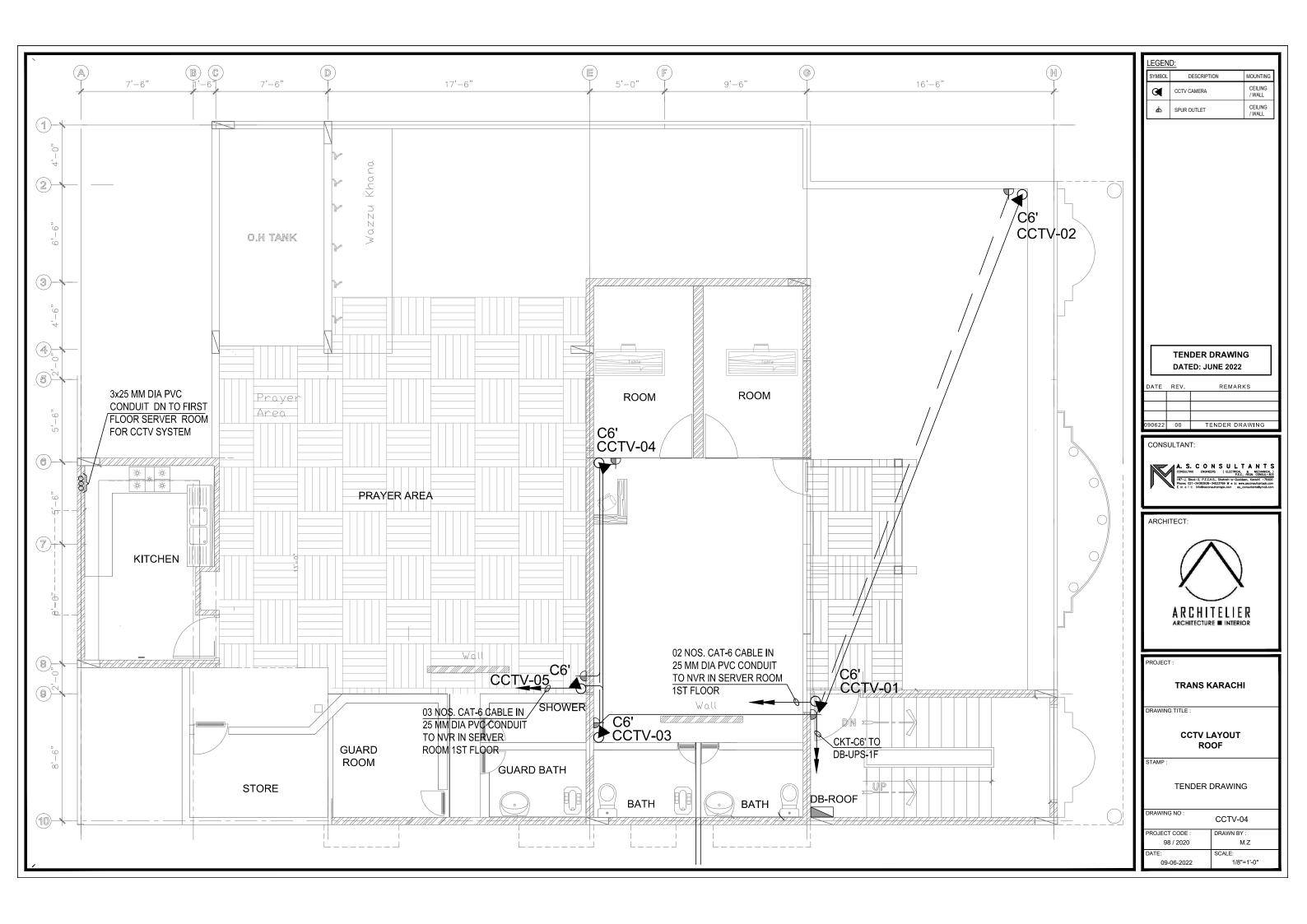


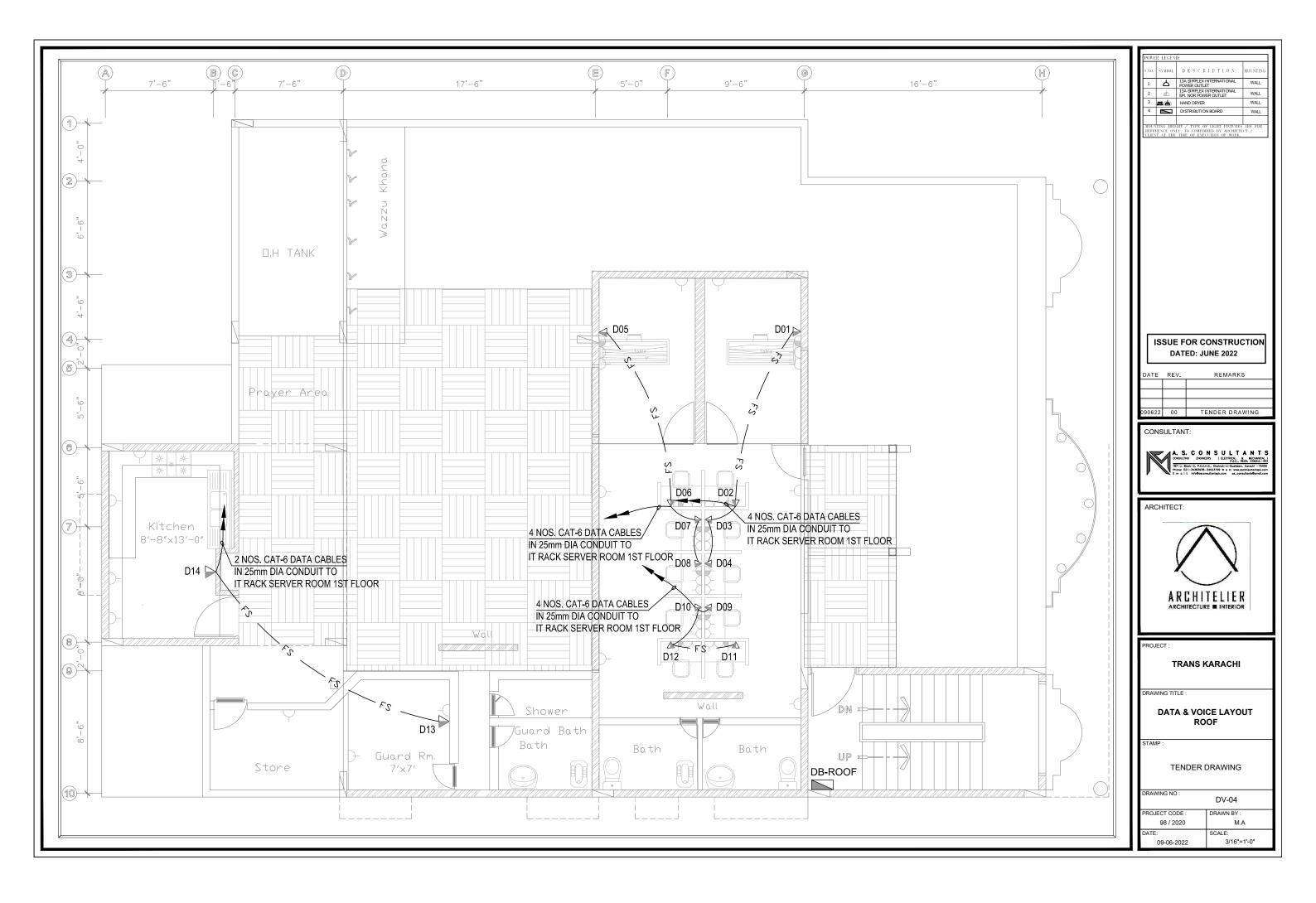
ref ..\..\..\Xrefs\flooring legend.dwg

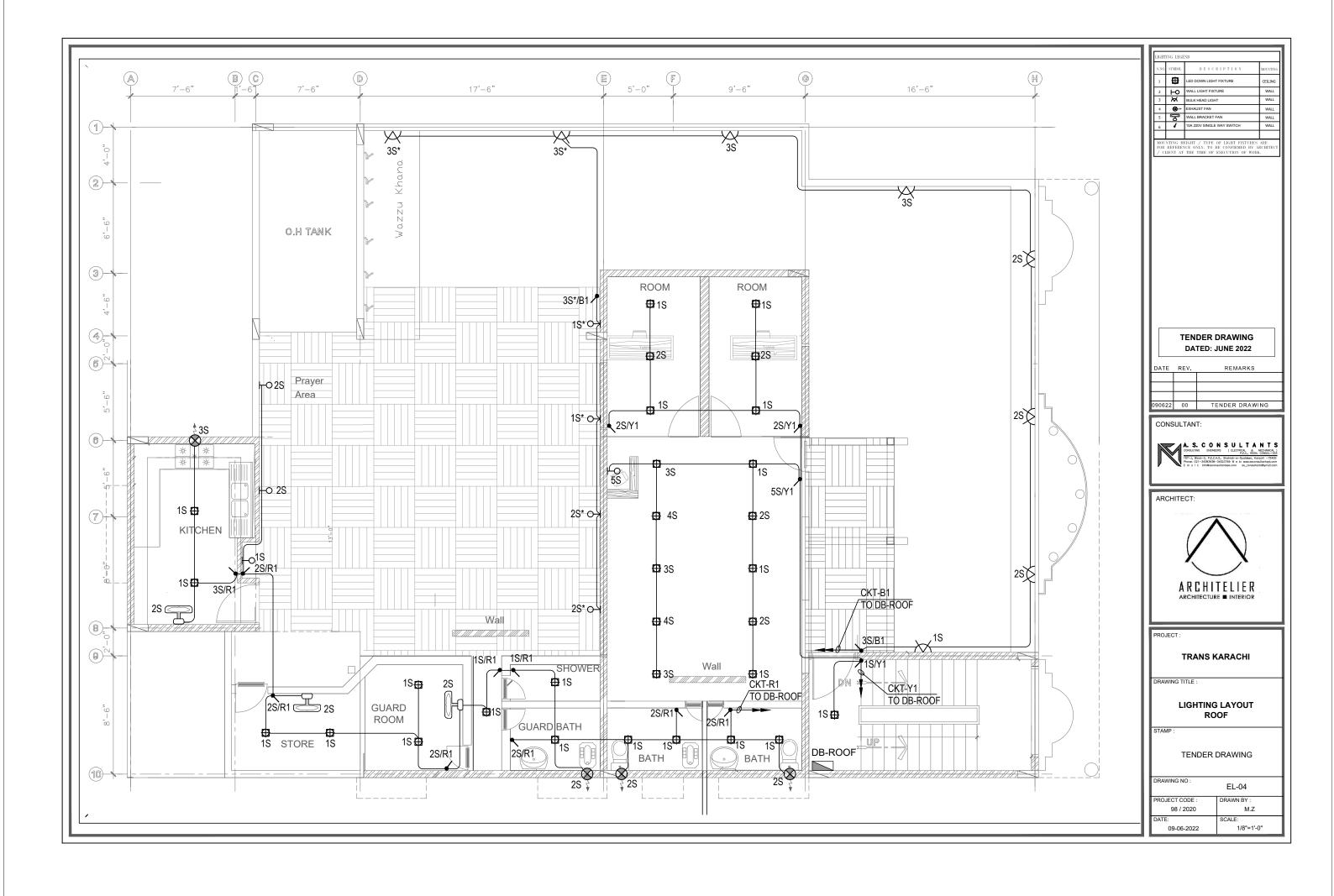


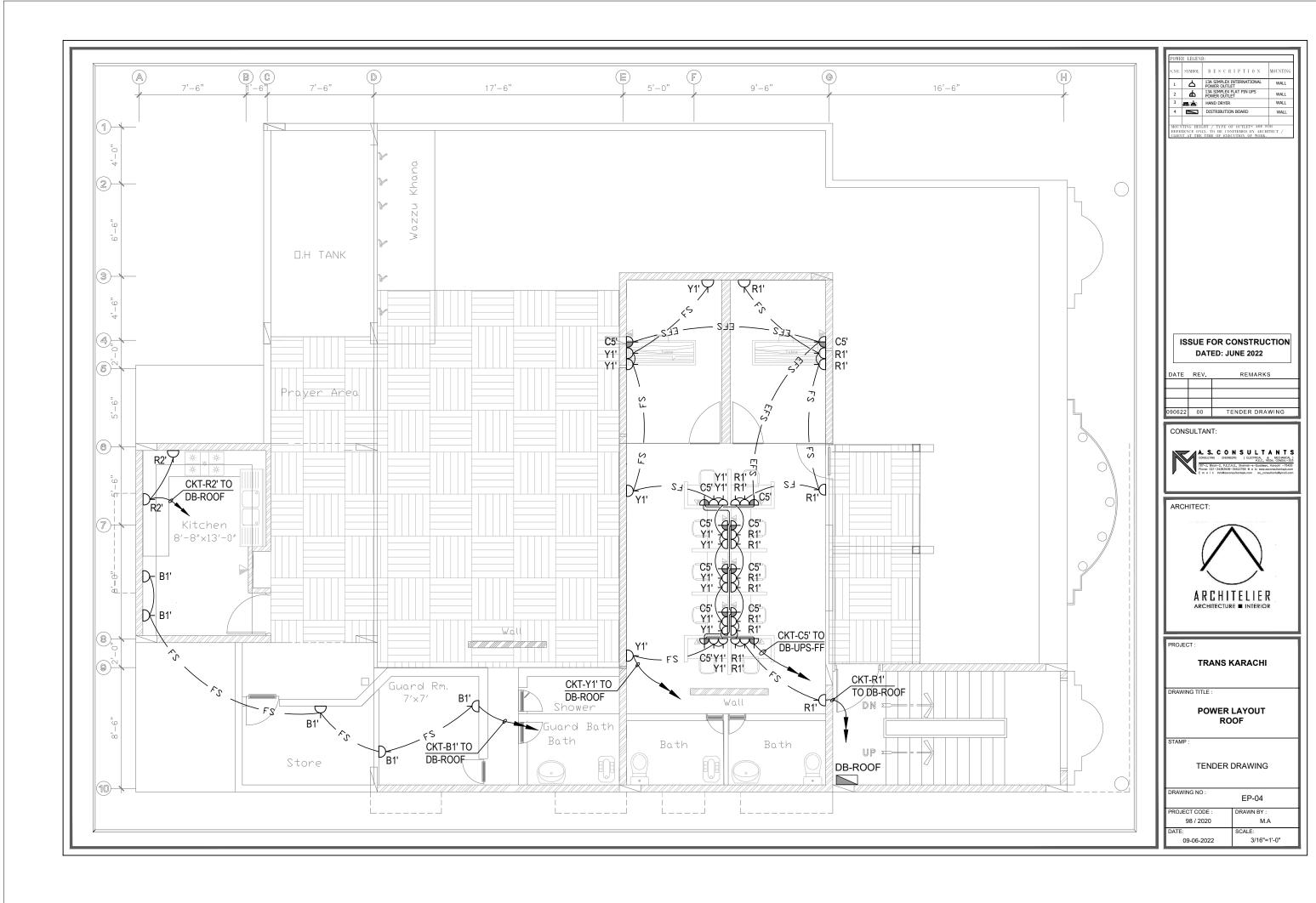


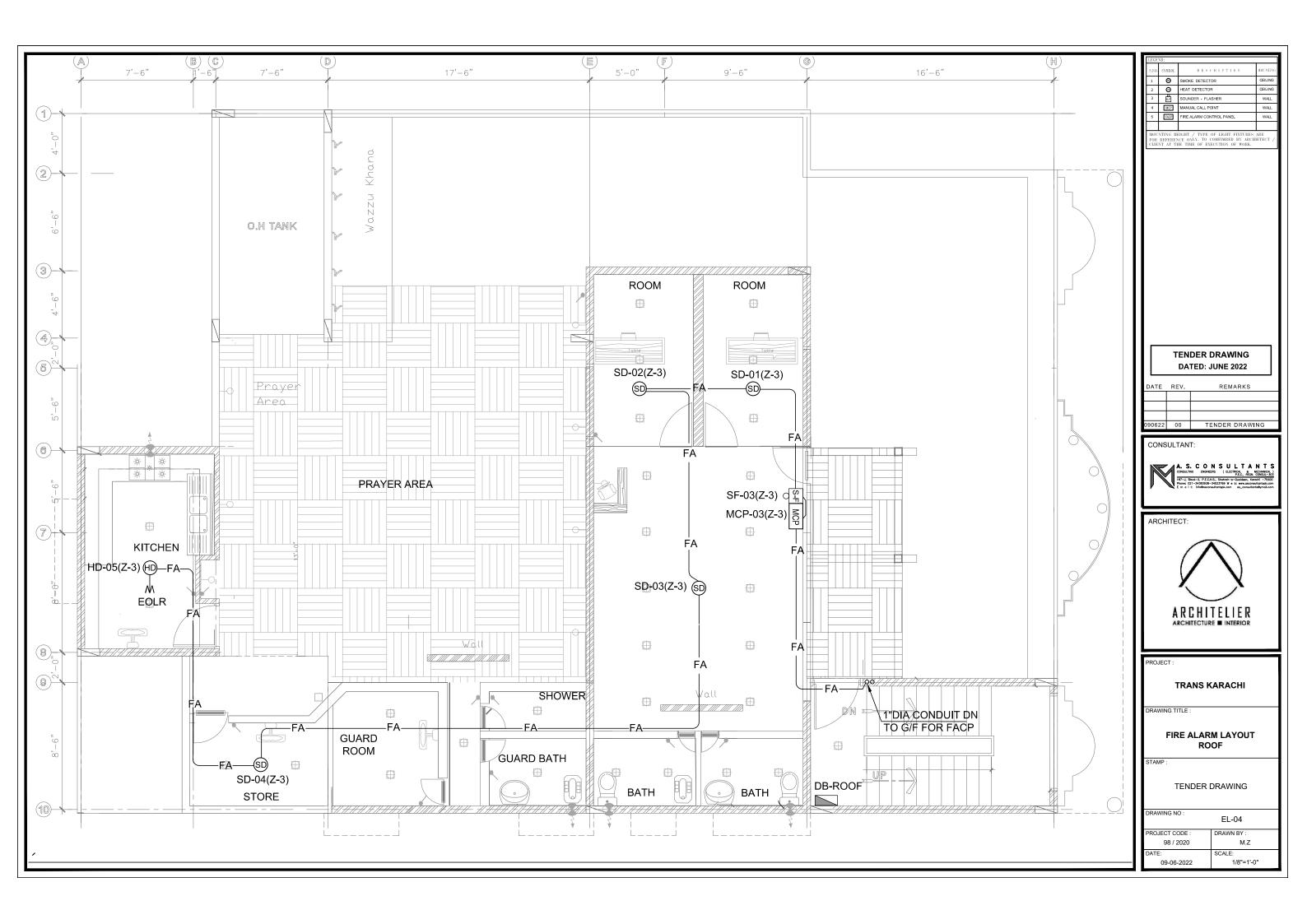
















# PROJECT: 47279-002, KARACHI BRT RED LINE PROJECT GOVERNMENT OF SINDH

# **MINUTES OF PRE-BID MEETING**

(Held on 16<sup>th</sup> June 2022)

For

RFQ to carry out the Balance Civil & MEP Works of TransKarachi Corporate Office

Bid Ref # KBRT-Works-Office Renov-02/2022

June 2022

#### PART – 1: QUERIES AND REPLIES

The following answers to the questions raised by the Bidders shall be considered as additional clarifications/ Addendum to RFQ issued for the subject procurement, and shall form a part of the Contract of successful Bidder.

Sr#	Query	Answers/Remarks/Notes
A.	Civil Works	
1.	Waterproofing is required over the top of roof at Roof-Top Floor.	It is included and BOQ is updated accordingly. Please refer Civil Work BOQ Item # F-25
В.	MEP Works	
1.	The number of ACs shown in Drawing are: Two of 01 Ton & other Two of 1.5 Ton; whereas in the BOQ, all the	1) As the wiring for 01 Ton or 1.5 Ton AC will be the same, the Contractor has to provide points/ connections for four (04) ACs.
	Four (04) ACs are given of 01 Ton. Please clarify.	2) Only one new AC of 01 Ton in one Cabin will be provided & fixed by the Contractor.
		3) 2 <sup>nd</sup> AC of 01 Ton is already available with TK and the Contractor only needs to fix the same.
		4) Two ACs of 1.5 Ton are also available with TK and the Contractor only needs to fix the same.
		Please refer MEP BOQ-Roof-Top Air Conditioning Works Item # 1 (a) & (b)
2.	Fire Alarm system: 4 zone conventional Fire Alarm Panel is proposed. Make is not identified.	Make: Honeywell (Updated in the BOQ of MEP Works)
3.	CCTV cameras at roof: Make is not identified.	Make: HIKVision (Updated in the BOQ of MEP Works)
4.	External lights need to be provided at the entrance.	Item added & Updated in the BOQ of MEP Works. Please refer MEP BOQ Item # C-1(e)
5	Addition of breakers in Roof DB:  Modification required in existing DB.	Circuit Breakers are to be added in the existing Roof DB (already kept) for AC & Power circuits. BOQ item updated/Added accordingly. Please refer MEP BOQ Item # E-1
6.	Cable tray to be extended for covering exposed electrical conduits (outside kitchen wall - GF)	BOQ item updated/Added accordingly. Please refer MEP BOQ Item # D-3(a) & (b)

#### PART-2: BID SUBMISSION

All the Bidders are advised to:

- > Study the issued RFQ Documents carefully especially Terms & Conditions of Draft Contract Agreement before preparing their Quotations.
- > Submit all the required documents as indicated in Section-4 [Preparation of Quotations] of RFQ Document along with their Quotations so that your proposal can be saved from being non-responsive.

----- ALL OTHER TERMS & CONDITIONS OF RFQ &CONTRACT WILL REMAIN UNCHANGED ------