

Volume IA Part 1: Bill of Quantities (BOQ)

Section IV Bidding Form Bill of Quantities (BOQ)

BILL OF QUANTITIES

(a Part of Section IV. Bidding Forms)

Work Items - Bill No. 4 and Bill No. 5

DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO.4
 STATIONS ARCHITECTURAL WORKS

Bill No.	DESCRIPTION	AMOUNT	
		LOCAL (PHP)	FOREIGN ()
	CP104		
Bill No. 4	STATIONS ARCHITECTURAL WORKS		
Bill No. 4A	ORTIGAS NORTH STATION		
Bill No. 4B	ORTIGAS SOUTH STATION		
	TOTAL STATIONS ARCHITECTURAL WORKS		

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4A
 STATION ARCHITECTURAL WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	PART A	EARTHWORKS						
803	803 (1) a	Structure Excavation (Common Soil)	m3	526.88				
803	803 (4)	Gravel Fill	m3	124.58				
1000	1000 (1)	Soil Poisoning/Termiticide Application	m2	723.48				
803	803 (2)	Trimming Works	m2	655.67				
		SUB-TOTAL (PART A - EARTHWORKS)						
	PART D	BUILDING WORKS						
	D.1	STRUCTURAL WORKS						
900	900 (1) (c2)	Structural Concrete (Footings and Slab on Fill) 27.6 MPa at 28 days	m3	84.53				
900	900 (1) (c3)	Structural Concrete (Footing Tie Beams) 27.6 MPa at 28 days	m3	3.56				
900	900 (1) (c4)	Structural Concrete (Columns) 27.6 MPa at 28 days	m3	34.49				
900	900 (1) (c5)	Structural Concrete (Suspended Slab) 27.6 MPa at 28 days	m3	213.81				
900	900 (1) (c6)	Structural Concrete (Beams / Girders) 27.6 MPa at 28 days	m3	107.19				
900	900 (1) (c1)	Structural Concrete (27.6 MPa) at 28 days	m3	1,567.91				
901	901 (1)	Lean Concrete 17 MPa at 28 days	m3	36.97				

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NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
902	902 (1) a1	Reinforcing Steel (Deformed), Grade 40	kg	142,151.09				
902	902 (2) a2	Reinforcing Steel (Deformed), Grade 60	kg	173,276.38				
1047	1047 (2)	Structural Steel	kg	240,191.35				
903	903 (2)	Formworks and Falseworks	m2	14,903.87				
1047	1047 (15)	Hoist Crane Beam Assembly and Anchoring System	ls	1.00				
1047	1047 (16)	Escalator Installation Anchoring	ls	1.00				
1047	1047 (17)	Elevator Installation Anchoring	ls	1.00				
900	900 (8)	Prefomed Joint Fillers	m3	1.53				
1033	1033 (3)	Catwalk for Equipment Maintenance	ls	1.00				
		SUB-TOTAL (D.1 - STRUCTURAL WORKS)						
	D.2	ARCHITECTURAL WORKS						
		Ceiling Works						
1027	1027 (5)	Rubbed Concrete Finish	m2	9,751.02				
1811	1811 (1)	Triangular Aluminum Ceiling	m2	393.92				
1811	1811 (2)	Aluminum Ceiling Panel (Triangular Printed); 1200mm x 600mm	m2	3,782.60				
1811	1811 (3)	Aluminum Ceiling Panel (Triangular Printed); 600mm x 600mm	m2	504.46				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1811	1811 (4)	Spandrel Panel Ceiling	m2	70.67				
1811	1811 (5)	Metal Concealed Ceiling Panel	m2	289.91				
1811	1811 (6)	Curved Metal Panel	m2	1,715.60				
1811	1811 (7)	Aluminum Ceiling Panel with Perforation	m2	117.96				
1811	1811 (8)	Aluminum Ceiling Panel without Perforation	m2	102.16				
1811	1811 (9)	Aluminum Composite Panel Cladding	m2	26.28				
1030	1030 (1)	Concealed Grid Mineral Acoustical Board	m2	380.08				
1030	1030 (2)	Moisture Resistant Gypsum Board	m2	284.73				
1811	1811 (10)	Solid Plate	m2	126.20				
1811	1811 (11)	Stainless Steel Plate and Corner Trim	m2	19.36				
1203	1203 (1)	Stainless Steel Ceiling Panel	m2	10.00				
		SUB-TOTAL (Ceiling Works)						
		Steel Doors and Frames						
1006	1006 (5)	Fire-rated Exit Steel Door Set	m2	140.48				
1006	1006 (1)	Hollow Steel Door Set	m2	55.75				
1006	1006 (7)	Steel Sliding Door Set	m2	10.95				
1006	1006 (8)	Watertight Doors - WS-3	m2	9.20				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1006	1006 (9)	Watertight Doors - WS-6	m2	56.98				
1006	1006 (10)	Steel Folding Doors	m2	4.40				
1818	1818 (1)	Glass Doors	m2	3.94				
		<u>Ironmongeries</u>						
1004	1004 (2) a1	Finishing Hardware Lockset - O/S Key Operation	set	18.00				
1004	1004 (2) a2	Finishing Hardware Lockset - Waterproof Type Gremon Lock	set	2.00				
1004	1004 (2) a3	Finishing Hardware Lockset - Dead Lock	set	1.00				
1004	1004 (2) a5	Finishing Hardware Lockset - Electromagnetic Lock	set	17.00				
1004	1004 (2) a6	Finishing Hardware Lockset - Electromagnetic Lock with Emergency Release Lock	set	31.00				
1004	1004 (2) a7	Finishing Hardware Lockset - Electromagnetic Lock with Emergency Combination Detector	set	3.00				
1004	1004 (2) a8	Finishing Hardware Lockset - Turn and Release Lock with Indicator	set	5.00				
1004	1004 (2) a9	Finishing Hardware Lockset - Turn and Release Lock	set	4.00				
1004	1004 (2) a10	Finishing Hardware Lockset - Emergency Exit Push Bar Panic Device	set	18.00				
1004	1004 (2) a11	Finishing Hardware Lockset - Cylindrical Lock with Door Sensor	set	18.00				
1004	1004 (2) a12	Finishing Hardware Lockset - Panic Exit Device/Latch	set	19.00				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1004	1004 (2) b	Finishing Hardware Latches	set	51.00				
1004	1004 (2) c3	Finishing Hardware Bolts - Top Flush Bolt	set	60.00				
1004	1004 (2) d	Finishing Hardware Door Closer	set	127.00				
1004	1004 (2) d1	Finishing Hardware Door Closer - Door Coordinator	set	36.00				
1004	1004 (2) d2	Finishing Hardware Door Closer - Sliding Door Track Guide	set	5.00				
1004	1004 (2) f	Finishing Hardware Handles	set	7.00				
1004	1004 (2) f1	Finishing Hardware Handles - Lever Handles on Plates	set	172.00				
1004	1004 (2) f2	Finishing Hardware Handles - Waterstop Lever Handle	set	4.00				
1004	1004 (2) g	Finishing Hardware Hinges	set	580.00				
1004	1004 (2) g3	Finishing Hardware Hinges - Two Axis Hinge	set	8.00				
1004	1004 (2) g4	Finishing Hardware Hinges - Floor Hinges	set	5.00				
1004	1004 (2) g6	Finishing Hardware Hinges - SUS Bottom Rail Hinge w/ Lockset	set	1.00				
1004	1004 (2) g7	Finishing Hardware Hinges - SUS Top Rail Hinge	set	1.00				
1004	1004 (2) g8	Finishing Hardware Hinges - Top & Bottom Pivot	set	1.00				
1004	1004 (2) j	Finishing Hardware Push Plate	set	60.00				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1004	1004 (2) j1	Finishing Hardware Plates - Kick Plates	set	201.00				
1004	1004 (2) j3	Finishing Hardware Plates - Combination Plates	set	60.00				
1004	1004 (2) l1	Finishing Hardware Seal - Neoprene Sponge	set	22.00				
1004	1004 (2) m	Finishing Hardware Rollers - Top & Bottom Rollers	set	1.00				
		Platform Screen Doors "PSD" "BY OTHERS"						
		SUB-TOTAL (Steel Doors and Frames)						
		Aluminum Windows						
1817	1817	Stainless Steel Windows	m2	65.03				
		<u>Frameless Glass Windows</u>						
1012	1012 (9) a2	Laminated Glass - 12mm	m2	28.23				
		SUB-TOTAL (Aluminum Windows)						
		Metal Louvers						
1804	1804 (1)	Extruded Aluminum Vertical Louvers	m2	1,251.97				
1804	1804 (2)	Extruded Aluminum Horizontal Louvers with Insect Screen	m2	0.56				
1804	1804 (3)	Extract Air Aluminum Louver with Insect Screen	m2	9.65				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1031	1031 (1) d	Noise Barrier Panel	m2	176.10				
		SUB-TOTAL (Metal Louvers)						
		Rolling Up Doors						
1011	1011 (1) b	Fire Shutter Door	m2	151.54				
1011	1011 (1) c	FS Fire Shutter Door with Access Door	m2	37.64				
1011	1011 (1) a	Roll -up Security Shutter Door	m2	70.55				
1809	1809	Flood Barrier Assembly - Manual	m2	2.66				
1809	1809 (1)	Flood Barrier Assembly - Automatic	m2	2.66				
		SUB-TOTAL (Rolling Up Doors)						
		Pre-painted Metal Sheets						
1039	1039	Parapet Wall Aluminum Coping	m2	217.54				
1017	1017 (1) b	Aluminum Bandless Gutter	set	3.00				
		SUB-TOTAL (Pre-painted Metal Sheets)						
		Waterproofing						
1016	1016 (2)	Bituminous Waterproofing	m2	1,764.05				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1016	1016 (1) b	Elastomeric Waterproofing	m2	1,271.56				
1016	1016 (1) a	Cementitious Waterproofing	m2	682.40				
		SUB-TOTAL (Waterproofing)						
		Masonry Works						
1046	1046 (4) a2	Solid Blocks Non-Load Bearing 150 mm	m2	4,533.26				
1046	1046 (4) a3	Solid Blocks Non-Load Bearing 175mm	m2	655.80				
1046	1046 (1) a2	CHB Load Bearing (including Reinforcing Steel) 150mm	m2	7,280.27				
		SUB-TOTAL (Masonry Works)						
		Wall Finishes						
1027	1027 (1)	Cement Plaster Finish	m2	35,840.80				
1018	1018 (3) a1	Granite Stone Honed Finish – 600x1200x30	m2	1,934.25				
1018	1018 (3) a2	Granite Stone Honed Finish – 1200x150x30	m2	472.68				
1018	1018 (3) b1	Granite Stone Polished – 1200x600x30	m2	485.59				
1018	1018 (3) b2	Granite Stone Polished – 1200x150x30	m2	166.61				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1018	1018 (3) b3	Granite Stone Polished – 1200x800x30	m2	1,157.15				
1018	1018 (5) b6	Glazed Ceramic Tile – 1200x600x10	m2	1,366.06				
1018	1018 (5) b3	Glazed Ceramic Tile – 1200x150x10	m2	339.35				
1018	1018 (5) b7	Glazed Ceramic Tile – 600x300x6	m2	286.20				
1018	1018 (5) b4	Glazed Ceramic Tile – 3000x1000x6	m2	836.15				
1018	1018 (5) b1	Glazed Ceramic Tile – 600x600x10	m2	518.59				
1031	1031 (1) c	Glass Wool Acoustic Panel	m2	4,043.87				
1814	1814 (1) b1	Wall Access Panel Standard Fire-rated - 500 x 875 mm	no	157.00				
1814	1814 (1) b2	Wall Access Panel Standard Fire-rated - 3000 x 3500 mm	no	1.00				
1814	1814 (1) b3	Wall Access Panel Standard Fire-rated - 4500 x 3500 mm	no	1.00				
1814	1814 (1) b4	Wall Access Panel Standard Fire-rated - 5000 x 4500 mm	no	2.00				
1041	1041 (1) a3	Gypsum Board 118mm	m2	676.90				
1041	1041 (1) a4	Gypsum Board 140mm	m2	39.56				
1816	1816 (1) a3	Phenolic Partition - Shower Partition	m2	41.79				
1816	1816 (1) a1	Phenolic Partition - Toilet Partition	m2	217.36				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1816	1816 (1) a2	Phenolic Partition - Urinal Partition	m2	20.39				
1803	1803 (3) b	Stainless Steel Plate	m2	188.66				
		SUB-TOTAL (Wall Finishes)						
		Floor Finishes						
1018	1018 (3) c1	Granite Stone Flamed - 600x600x25	m2	5,659.00				
1018	1018 (3) c2	Granite Stone Flamed - 600x300x25	m2	403.00				
1018	1018 (3) b4	Granite Stone Polished – 1200x80x25	m2	30.31				
1018	1018 (3) b5	Granite Stone Polished - 1200x150x25	m2	59.00				
1018	1018 (3) b7	Granite Stone Polished - 1200x600x25	m2	6.00				
1018	1018 (3) b6	Granite Stone Polished - 600x150x25	m2	176.10				
1018	1018 (3) b11	In-laid Granite Stone Directional Symbol and trim	m2	35.87				
1203	1203 (1)	Granite Flooring; to Elevator	m2	10.00				
1018	1018 (8) a1	Stainless Steel Warning Hazard Tactile	m2	127.40				
1018	1018 (8) a2	Stainless Steel Directional Tactile	m2	169.26				
1018	1018 (8)	Stainless Steel Position Tactile	m2	19.00				

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NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	a3							
1018	1018 (7) a1	Non-Slip Ceramic Tile – 300x300x10	m2	413.00				
1018	1018 (7) a2	Non-Slip Ceramic Tile – 600x600x10	m2	43.00				
1808	1808	Raised Access Floor Assembly	m2	491.00				
1020	1020 (1)	Vinyl Floor Tile	m2	776.00				
1801	1801 (1)	Epoxy Coating - Dust Proofing	m2	491.00				
1021	1021 (1) c2	Cement Floor Finish - Cinder Concrete-Filled Floor with Trowel Finish and Concrete Hardener	m2	436.00				
1021	1021 (1) c1	Cement Floor Finish - Concrete Trowel with Floor Hardener	m2	7,731.80				
1021	1021 (4) a	Straight to Finish - Lightweight Concrete with Trench	m2	1,066.00				
1814	1814 (1) a1	Floor Access Panel Precast Concrete Block 2-hr Fire-rated - 4500 x 4000 mm	no	1.00				
1814	1814 (1) a2	Floor Access Panel Precast Concrete Block 2-hr Fire-rated - 6000 x 4000 mm	no	1.00				
1803	1803 (3) a	Stainless Steel Cover in between Stair and Escalator	m2	32.02				
1805	1805 (1) a4	AFC Floor Cover	m2	14.50				
		SUB-TOTAL (Floor Finishes)						
		Painting, Varnishing and Other Related Works						

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NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1032	1032 (1) a1	Painting Works (Masonry/Concrete) – Acrylic Emulsion	m2	1,762.29				
1032	1032 (1) a2	Painting Works (Masonry/Concrete) – Acrylic Polyurethane	m2	16,776.78				
1032	1032 (1) a3	Painting Works (Gypsum) – Acrylic Emulsion	m2	284.73				
		SUB-TOTAL (Painting, Varnishing and Other Related Works)						
		Skylights						
1819	1819 (1) a	Pre-fabricated modular glass roof	m2	91.33				
		SUB-TOTAL (Skylights)						
		Glass and Glazing						
1012	1012 (9) a1	Fire Rated Laminated Glass - 2-6mm with Polyvinyl Butyral Film Interlayer and Security Film	m2	164.34				
1012	1012 (10) a1	Toughened Glass - 12mm with Frosted Film	m2	922.08				
1012	1012 (5) e	Tempered Back painted Glass - 12mm	m2	229.46				
		SUB-TOTAL (Glass and Glazing)						
		Metal Structures						
1047	1047 (12)	Hot-dip Galvanized Steel Ladder	lm	46.61				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1047	1047 (14)	Platform H-beam Light Box	kg	11,558.23				
1805	1805 (1) a1	Stainless Steel Floor Grating	m2	65.94				
1033	1033 (2)	FRP Chequered Plate Cover	m2	1.00				
1814	1814 (1) c1	Roof Access Hatch Cover	no	1.00				
1017	1017 (1)	Roof Drain with Strainer	set	12.00				
		SUB-TOTAL (Metal Structures)						
		Fence and Railings						
1051	1051 (5) a1	Stainless Steel Railing	lm	99.13				
1051	1051 (5) a2	Stainless Steel Upper and Lower Railing - Wall Mounted	lm	325.69				
1051	1051 (5) a4	Stainless Railing with Swing Door	lm	2.51				
1051	1051 (5) a5	Stainless Steel Guardrail	lm	25.16				
1051	1051 (5) b1	Stainless Steel Handrail with Glass Railing - 1400mm height	lm	73.62				
1051	1051 (5) b2	Stainless Steel Handrail with Glass Railing and Door	lm	6.74				
1051	1051 (5) b3	Stainless Steel Handrail with Glass Railing - 1200mm height	lm	90.61				
1051	1051 (6) a1	Hot-dip Galvanized Railing	lm	296.62				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1051	1051 (6) a2	Hot-dip Galvanized Handrail with Double Action Foldable Door	lm	10.00				
1051	1051 (5) a3	Stainless Steel Handrail - 950 mm height	lm	13.86				
1051	1051 (6) a3	Hot-dip Galvanized Handrail - Wall Mounted	lm	115.92				
		SUB-TOTAL (Fence and Railings)						
		Baseboards, thresholds & Nosing Finish						
1018	1018 (3) b9	Granite Stone Polished - 30mm Thick	lm	1,712.51				
1018	1018 (3) b10	Granite Stone Polished - 20mm Thick	lm	128.34				
1018	1018 (3) a3	Granite Stone Honed Finish - 200mm Threshold	lm	30.20				
1018	1018 (5) b9	Glazed Ceramic Tile - 200mm Threshold	lm	24.80				
1807	1807 (1)	Stainless Steel Skirting; 300mm	lm	197.80				
1018	1018 (5) b8	Glazed Ceramic Tile - 300x100x10	lm	132.67				
1018	1018 (5) b5	Glazed Ceramic Tile - 600x100x10	lm	28.15				
1020	1020 (2)	Vinyl Tile Skirting	lm	540.47				
1020	1020 (3)	Vinyl Tile - 200mm Threshold	lm	39.00				
1032	1032 (1) a4	Painting Works (Masonry/Concrete) - Acrylic Emulsion H=100mm	lm	148.14				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1801	1801 (2)	Epoxy Coating	lm	773.07				
		SUB-TOTAL (Baseboards, thresholds & Nosing Finish)						
		Signage						
1813	1813 (1)	Identification Signs	ls	1.00				
1813	1813 (2)	Information Signs	ls	1.00				
1813	1813 (3)	Wayfinding / Directional Signs	ls	1.00				
1813	1813 (4)	Explanatory Signs	ls	1.00				
1813	1813 (7)	Evacuation Direction Indicators	ls	1.00				
1813	1813 (8)	Room Identification Signages	ls	1.00				
1813	1813 (9)	Braille Display Board	ls	1.00				
1813	1813 (10)	Toilet Information Board	ls	1.00				
		SUB-TOTAL (Signage)						
		SUB-TOTAL (D.2 - ARCHITECTURAL WORKS)						
	D.4	MISCELLANEOUS						
1812	1812 (1)	System Furniture	ls	1.00				
1812	1812 (2)	Office Furnitures	ls	1.00				
1812	1812 (4)	Built-ins	ls	1.00				

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					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1822	1822 (1)	Quartz Countertop	m2	18.59				
1822	1822 (2)	Quartz Ledge	m2	23.62				
1821	1821	Stainless Steel Countertop	m2	12.11				
		<u>Plumbing Fixtures</u>						
1002	1002 (14) a1	Hand Rinse Basin, wall hung Sensor Type (Lavatory faucet included under this pay item)	set	3.00				
1002	1002 (13)	Cleaner's sink complete	set	5.00				
1002	1002 (10) a2	Urinal with flush valve complete Sensor Type	set	10.00				
1002	1002 (15) a1	Wash Hand Basin (Lavatory Counter Top) above Counter, complete sensor type (Lavatory faucet included under this pay item)	set	22.00				
1002	1002 (9) a3	Water Closet elongated complete, Automatic flush valve (Water closet Flush Panel included under this pay item)	set	26.00				
		<u>Stainless Steel Grab Bar</u>						
1002	1002 (18) a1	Stainless Steel Grab Bar, 32mm dia - Vertical	lm	6.19				
1002	1002 (18) a2	Stainless Steel Grab Bar, 32mm dia - Horizontal	lm	3.92				
1002	1002 (18) a3	Stainless Steel Grab Bar, 32mm dia - Dropdown	lm	5.47				
		<u>Toilet Accessories</u>						
1002	1002 (28) a1	Shower Head/Shower Valve	set	6.00				
1002	1002	Lever-Operated Mixer Tap	set	24.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4A
 STATION ARCHITECTURAL WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	(28) a2							
1002	1002 (28) a3	Cleaner's Tap	set	5.00				
1002	1002 (28) b1	Toilet Paper Holder	set	22.00				
1002	1002 (28) b2	Toilet Paper Dispenser	set	5.00				
1002	1002 (28) c1	Soap Holder	set	6.00				
1002	1002 (28) c2	Soap Dispenser	set	24.00				
1002	1002 (28) d1	Hand dryer	set	10.00				
1002	1002 (28) e1	Trash Bins	set	12.00				
1002	1002 (28) e2	Sanitary Disposal Bins	set	4.00				
1002	1002 (28) e3	Sanitary Dispenser	set	3.00				
1002	1002 (28) f1	Robe Hook	set	34.00				
1002	1002 (28) f2	Towel Rail	set	6.00				
1002	1002 (20)	Framed Mirror with T5 LED backlight	m2	27.63				
		<u>GAD Toilet Accessories</u>						
1002	1002 (28) g1	Folding Bed	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4A
 STATION ARCHITECTURAL WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1002	1002 (28) g2	Baby Chair	set	4.00				
1002	1002 (28) g3	Diaper Change Bed	set	3.00				
1002	1002 (28) h1	Ostomate Toilet	set	2.00				
1810	1810	Smoke Curtains Assembly	m2	57.95				
		<u>Elevator Handrails</u>						
1203	1203 (1)	Stainless Steel Railing	lm	11.65				
1035	1035 (2)	Gallery Wall Stainless Steel Structural Module	m2	343.78				
1803	1803 (3) c	Aluminum Corner Trim	m	561.80				
		SUB-TOTAL (D.4 - MISCELLANEOUS)						
		SPARE PARTS						
C01.5.1	C01.5.1	Architectural Spare Materials	ls	1.00				
		SUB-TOTAL (- SPARE PARTS)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4A
 STATION ARCHITECTURAL WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		MOCK UP						
C01.3.3	C01.3.3	Mock-up 3 - Mock-up for Ortigas North Entrance - 2	ls	1.00				
		SUB-TOTAL (- MOCK UP)						
		GRAND TOTAL-STATION ARCHITECTURAL WORKS (ORTIGAS NORTH)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	PART A	EARTHWORKS						
803	803 (1) a	Structure Excavation (Common Soil)	m3	380.98				
803	803(4)	Gravel Fill	m3	16.32				
1000	1000 (1)	Soil Poisoning/Termiticide Application	m2	335.66				
803	803 (2)	Trimming Works	m2	267.86				
		SUB-TOTAL (PART A - EARTHWORKS)						
	PART D	BUILDING WORKS						
	D.1	STRUCTURAL WORKS						
900	900 (1) (c2)	Structural Concrete (Footings and Slab on Fill) 27.6 MPa at 28 days	m3	10.48				
900	900 (1) (c3)	Structural Concrete (Footing Tie Beams) 27.6 MPa at 28 days	m3	1.07				
900	900 (1) (c4)	Structural Concrete (Columns) 27.6 MPa at 28 days	m3	47.07				
900	900 (1) (c5)	Structural Concrete (Suspended Slab) 27.6 MPa at 28 days	m3	170.96				
900	900 (1) (c6)	Structural Concrete (Beams / Girders) 27.6 MPa at 28 days	m3	93.58				
900	900 (1) (c1)	Structural Concrete (27.6 MPa) at 28 days	m3	1,929.47				
901	901 (1)	Lean Concrete 17 MPa at 28 days	m3	5.44				
902	902 (1) a1	Reinforcing Steel (Deformed), Grade 40	kg	158,431.44				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
902	902 (2) a2	Reinforcing Steel (Deformed), Grade 60	kg	140,564.42				
1047	1047 (2)	Structural steel	kg	224,822.93				
903	903 (2)	Formworks and Falseworks	m2	15,667.65				
1047	1047 (15)	Hoist Crane Beam Assembly and Anchoring System	ls	1.00				
1047	1047 (16)	Escalator Installation Anchoring	ls	1.00				
1047	1047 (17)	Elevator Installation Anchoring	ls	1.00				
900	900 (8)	Preformed Joint Fillers	m3	1.20				
1033	1033 (3)	Catwalk for Equipment Maintenance	ls	1.00				
		SUB-TOTAL (D.1 - STRUCTURAL WORKS)						
	D.2	ARCHITECTURAL WORKS						
		Ceiling Works						
1027	1027 (5)	Rubbed Concrete finish	m2	7,351.93				
1811	1811 (1)	Triangular Aluminum Ceiling	m2	372.94				
1811	1811 (2)	Aluminum Ceiling Panel (Triangular Printed); 1200mm x 600mm	m2	2,946.85				
1811	1811 (3)	Aluminum Ceiling Panel (Triangular Printed); 600mm x 600mm	m2	776.53				
1811	1811 (4)	Spandrel Panel Ceiling	m2	56.20				
1811	1811 (5)	Metal Concealed Ceiling Panel	m2	234.26				
1811	1811 (6)	Curved Metal Panel	m2	1,566.94				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1811	1811 (7)	Aluminum Ceiling Panel with Perforation	m2	119.91				
1811	1811 (8)	Aluminum Ceiling Panel without Perforation	m2	101.50				
1811	1811 (9)	Aluminum Composite Panel Cladding	m2	21.33				
1030	1030 (1)	Concealed Grid Mineral Acoustical Board	m2	384.93				
1030	1030 (2)	Moisture Resistant Gypsum Board	m2	276.64				
1811	1811 (10)	Solid Plate	m2	125.95				
1811	1811 (11)	Stainless Steel Plate and Corner Trim	m2	19.93				
1203	1203 (1)	Stainless Steel Ceiling Panel	m2	9.09				
		SUB-TOTAL (Ceiling Works)						
		Steel Doors and Frames						
1006	1006 (1)	Hollow Steel Door Set	m2	57.07				
1006	1006 (5)	Fire-rated Exit Steel Door Set	m2	162.83				
1006	1006 (7)	Steel Sliding Door Set	m2	10.95				
1006	1006 (8)	Watertight Doors – WS-3	m2	3.29				
1006	1006 (9)	Watertight Doors – WS-6	m2	46.37				
1006	1006 (10)	Steel Folding Doors	m2	8.80				
1818	1818 (1)	Glass Doors	m2	3.94				
		<u>Ironmongeries</u>						
1004	1004 (2) g	Finishing Hardware Hinges	set	604.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1004	1004 (2) d	Finishing Hardware Door Closer	set	136.00				
1004	1004 (2) b	Finishing Hardware Latches	set	54.00				
1004	1004 (2) f1	Finishing Hardware Handles - Lever Handles on Plates	set	172.00				
1004	1004 (2) j1	Finishing Hardware Plates - Kick Plates	set	201.00				
1004	1004 (2) c3	Finishing Hardware Bolts - Top Flush Bolt	set	62.00				
1004	1004 (2) a10	Finishing Hardware Lockset - Emergency Exit Push Bar Panic Device	set	20.00				
1004	1004 (2) a1	Finishing Hardware Lockset - O/S Key Operation	set	19.00				
1004	1004 (2) a5	Finishing Hardware Lockset - Electromagnetic Lock	set	18.00				
1004	1004 (2) a6	Finishing Hardware Lockset - Electromagnetic Lock with Emergency Release Lock	set	32.00				
1004	1004 (2) a7	Finishing Hardware Lockset – Electromagnetic Lock with Emergency Combination Detector	set	2.00				
1004	1004 (2) a8	Finishing Hardware Lockset - Turn and Release Lock with Indicator	set	5.00				
1004	1004 (2) a12	Finishing Hardware Lockset - Panic Exit Device/Latch	set	19.00				
1004	1004 (2) a11	Finishing Hardware Lockset Cylindrical Lock with Door Sensor	set	17.00				
1004	1004 (2) d1	Finishing Hardware Door Closer - Door Coordinator	set	46.00				
1004	1004 (2) d2	Finishing Hardware Door Closer - Sliding Door Track Guide	set	5.00				
1004	1004 (2) f	Finishing Hardware Handles	set	7.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1004	1004 (2) g4	Finishing Hardware Hinges - Floor Hinges	set	5.00				
1004	1004 (2) g6	Finishing Hardware Hinges - SUS Bottom Rail Hinge w/ Lockset	set	1.00				
1004	1004 (2) g7	Finishing Hardware Hinges - SUS Top Rail Hinge	set	1.00				
1004	1004 (2) g8	Finishing Hardware Hinges - Top & Bottom Pivot	set	2.00				
1004	1004 (2) m	Finishing Hardware Rollers - Top & Bottom Rollers	set	2.00				
1004	1004 (2) j3	Finishing Hardware Plates - Combination Plates	set	62.00				
1004	1004 (2) a9	Finishing Hardware Lockset - Turn and Release Lock	set	4.00				
1004	1004 (2) j	Finishing Hardware Push Plate	set	62.00				
1004	1004 (2) a3	Finishing Hardware Lockset – Dead Lock	set	1.00				
1004	1004 (2) l1	Finishing Hardware Seal - Neoprene Sponge	set	16.00				
		Platform Screen Doors "PSD" "BY OTHERS"						
		SUB-TOTAL (Steel Doors and Frames)						
		Aluminum Windows						
1817	1817	Stainless Steel Windows	m2	53.62				
		<u>Frameless glass window</u>						
1012	1012 (9)	Laminated Glass - 12mm	m2	21.91				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	a2							
SUB-TOTAL (Aluminum Windows)								
Metal Louvers								
1804	1804 (1)	Extruded Aluminum Vertical Louvers	m2	1,368.04				
1804	1804 (2)	Extruded Aluminum Horizontal Louvers with Insect Screen	m2	0.56				
1804	1804 (3)	Extract Air Aluminum Louver with Insect Screen	m2	7.94				
1031	1031 (1) d	Noise Barrier Panel	m2	302.96				
SUB-TOTAL (Metal Louvers)								
Rolling Up Doors								
1011	1011 (1) b	Fire Shutter Door	m2	90.14				
1011	1011 (1) a	Roll -up Security Shutter Door	m2	79.88				
1011	1011 (1) c	Fire Shutter Door with Access Door	m2	42.43				
1809	1809	Flood Barrier Assembly - Manual	m2	8.28				
1809	1809 (1)	Flood Barrier Assembly - Automatic	m2	8.28				
SUB-TOTAL (Rolling Up Doors)								
Prepainted Metal Sheets								
1039	1039	Parapet Wall Aluminum Coping	m2	128.59				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1017	1017 (1) b	Aluminum Bandless Gutter	set	2.00				
		SUB-TOTAL (Prepainted Metal Sheets)						
		Waterproofing						
1016	1016 (2)	Bituminous Waterproofing	m2	1,130.94				
1016	1016 (1) b	Elastomeric Waterproofing	m2	909.67				
1016	1016 (1) a	Cementitious Waterproofing	m2	732.18				
		SUB-TOTAL (Waterproofing)						
		Masonry Works						
1046	1046 (4) a2	Solid Blocks Non-Load Bearing 150 mm	m2	3,863.01				
1046	1046 (1) a2	CHB Load Bearing (including Reinforcing Steel) 150mm	m2	4,372.31				
		SUB-TOTAL (Masonry Works)						
		Wall Finishes						
1027	1027 (1)	Cement Plaster Finish	m2	25,404.51				
1018	1018 (3) a1	Granite Stone Honed Finish – 600x1200x30	m2	2,494.30				
1018	1018 (3) a2	Granite Stone Honed Finish – 1200x150x30	m2	543.96				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1018	1018 (3) b1	Granite Stone Polished – 1200x600x30	m2	609.06				
1018	1018 (3) b2	Granite Stone Polished – 1200x150x30	m2	182.50				
1018	1018 (3) b3	Granite Stone Polished – 1200x800x30	m2	1,058.66				
1018	1018 (5) b6	Glazed Ceramic Tile – 1200x600x10	m2	1,086.15				
1018	1018 (5) b3	Glazed Ceramic Tile – 1200x150x10	m2	273.67				
1018	1018 (5) b7	Glazed Ceramic Tile – 600x300x6	m2	230.71				
1018	1018 (5) b4	Glazed Ceramic Tile – 3000x1000x6	m2	425.18				
1018	1018 (5) b1	Glazed Ceramic Tile – 600x600x10	m2	469.95				
1031	1031 (1) c	Glass Wool Acoustic Panel	m2	2,443.33				
1814	1814 (1) b1	Wall Access Panel Standard Fire-rated - 500 x 875 mm	no	106.00				
1814	1814 (1) b2	Wall Access Panel Standard Fire-rated - 3000 x 3500 mm	no	1.00				
1814	1814 (1) b3	Wall Access Panel Standard Fire-rated - 4500 x 3500 mm	no	2.00				
1041	1041 (1) a3	Gypsum Board 118mm	m2	689.89				
1041	1041 (1) a4	Gypsum Board 140mm	m2	51.86				
1816	1816 (1) a3	Phenolic Partition – Shower Partition	m2	44.94				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1816	1816 (1) a1	Phenolic Partition – Toilet Partition	m2	168.60				
1816	1816 (1) a2	Phenolic Partition – Urinal Partition	m2	16.50				
1803	1803 (3) b	Stainless Steel Plate	m2	163.35				
		SUB-TOTAL (Wall Finishes)						
		Floor Finishes						
1018	1018 (3) c1	Granite Stone Flamed - 600x600x25	m2	5,170.00				
1018	1018 (3) c2	Granite Stone Flamed - 600x300x25	m2	370.00				
1018	1018 (3) b4	Granite Stone Polished - 1200x80x25	m2	31.37				
1018	1018 (3) b5	Granite Stone Polished - 1200x150x25	m2	39.00				
1018	1018 (3) b7	Granite Stone Polished - 1200x600x25	m2	3.00				
1018	1018 (3) b6	Granite Stone Polished - 600x150x25	m2	146.85				
1018	1018 (3) b11	In-laid Granite Stone Directional Symbol and Trim	m2	35.87				
1203	1203 (1)	Granite Flooring; to elevator	m2	10.00				
1018	1018 (8) a1	Stainless Steel Warning Hazard Tactile	m2	143.70				
1018	1018 (8) a2	Stainless Steel Directional Tactile	m2	198.10				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1018	1018 (8) a3	Stainless Steel Position Tactile	m2	15.76				
1018	1018 (7) a1	Non-Slip Ceramic Tile – 300x300x10	m2	354.00				
1018	1018 (7) a2	Non-Slip Ceramic Tile – 600x600x10	m2	30.80				
1808	1808	Raised Access Floor Assembly	m2	469.59				
1020	1020 (1)	Vinyl Floor Tile	m2	817.59				
1801	1801 (1)	Epoxy Coating - Dust Proofing	m2	469.59				
1021	1021 (1) c2	Cement Floor Finish - Cinder Concrete-Filled Floor with Trowel Finish and Concrete Hardener	m2	261.00				
1021	1021 (1) c1	Cement Floor Finish - Concrete Trowel with Floor Hardener	m2	5,794.00				
1021	1021 (4) a	Straight to Finish - Lightweight Concrete with Trench	m2	370.00				
1814	1814 (1) a1	Floor Access Panel Precast Concrete Block 2-hr Fire-rated - 4500 x 4000 mm	no	2.00				
1803	1803 (3) a	Stainless Steel Cover in between Stair and Escalator	m2	41.78				
1805	1805 (1) a4	AFC Floor Cover	m2	11.72				
		SUB-TOTAL (Floor Finishes)						
		Painting, Varnishing and Other Related Works						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1032	1032 (1) a1	Painting Works (Masonry/Concrete) - Acrylic Emulsion	m2	2,747.32				
1032	1032 (1) a2	Painting Works (Masonry/Concrete) - Acrylic Polyurethane	m2	12,378.04				
1032	1032 (1) a3	Painting Works (Gypsum) – Acrylic Emulsion	m2	276.64				
		SUB-TOTAL (Painting, Varnishing and Other Related Works)						
		Skylights						
1819	1819 (1) a	Pre-fabricated modular glass roof	m2	31.21				
		SUB-TOTAL (Skylights)						
		Glass and Glazing						
1012	1012 (9) a1	Fire Rated Laminated Glass – 2-6mm with Polyvinyl Butyral Film Interlayer and Security Film	m2	197.85				
1012	1012 (9) a3	Laminated Glass – 30 mm, 2-hr Fire Rated	m2	25.84				
1012	1012 (10) a1	Toughened Glass - 12mm with Security Film	m2	729.94				
1012	1012 (5) e	Tempered Back Painted Glass - 12mm	m2	223.21				
		SUB-TOTAL (Glass and Glazing)						
		Metal Structures						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1047	1047 (12)	Hot-dip Galvanized Steel Ladder	lm	11.90				
1805	1805 (1) a1	Stainless Steel Floor Grating	m2	73.37				
1017	1017 (1)	Roof Drain with Strainer	nr	8.00				
1047	1047 (14)	Platform H-Beam Light Box	kg	8,960.34				
		SUB-TOTAL (Metal Structures)						
		Fence and Railings						
1051	1051 (5) a1	Stainless Steel Railing	lm	161.50				
1051	1051 (5) a2	Stainless Steel Upper and Lower Railing - Wall Mounted	lm	273.94				
1051	1051 (5) a3	Stainless Steel Handrail - 950 mm height	lm	9.42				
1051	1051 (5) a4	Stainless Railing with Swing Door	lm	2.38				
1051	1051 (5) a5	Stainless Steel Guardrail	lm	39.04				
1051	1051 (5) b1	Stainless Steel Handrail with Glass Railing - 1400mm height	lm	54.61				
1051	1051 (5) b2	Stainless Steel Handrail with Glass Railing and Door	lm	9.49				
1051	1051 (5) b3	Stainless Steel Handrail with Glass Railing - 1200mm height	lm	104.21				
1051	1051 (6) a1	Hot-dip Galvanized Railing	lm	232.31				
1051	1051 (6)	Hot-dip Galvanized Handrail with Double Action Foldable Door	lm	10.56				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		SUB-TOTAL (Baseboards, thresholds & Nosings Finish)						
		Signages						
1813	1813 (1)	Identification Signs	ls	1.00				
1813	1813 (2)	Information Signs	ls	1.00				
1813	1813 (3)	Wayfinding / Directional Signs	ls	1.00				
1813	1813 (4)	Explanatory Signs	ls	1.00				
1813	1813 (7)	Evacuation Direction Indicators	ls	1.00				
1813	1813 (8)	Room Identification Signages	ls	1.00				
1813	1813 (9)	Braille Display Board	ls	1.00				
1813	1813 (10)	Toilet Information Board	ls	1.00				
		SUB-TOTAL (Signages)						
		SUB-TOTAL (D.2 - ARCHITECTURAL WORKS)						
	D.4	MISCELLANEOUS						
1812	1812 (1)	System Furniture	ls	1.00				
1812	1812 (2)	Office Furnitures	ls	1.00				
1812	1812 (4)	Built-ins	ls	1.00				
1822	1822 (1)	Quartz Countertop	m2	14.02				
1822	1822 (2)	Quartz Ledge	m2	20.94				
1821	1821	Stainless Steel Countertop	m2	11.48				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Plumbing Fixtures</u>						
1002	1002 (14) a1	Hand Rinse Basin, wall hung Sensor type (Lavatory faucet included under this pay item)	set	3.00				
1002	1002 (10) a2	Urinal with flush valve complete Sensor Type	set	8.00				
1002	1002 (13)	Cleaner's sink complete	set	5.00				
1002	1002 (15) a1	Wash Hand Basin (Lavatory Countertop) above counter, complete sensor type (Lavatory faucet included under this pay item)	set	18.00				
1002	1002 (9) a3	Water closet elongated complete, Automatic flush valve (Water closet Flush Panel included under this pay item)	set	22.00				
		<u>Stainless Steel Grab Bar</u>						
1002	1002 (18) a1	Stainless Steel Grab Bar, 32mm dia - Vertical	lm	5.84				
1002	1002 (18) a2	Stainless Steel Grab Bar, 32mm dia - Horizontal	lm	3.60				
1002	1002 (18) a3	Stainless Steel Grab Bar, 32mm dia - Dropdown	lm	6.01				
		<u>Toilet Accessories</u>						
1002	1002 (28) b2	Toilet Paper Dispenser	set	5.00				
1002	1002 (28) c1	Soap Holder	set	6.00				
1002	1002 (28) c2	Soap Dispenser	set	22.00				
1002	1002 (28) d1	Hand Dryer	set	10.00				
1002	1002 (28)	Trash Bins	set	12.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1810	1810	Smoke Curtains Assembly	m2	56.30				
		<u>Elevator Handrails</u>						
1203	1203 (1)	Stainless Steel Railing	lm	10.58				
1035	1035 (2)	Gallery Wall Stainless Steel Structural Module	m2	176.55				
1803	1803 (3) c	Aluminum Corner Trim	m	549.45				
SUB-TOTAL (D.4 - MISCELLANEOUS)								
SPARE PARTS								
CO1.5.1	CO1.5.1	Architectural Spare Materials	ls	1.00				
SUB-TOTAL (- SPARE PARTS)								
MOCK UP								
CO1.3.1	CO1.3.1	Mock-up 1 - Mock-up for Ortigas South Public Toilet and Ticket Office	ls	1.00				
CO1.3.2	CO1.3.2	Mock-up 2 - Mock-up for Ortigas South Entrance - 1	ls	1.00				
CO1.3.4	CO1.3.4	Mock-up 4 - Mock-up for Ortigas South Escalator at B1F Level	ls	1.00				
CO1.3.5	CO1.3.5	Mock-up 5 - Mock-up for Ortigas South Escalator at B3F Level	ls	1.00				
CO1.3.6	CO1.3.6	Mock-up 6 - Mock-up for Ortigas South Elevator at B1F Level	ls	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 4B
 STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	Unit	Quantity	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		SUB-TOTAL (- MOCK UP)						
		GRAND TOTAL-STATION ARCHITECTURAL WORKS (ORTIGAS SOUTH)						

DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO.5
 STATIONS E & M WORKS

Bill No.	DESCRIPTION	AMOUNT	
		LOCAL (PHP)	FOREIGN ()
	CP104		
Bill No. 5	STATIONS E & M WORKS		
Bill No. 5A	ORTIGAS NORTH STATION		
Bill No. 5B	ORTIGAS SOUTH STATION		
	TOTAL STATIONS E & M WORKS		

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		BUILDER'S WORKS IN CONNECTION TO SERVICES						
		Builder's work in connection with services	item	1.00				
		[SOME SAMPLE OF COMMON BUILDER'S WORKS, TO BE FURTHER DISCUSSED WITH IF REQUIRED]						
		Allow for forming openings, chases, providing pipe sleeves, fabric mesh and/or additional reinforcement, etc., in concrete as required by mechanical and electrical pipe works and conduits.						
		Allow for sealing openings for mechanical and electrical works in floor, wall and ceiling with approved firestop sealing compound, complete with all necessary calcium silicate board panel and hot dipped galvanized mild steel platform and supports to the Architect's approval.						
		Allow for sealing openings for mechanical and electrical works in floor, wall and ceiling with approved water stop and						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		all necessary sealing compound to the Architect's approval.						
		Allow for sealing openings in ducts around pipes, etc., with cement grout or other equal and approved sealing compound to Authorities' and Architect's approval.						
		Allow for builder's work in connection with mechanical and electrical services installations (i.e. plinths, curbs, concrete/steel beam support, lift separator beam and the like).						
		<u>FIREPROOFING AND SLAB OVER AT TAS, SCV, IT CABLE DUCT AND THE LIKE</u>						
		Expanded galvanized steel mesh anchored to wall complete with approved finishes and all necessary fixing accessories; all in accordance to drawings and to Architect's approval.						
		SUB-TOTAL (BUILDER'S WORKS)						
		AIR-CONDITIONING AND MECHANICAL VENTILATION						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>CONDENSATE DRAIN SYSTEM</u>						
		<u>Allowance for Galvanized steel pipes and fittings including approved insulation, and all other necessary accessories to complete the system</u>						
1209	1209(1)	from FCU/AHU to nearest plumbing stub out	item	1.00				
		<u>REFRIGERANT PIPING SYSTEM</u>						
		<u>Copper (Cu) pipes and fittings, type L, hard drawn, including freon charging , jointing in accordance with designer's specification</u>						
1213	1213(3)	6.35mm diameter	m	47.00				
1213	1213(3)	9.53mm diameter	m	104.00				
1213	1213(3)	12.70mm diameter	m	403.00				
1213	1213(3)	15.88mm diameter	m	61.00				
1213	1213(3)	19.05mm diameter	m	576.00				
1213	1213(3)	22.23mm diameter	m	16.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1213	1213(3)	28.58mm diameter	m	365.00				
1213	1213(3)	34.93mm diameter	m	267.00				
1213	1213(3)	41.28mm diameter	m	293.00				
		<u>Thermal Insulation: Elastomeric rubber, Class O:</u>						
		15mm thick						
1213	1213(5)	6.35mm diameter	m	47.00				
1213	1213(5)	9.53mm diameter	m	104.00				
1213	1213(5)	12.70mm diameter	m	403.00				
1213	1213(5)	15.88mm diameter	m	61.00				
1213	1213(5)	19.05mm diameter	m	576.00				
1213	1213(5)	22.23mm diameter	m	16.00				
		20mm thick						
1213	1213(5)	28.58mm diameter	m	365.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1213	1213(5)	34.93mm diameter	m	267.00				
1213	1213(5)	41.28mm diameter	m	293.00				
		<u>CONDENSER WATER SYSTEM</u>						
		-						
		<u>Galvanized steel pipes and fittings; ERW; ASTM A-53, heavy grade; jointing in accordance with the designer's specification</u>						
1209	1209(1)	65mm diameter	m	12.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	1.00				
1209	1209(1)	80mm diameter	m	20.00				
1209	1209(1.1)	extra over for elbow	pc	2.00				
1209	1209(1.1)	extra over for tee	pc	2.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	2.00				
1209	1209(1)	100mm diameter	m	35.00				
1209	1209(1.1)	extra over for elbow	pc	3.00				
1209	1209(1)	125mm diameter	m	12.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Automatic Tube Cleaner (ATC)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes,	pc	2.00				
		Balancing Valve						
1210	1210(1)	250mm diameter	pc	2.00				
1210	1210(1)	300mm diameter	pc	1.00				
		Butterfly valve						
1210	1210(1)	250mm diameter	pc	12.00				
1210	1210(1)	300mm diameter	pc	1.00				
		Drain Valve						
1210	1210(1)	dimension as required	pc	5.00				
		Flexible connector						
1210	1210(1)	250mm diameter	pc	10.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Float valve						
1210	1210(1)	50mm diameter	pc	2.00				
		Flow switch (FS)						
1210	1210(1)	mounting to 250mm diameter galvanized steel pipes	pc	2.00				
		Gate valves						
1210	1210(1)	50mm diameter	pc	2.00				
		Isolation Valve						
1210	1210(1)	250mm diameter	pc	2.00				
		Motorized butterfly valve						
1210	1210(1)	250mm diameter	pc	6.00				
		Non-Return Valve						
1210	1210(1)	250mm diameter	pc	3.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Pressure gauges (PG); complete with cock						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	10.00				
		Temperature Gauge (TG)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	4.00				
		Test Plug (TP)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	10.00				
		Wye Strainer						
1210	1210(1)	250mm diameter	pc	4.00				
1210	1210(1)	300mm diameter	pc	1.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Pumps, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						
1218	1218(1)	ON-MZ-CDWP-01/02/03; condenser water pump; end-suction type, 3871.17 LPM at 175 kPa; 21kW motor, 380V/3ph/60Hz (2W+1S), ref STN-MEP-VAC-ON-5101	set	3.00				
		Chemical pot feeder; including all necessary accessories and connections, electrical/control wiring, conduits and controls; complete as in the equipment schedule and as described						
		capacity as required	pc	1.00				
		Cooling tower, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1219	1219(1)	ON-GL-CT-01/02; 3871.2 LPM; counter flow type with vertical discharge, axial type fan ; with anti vibration & chemical treatment; belt and pulley driven, 1350kW heat rejection; 19kW motor rating; 380V/3ph/60Hz, ref STN-MEP-VAC-ON-5101	set	2.00				
		Allowance for the provision of the following						
		Make-up Water tank including all necessary pipeworks and ancillaries and as shown in schematic diagram.	item	1.00				
		CHILLED WATER SYSTEM						
		Galvanized steel pipes and fittings; ERW; ASTM A-53, heavy grade; jointing in accordance with the designer's specification						
		To walls and chased						
1209	1209(1)	25mm diameter	m	216.00				
1209	1209(1)	32mm diameter	m	142.00				
1209	1209(1)	40mm diameter	m	385.00				
1209	1209(1)	50mm diameter	m					

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
				188.00				
1209	1209(1)	65mm diameter	m	112.00				
1209	1209(1.1)	extra over for elbow	pc	6.00				
1209	1209(1.1)	extra over for tee	pc	12.00				
1209	1209(1.1)	extra over for tee reducer	pc	2.00				
1209	1209(1.1)	80mm diameter	m	308.00				
1209	1209(1.1)	extra over for elbow	pc	16.00				
1209	1209(1.1)	extra over for tee reducer	pc	2.00				
1209	1209(1.1)	extra over for reducer	pc	2.00				
1209	1209(1)	100mm diameter	m	33.00				
1209	1209(1.1)	extra over for elbow	pc	9.00				
1209	1209(1.1)	extra over for tee reducer	pc	4.00				
1209	1209(1.1)	extra over for reducer	pc	2.00				
1209	1209(1)	125mm diameter	m	408.00				
1209	1209(1.1)	extra over for elbow	pc	26.00				
1209	1209(1.1)	extra over for tee reducer	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1209	1209(1.1)	extra over for tee	pc	6.00				
1209	1209(1.1)	extra over for reducer	pc	10.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	6.00				
1209	1209(1)	200mm diameter	m	575.00				
1209	1209(1.1)	extra over for elbow	pc	4.00				
1209	1209(1.1)	extra over for tee	pc	4.00				
1209	1209(1.1)	extra over for tee reducer	pc	2.00				
1209	1209(1.1)	extra over for reducer	pc	2.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	8.00				
1209	1209(1)	250mm diameter	m	219.00				
1209	1209(1.1)	extra over for elbow	pc	24.00				
1209	1209(1.1)	extra over for tee	pc	2.00				
1209	1209(1.1)	extra over for tee reducer	pc	12.00				
1209	1209(1.1)	extra over for reducer	pc	12.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	10.00				
		Rubber Insulation, class "0"						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Automatic Air Vent (AAV)						
1210	1210(1)	mounting to 80mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 125mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 200mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 300mm diameter galvanized steel pipes	pc	4.00				
		Balancing Valve						
1210	1210(1)	25mm diameter	pc	2.00				
1210	1210(1)	65mm diameter	pc	1.00				
1210	1210(1)	100mm diameter	pc	6.00				
1210	1210(1)	125mm diameter	pc	3.00				
1210	1210(1)	200mm diameter	pc	2.00				
1210	1210(1)	250mm diameter	pc	2.00				
		BTU meter						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1210	1210(1)	mounting to 32mm diameter galvanized steel pipes	pc	1.00				
		Butterfly valve						
1210	1210(1)	40mm diameter	pc	2.00				
1210	1210(1)	100mm diameter	pc	14.00				
1210	1210(1)	125mm diameter	pc	13.00				
1210	1210(1)	200mm diameter	pc	7.00				
1210	1210(1)	250mm diameter	pc	12.00				
		Drain Valve						
1210	1210(1)	dimension as required	pc	9.00				
		Flexible connector						
1210	1210(1)	40mm diameter	pc	2.00				
1210	1210(1)	50mm diameter	pc	2.00				
1210	1210(1)	80mm diameter	pc	8.00				
1210	1210(1)	200mm diameter	pc	8.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1210	1210(1)	250mm diameter	pc	10.00				
		Flow Switch (FS)						
1210	1210(1)	mounting to 100mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 200mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 250mm diameter galvanized steel pipes	pc	2.00				
		Motorized butterfly valve						
1210	1210(1)	200mm diameter	pc	1.00				
1210	1210(1)	250mm diameter	pc	2.00				
		Non-Return Valve (NRV)						
1210	1210(1)	100mm diameter	pc	2.00				
1210	1210(1)	200mm diameter	pc	2.00				
1210	1210(1)	250mm diameter	pc	3.00				
		Pressure gauges (PG); complete with cock						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1210	1210(1)	mounting to 80mm diameter galvanized steel pipes	pc	8.00				
1210	1210(1)	mounting to 250mm diameter galvanized steel pipes	pc	10.00				
		Temperature Gauge (TG)						
1210	1210(1)	mounting to 100mm diameter galvanized steel pipes	pc	4.00				
1210	1210(1)	mounting to 250mm diameter galvanized steel pipes	pc	4.00				
		Test Plug (TP)						
1210	1210(1)	mounting to 100mm diameter galvanized steel pipes	pc	10.00				
1210	1210(1)	mounting to 200mm diameter galvanized steel pipes	pc	4.00				
		Wye Strainer						
1210	1210(1)	100mm diameter	pc	6.00				
1210	1210(1)	250mm diameter	pc	3.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>of</u>						
		Pumps, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						
1217	1217(1)	ON-MZ-CHWP-01-03; WCC Chilled Water Pump; end suction type; 3138.79 LPM at 350 kPA PD; 30kW motor rating complete with VFD; 380V/3ph/60Hz; ref STN-MEP-VAC-ON-5101	set	3.00				
1217	1217(1)	ON-CL-CHWP-01-02; ACC Chilled water pump; end suction type; 247.034 LPM at 275 kPA PD; 1.5kW motor rating; 380V/3ph/60Hz; ref STN-MEP-VAC-ON-5101	set	2.00				
		Chiller, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						
		Water Cooled Chiller,						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Air separator; including all necessary accessories and connections, complete as in the equipment schedule and as described						
1210	1210(4)	ON-MZ-AS-01; 3139 lpm capacity; PN16; 7deg C, ref STN-MEP-VAC-ON-5104	pc	1.00				
1210	1210(4)	ON-CL-AS-01; 247 lpm capacity; PN16; 7deg C, ref STN-MEP-VAC-ON-5104	pc	1.00				
		Chemical pot feeder; including all necessary accessories and connections, electrical/control wiring, conduits and controls; complete as in the equipment schedule and as described						
		capacity as required	set	1.00				
		<u>MECHANICAL VENTILATION SYSTEM</u>						
		<u>Galvanized steel sheet rectangular ducts and fittings; conforming to SMACNA HVAC Duct Construction Standards</u>						
		-						
1211	1211(2)	Gauge 26	m2	549.00				
1211	1211(2)	Gauge 24	m2	2,845.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Exhaust Air Grille						
1211	1211(6)	EAG-1A/1E; 400mm x 300mm	pc	5.00				
1211	1211(6)	EAG-02; 200mm x 200mm	pc	1.00				
1211	1211(6)	EAG-3A/3Z; 400mm x 200mm	pc	26.00				
1211	1211(6)	EAG-4A/4E; 400mm x 300mm	pc	5.00				
1211	1211(6)	EAG-05; 200mm x 100mm	pc	1.00				
1211	1211(6)	EAG-6A/6G; 150mm x 150mm	pc	7.00				
1211	1211(6)	EAG-7A/7I; 150mm x 150mm	pc	9.00				
1211	1211(6)	EAG-8A/8J; 400mm x 400mm	pc	10.00				
1211	1211(6)	EAG-9A/9C; 400mm x 300mm	pc	3.00				
1211	1211(6)	EAG-10A/10C; 400mm x 300mm	pc	3.00				
1211	1211(6)	EAG-11; 400mm x 400mm	pc	1.00				
1211	1211(6)	EAG-12A-12F; 400mm x 400mm	pc	6.00				
1211	1211(6)	EAG-13A/13C; 200mm x 200mm	pc	3.00				
1211	1211(6)	EAG-14A/14N; 300mm x300mm	pc	14.00				
1211	1211(6)	EAG-15A/15B; 150mm x 150mm	pc	2.00				
1211	1211(6)	EAG-16A/16F; 400mm x 400mm	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	EAG-17A/17C; 400mm x 200mm	pc	3.00				
1211	1211(6)	EAG-18A/18B; 150mm x 200mm	pc	2.00				
		Fresh Air Grille						
1211	1211(6)	FAG 1A-1E; 400mm x 300mm	pc	5.00				
1211	1211(6)	FAG 2; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG-3A-3E; 200mm x 200mm	pc	5.00				
1211	1211(6)	FAG-4; 400mm x 150mm	pc	1.00				
1211	1211(6)	FAG-8A-8D; 400mm x 150mm	pc	4.00				
1211	1211(6)	FAG-9A/9J; 150mm x 150mm	pc	10.00				
1211	1211(6)	FAG-10A/10C; 400mm x 300mm	pc	3.00				
1211	1211(6)	FAG-11A/11C; 400mm x 300mm	pc	3.00				
1211	1211(6)	FAG-12; 400mm x 400mm	pc	1.00				
1211	1211(6)	FAG-13A/13F; 400mm x 400mm	pc	6.00				
1211	1211(6)	FAG 14A/14C; 200mm x 200mm	pc	3.00				
1211	1211(6)	FAG-15; 600mm x 600mm	pc	1.00				
1211	1211(6)	FAG-16A/16C; 400mm x 400mm	pc	3.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	FAG-17A-17F; 300mm x 300mm	pc	6.00				
1211	1211(6)	FAG-18A/18N; 300mm x 300mm	pc	14.00				
1211	1211(6)	FAG-19/20; 1500mm x 600mm	pc	2.00				
1211	1211(6)	FAG-22A/22C; 400mm x 200mm	pc	3.00				
1211	1211(6)	FAG-23A/23B; 150mm x 200mm	pc	2.00				
		Return Air Diffuser						
1211	1211(6)	600mm x 600mm	pc	48.00				
		Volume damper						
1211	1211(5)	150mm x 150mm	pc	14.00				
1211	1211(5)	200mm x 150mm	pc	1.00				
1211	1211(5)	200mm x 200mm	pc	9.00				
1211	1211(5)	300mm x 300mm	pc	20.00				
1211	1211(5)	400mm x 200mm	pc	3.00				
1211	1211(5)	400mm x 300mm	pc	11.00				
1211	1211(5)	400mm x 400mm	pc	8.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	650mm x 350mm	pc	1.00				
1211	1211(5)	700mm x 200mm	pc	1.00				
		Motorized smoke and fire damper						
1211	1211(5)	MSFD-1; 1000mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-02 to MSFD-15; 300mm x 300mm	pc	14.00				
1211	1211(5)	MSFD-52; 750mm x 700mm	pc	1.00				
1211	1211(5)	MSFD-57; 1000mm x 700mm	pc	1.00				
1211	1211(5)	MSFD-58; 1000mm x 700mm	pc	1.00				
1211	1211(5)	MSFD-59; 900mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-60; 650mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-61; 650mm x 250mm	pc	1.00				
1211	1211(5)	MSFD-63; 900mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-64; 900mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-65; 900mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-66; 650mm x 250mm	pc	1.00				
1211	1211(5)	MSFD-67; 650mm x 250mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	MSFD-69; 350mm x 350mm	pc	1.00				
1211	1211(5)	MSFD-70/74; 350mm x 350mm	pc	5.00				
1211	1211(5)	MSFD-75/76; 1000mm x 700mm	pc	2.00				
1211	1211(5)	MSFD-77; 900mm x 700mm	pc	1.00				
1211	1211(5)	MSFD-78/79; 1000mm x 700mm	pc	2.00				
1211	1211(5)	MSFD-80; 900mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-81/82; 1000mm x 400mm	pc	2.00				
1211	1211(5)	MSFD-84/85; 500mm x 500mm	pc	2.00				
1211	1211(5)	MSFD-86; 700mm x 200mm	pc	2.00				
1211	1211(5)	MSFD-87/89; 500mm x500mm	pc	3.00				
		Fire Damper						
1211	1211(5)	200mm x 150mm	pc	3.00				
1211	1211(5)	300mm x 200mm	pc	3.00				
1211	1211(5)	300mm x 300mm	pc	3.00				
1211	1211(5)	350mm x 350mm	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	400mm x 150mm	pc	1.00				
1211	1211(5)	400mm x 200mm	pc	1.00				
1211	1211(5)	400mm x 250mm	pc	1.00				
1211	1211(5)	400mm x 300mm	pc	2.00				
1211	1211(5)	400mm x 400mm	pc	4.00				
1211	1211(5)	500mm x 450mm	pc	3.00				
1211	1211(5)	1250mm x 100mm	pc	3.00				
		Non-Return Damper						
1211	1211(5)	300mm x 300mm	pc	3.00				
1211	1211(5)	400mm x 250mm	pc	1.00				
1211	1211(5)	400mm x 300mm	pc	1.00				
1211	1211(5)	400mm x 400mm	pc	1.00				
1211	1211(5)	600mm x 400mm	pc	1.00				
1211	1211(5)	1000mm x 600mm	pc	1.00				
		Pressure relief damper complete with fire damper						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	PRD - c/w FD - (AFC Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (Electrical Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (Generator Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (MZ - Fire Exit Staircase)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (SER Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (SSS Substation)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (SUR Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (Telco Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (TER Room)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (TSS -Traction Substation)	pc	1.00				
1211	1211(5)	PRD - c/w FD - (TUR Room)	pc	1.00				
		Plenum box						
1211	1211(6)	5800mm x 2000mm x 1200mm	pc	2.00				
		Fresh Air Filter						
1211	1211(6)	ON-MZ-FIL-01	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	ON-MZ-FIL-02	pc	1.00				
1211	1211(6)	ON-CL-FIL-01	pc	1.00				
1211	1211(6)	ON-CL-FIL-02	pc	1.00				
		Sound Attenuator						
1211	1211(6)	SA-01; 4200 cmh; 600mm x 500mm x 900mm; 7Pa; downstream	pc	1.00				
1211	1211(6)	SA-02; 4200 cmh; 600mm x 500mm x 900mm; 7Pa; upstream	pc	1.00				
1211	1211(6)	SA-03; 6800 cmh; 600mm x 500mm x 1500mm; 21Pa; downstream	pc	1.00				
1211	1211(6)	SA-04; 6800 cmh; 600mm x 500mm x 1500mm; 21Pa; upstream	pc	1.00				
1211	1211(6)	SA-05; 3180 cmh; 600mm x 500mm x 1500mm; 5Pa; downstream	pc	1.00				
1211	1211(6)	SA-06; 3180 cmh; 600mm x 500mm x 1500mm; 5Pa; upstream	pc	1.00				
1211	1211(6)	SA-07; 2030 cmh; 400mm x 300mm x 900mm; 10Pa; downstream	pc	1.00				
1211	1211(6)	SA-08; 2030 cmh; 400mm x 300mm x 900mm; 10Pa; upstream	pc	1.00				
1211	1211(6)	SA-09; 3866 cmh; 600mm x 500mm x 900mm; 7Pa; downstream	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	SA-10; 3866 cmh; 600mm x 500mm x 900mm; 7Pa; upstream	pc	1.00				
1211	1211(6)	SA-11; 18720 cmh; 750mm x 700mm x 2100mm; 57Pa; downstream	pc	1.00				
1211	1211(6)	SA-12; 18720 cmh; 750mm x 700mm x 2100mm; 57Pa; upstream	pc	1.00				
1211	1211(6)	SA-25; 4200 cmh; 400mm x 300mm x 1500mm; 49Pa; downstream	pc	1.00				
1211	1211(6)	SA-26; 4200 cmh; 400mm x 300mm x 1500mm; 49Pa; downstream	pc	1.00				
1211	1211(6)	SA-27; 6800 cmh; 600mm x 500mm x 6000mm; 121Pa; downstream	pc	1.00				
1211	1211(6)	SA-28; 6800 cmh; 600mm x 500mm x 6000mm; 121Pa; upstream	pc	1.00				
1211	1211(6)	SA-29; 18450 cmh; 1000mm x 700mm x 2100mm; 37Pa; downstream	pc	1.00				
1211	1211(6)	SA-30; 18450 cmh; 1000mm x 700mm x 2100mm; 37Pa; upstream	pc	1.00				
1211	1211(6)	SA-31; 20510 cmh; 1000mm x 700mm x 2100mm; 37Pa; downstream	pc	1.00				
1211	1211(6)	SA-32; 20510 cmh; 1000mm x 700mm x 2100mm; 37Pa; downstream	pc	1.00				
1211	1211(6)	SA-33; 21690 cmh; 1000mm x 700mm x 2100mm; 47Pa; upstream	pc	1.00				
1211	1211(6)	SA-34; 21690 cmh; 1000mm x 700mm x 2100mm; 47Pa; upstream	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Ventilation fans; including all accessories, controls, wirings, conduits, vibration isolator, backdraft damper and all other connections needed to complete the system						
1216	1216(3)	ON-CL-EAF-1A/1B; 1,490CMH; 350 Pa; centrifugal type; 0.37kW; 220V/1ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				
1216	1216(3)	ON-CL-EAF-02; 4,200CMH; 300 Pa; centrifugal type; 1.1kW; 380V/1ph/60Hz	set	1.00				
1216	1216(3)	ON-CL-EAF-03; 6,800CMH; 220 Pa; centrifugal type; 1.1kW; 220V/1ph/60Hz	set	1.00				
1216	1216(2)	ON-CL-EAF-04; 3,180CMH; 280 Pa; axial type; 0.75kW; 220V/1ph/60Hz	set	1.00				
1216	1216(3)	ON-CL-EAF-05; 1,250CMH; 660 Pa; centrifugal type; 0.55kW; 220V/1ph/60Hz	set	1.00				
1216	1216(2)	ON-CL-EAF-06; 2,030CMH; 270 Pa; axial type; 0.37kW; 220V/1ph/60Hz with Spark/Explosion proof & hydrogen sensor	set	1.00				
1216	1216(2)	ON-CL-EAF-07; 1,115CMH; 350 Pa; axial type; 0.37kW; 220V/1ph/60Hz with Spark/Explosion proof & hydrogen sensor	set	1.00				
1216	1216(2)	ON-CL-EAF-08; 3,866CMH; 350 Pa; axial type; 1.1kW; 380/3ph/60Hz with Spark/Explosion proof & hydrogen sensor	set	1.00				
1216	1216(3)	ON-CL-EAF-1A/1B; 1,490CMH; 630 Pa; centrifugal type;	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		AIR CONDITIONING SYSTEM						
		<u>Galvanized steel sheet rectangular ducts and fittings; conforming to SMACNA HVAC Duct Construction Standards</u>						
1211	1211(2)	Gauge 26	m2	351.00				
1211	1211(2)	Gauge 24	m2	3,057.00				
1211	1211(2)	Gauge 22	m2	2,161.00				
1211	1211(2)	Gauge 20	m2	108.00				
		<u>Thermal Insulation; Elastomeric closed cell rubberized 25mm thick</u>						
1212	1212(1)	fixing externally to rectangular ducts	m2	5,677.00				
		<u>Galvanized steel sheet ductwork ancillaries including flexible connections and flanges; conforming to the MPF Technical Specifications specified in 1211 Ductworks and Accessories</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Fire Damper						
1211	1211(5)	200mm x 150mm	pc	23.00				
1211	1211(5)	300mm x 300mm	pc	1.00				
1211	1211(5)	1250mm x 1000mm	pc	11.00				
		Linear Diffuser						
1211	1211(6)	ref. 1-136; 1200mm x 238mm	pc	138.00				
		Supply Air Grille						
1211	1211(6)	750mm x 200mm	pc	26.00				
1211	1211(6)	ref. SAG 1-81; 600mm x 150mm	pc	81.00				
1211	1211(6)	ref. SAG 82-169; 600mm x 150mm	pc	87.00				
		Return Air Grille						
1211	1211(6)	750mm x 200mm	pc	26.00				
		Fresh Air Grille (FAG)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	ref. FAG-05; 200mm x 150mm	pc	1.00				
1211	1211(6)	ref. FAG-6A-6B; 150mm x 150mm	pc	2.00				
1211	1211(6)	ref. FAG-7A-71; 200mm x 200mm	pc	9.00				
1211	1211(6)	ref. FAG-8A-8D; 150mm x 150mm	pc	4.00				
		Flexible duct						
1211	1211(4)	250mm diameter x 1m	pc	408.00				
		Motorized damper						
1211	1211(5)	MOD-01; 1000mm x 1200mm	pc	1.00				
1211	1211(5)	MOD-04; 1250mm x 1200mm	pc	1.00				
1211	1211(5)	MOD-06; 1200mm x 1000mm	pc	1.00				
1211	1211(5)	MOD-08; 1000mm x 1000mm	pc	1.00				
1211	1211(5)	MOD-09; 1000mm x 700mm	pc	1.00				
1211	1211(5)	MOD-10; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MOD-11; 1500mm x 1000mm	pc	1.00				
1211	1211(5)	MOD-12; 1500mm x 900mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	MOD-13; 1500mm x 850mm	pc	1.00				
1211	1211(5)	MOD-14; 1000mm x 700mm	pc	1.00				
		Sound Attenuator						
1211	1211(6)	SA-54; 20620cmh; 1250mm x 1000mm x 1500mm; 80Pa; Upstream	pc	1.00				
1211	1211(6)	SA-55; 20620cmh; 1250mm x 1000mm x 1500mm; 80Pa; Upstream	pc	1.00				
1211	1211(6)	SA-56; 48012cmh; 1200mm x 1000mm x 900mm; 74Pa; Upstream	pc	1.00				
1211	1211(6)	SA-57; 48012cmh; 1200mm x 1000mm x 900mm; 74Pa; Upstream	pc	1.00				
1211	1211(6)	SA-60; 48012cmh; 1200mm x 1000mm x 900mm; 74Pa; Upstream	pc	1.00				
1211	1211(6)	SA-61; 48012cmh; 1200mm x 1000mm x 900mm; 74Pa; Upstream	pc	1.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						

DEPARTMENT OF TRANSPORTATION (DOT)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Air Cooled Condensing Unit (ACCU), VRF/Multi-split type; including all necessary accessories and connections						
1213	1213(1)	ON-GL-OU-01; 162 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	ON-GL-OU-02; 162 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	ON-GL-OU-03; 157 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	ON-GL-OU-04; 157 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	ON-GL-OU-05; 130 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	ON-GL-OU-06; 130 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	ON-GL-OU-07; 90 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
		Fan Coil Unit (FCU), chilled water type; complete with insulation, thermostats, speed regulators and all necessary accessories and connections						
1214	1214(1)	ON-CL-FCU-01; ducted type; 1.7kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1214	1214(1)	ON-CL-FCU-02; ducted type; 2.2kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-03; ducted type; 3.5kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-04; ducted type; 1.3kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-05; ducted type; 1.1kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-06; ducted type; 5.3kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-07; ducted type; 4.6kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-08; ducted type; 1kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-09; ducted type; 1.3kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-10; ducted type; 2.7kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-11A & 11B; ducted type; 8.8kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	2.00				
1214	1214(1)	ON-CL-FCU-12; ducted type; 2.4kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-13; ducted type; 1.9kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-14; ducted type; 0.9kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1214	1214(1)	ON-CL-FCU-15; ducted type; 6.2kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	ON-CL-FCU-16; ducted type; 5.8kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
		Air Handling Unit (AHU), chilled water type; complete with insulation, thermostats, speed regulators, valves, sensors and all necessary accessories and connections						
1215	1215(1)	ON-MZ-AHU-01; 323 kW total cooling cap; 900 Pa return; 380V/3ph/60Hz; w/ VFD	set	1.00				
1215	1215(1)	ON-MZ-AHU-02; 323 kW total cooling cap; 900 Pa return; 380V/3ph/60Hz; w/ VFD	set	1.00				
1215	1215(1)	ON-CL-AHU-01; 468 kW total cooling cap; 750 Pa return; 380V/3ph/60Hz; w/ VFD	set	1.00				
1215	1215(1)	ON-CL-AHU-02; 468 kW total cooling cap; 750 Pa return; 380V/3ph/60Hz; w/ VFD	set	1.00				
		Fresh Air Handling Unit (FAHU), chilled water type; complete with insulation, thermostats, speed regulators and all necessary accessories and connections						
1215	1215(1)	ON-CL-FAH-01; 10.4 KW cooling capacity, 500 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1215	1215(1)	ON-CL-FAH-02; 34.8 KW cooling capacity, 500 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				
		PRESSURIZATION SYSTEM						
		<u>Galvanized steel sheet ductwork ancillaries including flexible connections and flanges; conforming to the MPF Technical Specifications specified in 1211 Ductworks and Accessories</u>						
		Motorized Fire Smoke Damper						
1211	1211(5)	MSFD-1; 1000mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-83A/83B; 750mm x 700mm	pc	2.00				
1211	1211(5)	MSFD-120/121; 750mm x 700mm	pc	2.00				
		Fresh Air Grille						
1211	1211(6)	FAG-19; 1500mm x 600mm fire rated	pc	1.00				
1211	1211(6)	FAG-20; 1500mm x 600mm	pc	1.00				
1211	1211(6)	FAG-21; 1500mm 600mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Ventilation fans; including all accessories, controls, wirings, conduits, vibration isolator and all other connections needed to complete the system						
1216	1216(4)	ON-CL-FAF-4A/4B; 18,720CMH; 300 Pa; axial type; 5.5kW; 380V/3ph/60Hz with VFD	set	2.00				
1216	1216(4)	ON-GL-FAF-1A/1B; 18,720CMH; 300 Pa; axial type; 4kW; 380V/3ph/60Hz with VFD	set	2.00				
1216	1216(4)	ON-GL-FAF-2A/2B; 18,720CMH; 300 Pa; axial type; 4kW; 380V/3ph/60Hz with VFD	set	2.00				
		<u>Allowance for the provision of the following</u>						
1211	1211(6)	Duct work ancillaries and differential pressure sensor including wirings, cables, conduits, controls and all necessary connections to complete the system and as described	item	1.00				
		SMOKE EXHAUST SYSTEM						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Galvanized carbon steel sheet rectangular ducts and fittings; fire rated; conforming to SMACNA HVAC Duct Construction Standards</u>						
1211	1211(2)	Gauge 16	m2	3,415.00				
		<u>Thermal Insulation: Insulfrax 40mm thick; 2.0hour fire rated; 96kg/cu.m</u>						
1212	1212(1)	fixing externally to rectangular ducts	m2	3,415.00				
		<u>Galvanized carbon steel sheet ductwork ancillaries including flexible connections and flanges; conforming to the MPF Technical Specifications specified in 1211 - Ductworks and Accessories</u>						
		-						
1211	1211(5)	Volume damper 600mm x 300mm	pc	72.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Fire Damper						
1211	1211(5)	900mm x 900mm	pc	1.00				
1211	1211(5)	1000mm x 700mm	pc	1.00				
1211	1211(5)	1500mm x 800mm	pc	1.00				
		Non-Return Damper						
1211	1211(5)	350mm x 350mm	pc	1.00				
1211	1211(5)	700mm x 500mm	pc	1.00				
1211	1211(5)	700mm x 600mm	pc	2.00				
1211	1211(5)	1250mm x 1000mm	pc	1.00				
1211	1211(5)	1500mm x 900mm	pc	1.00				
		Smoke Exhaust Grilles						
1211	1211(6)	SEG-01; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-02; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-03; 1500mm x 600mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	SEG-04; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-05; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-06; 150mm x 100mm	pc	1.00				
1211	1211(6)	SEG-07; 150mm x 100mm	pc	1.00				
1211	1211(6)	SEG-8A/8B; 400mm x 400mm	pc	2.00				
1211	1211(6)	SEG-9A/9P; 1000mm x 150mm	pc	16.00				
1211	1211(6)	SEG-10A/10P; 1000mm x 150mm	pc	16.00				
1211	1211(6)	SEG-11A/11P; 600mm x 600mm	pc	16.00				
1211	1211(6)	SEG-12; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-13; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-14; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-15; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-16; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-17; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-18; 600mm x 600mm	pc	1.00				
1211	1211(6)	SEG-19; 600mm x 600mm	pc	1.00				
1211	1211(6)	SEG-20; 1500mm x 600mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	SEG-21; 600mm x 600mm	pc	1.00				
1211	1211(6)	SEG-22/22D; 200mm x 200mm	pc	4.00				
1211	1211(6)	SEG-23; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-24; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-25; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG-26; 600mm x 600mm	pc	1.00				
1211	1211(6)	SEG-27A/27C; 400mm x 400mm	pc	3.00				
1211	1211(6)	SEG-28A/28F; 300mm x 300mm	pc	6.00				
		Smoke Exhaust Grilles						
1211	1211(6)	RAG 1-72; 600x300mm	pc	72.00				
		Return Air Diffuser						
1211	1211(6)	600mm x 600mm	pc	48.00				
		Flexible duct						
1211	1211(4)	150mm x 2m	pc	48.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Motorized Smoke Fire Damper						
1211	1211(5)	MSFD-16 to MSFD-26; 700mm x 500mm	pc	11.00				
1211	1211(5)	MSFD-27; 700mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-28; 300mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-35; 700mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-36; 700mm x 600mm	pc	1.00				
1211	1211(5)	MSFD-38; 1250mm x 700mm	pc	1.00				
1211	1211(5)	MSFD-39; 1250mm x 700mm	pc	1.00				
1211	1211(5)	MSFD-40 to MSFD-47; 600mm x 500mm	pc	8.00				
1211	1211(5)	MSFD-48; 300mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-51; 900mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-53; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-54; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-55; 1500mm x 1000mm	pc	1.00				
1211	1211(5)	MSFD-56; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-97; 500mm x 500mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	MSFD-98; 500mm x 500mm	pc	1.00				
1211	1211(5)	MSFD-99; 500mm x 500mm	pc	1.00				
1211	1211(5)	MSFD-100; 500mm x 500mm	pc	1.00				
1211	1211(5)	MSFD-105; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-106; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-118; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MSFD-119; 1500mm x 850mm	pc	1.00				
		Sound Attenuator						
1211	1211(5)	SA-13; 9480cmh; 700mm x 500mm x 1500mm; 13Pa; downstream	pc	1.00				
1211	1211(5)	SA-14; 9480cmh; 700mm x 500mm x 1500mm; 13Pa; upstream	pc	1.00				
1211	1211(5)	SA-15; 7560cmh; 800mm x 800mm x 900mm; 5Pa; downstream	pc	1.00				
1211	1211(5)	SA-16; 7560cmh; 800mm x 800mm x 900mm; 5Pa; upstream	pc	1.00				
1211	1211(5)	SA-17; 4260cmh; 600mm x 500mm x 900mm; 15Pa; downstream	pc	1.00				
1211	1211(5)	SA-18; 7560cmh; 600mm x 500mm x 900mm; 15Pa; upstream	pc	1.00				
1211	1211(5)	SA-19; 11880cmh; 700mm x 600mm x 1500mm; 74Pa;	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOT)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		downstream						
1211	1211(5)	SA-20; 11880cmh; 700mm x 600mm x 1500mm; 74Pa; upstream	pc	1.00				
1211	1211(5)	SA-21; 28800cmh; 800mm x 800mm x 2100mm; 64Pa; downstream	pc	1.00				
1211	1211(5)	SA-22; 28800cmh; 800mm x 800mm x 2100mm; 64Pa; downstream	pc	1.00				
1211	1211(5)	SA-23; 28800cmh; 800mm x 800mm x 2100mm; 64Pa; downstream	pc	1.00				
1211	1211(5)	SA-24; 28800cmh; 800mm x 800mm x 2100mm; 64Pa; upstream	pc	1.00				
1211	1211(5)	SA-39; 3850cmh; 500mm x 500mm x 900mm; 63Pa; upstream	pc	1.00				
1211	1211(5)	SA-40; 3850cmh; 500mm x 500mm x 900mm; 63Pa; downstream	pc	1.00				
1211	1211(5)	SA-46; 53550cmh; 1200mm x 1000mm x 1200mm; 74Pa; downstream	pc	1.00				
1211	1211(5)	SA-47; 53550cmh; 1200mm x 1000mm x 1200mm; 74Pa; upstream	pc	1.00				
1211	1211(5)	SA-48; 53550cmh; 1200mm x 1000mm x 1200mm; 74Pa; downstream	pc	1.00				
1211	1211(5)	SA-49; 53550cmh; 1200mm x 1000mm x 1200mm; 74Pa; upstream	pc	1.00				
1211	1211(5)	SA-50; 37601cmh; 1250mm x 1000mm x 1200mm; 68Pa; downstream	pc	1.00				
1211	1211(5)	SA-51; 37601cmh; 1250mm x 1000mm x 1200mm; 68Pa;	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOT)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		upstream						
1211	1211(5)	SA-52; 37601cmh; 1250mm x 1000mm x 1200mm; 68Pa; downstream	pc	1.00				
1211	1211(5)	SA-53; 37601cmh; 1250mm x 1000mm x 1200mm; 68Pa; upstream	pc	1.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Ventilation fans; including all accessories, controls, wirings, conduits, vibration isolator and all other connections needed to complete the system						
1216	1216(4)	ON-CL-SEF-1A/1B; 9,480CMH; 1600 Pa; centrifugal type; 7.5kW; 380V/3ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				
1216	1216(4)	ON-CL-SEF-2A/2B; 7,560CMH; 1,350 Pa; centrifugal type; 5.5kW; 380/3ph/60Hz with VFD	set	2.00				
1216	1216(4)	ON-CL-SEF-3A/3B; 4,260CMH; 1600 Pa; centrifugal type; 3.7kW; 3800V/3ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1216	1216(4)	ON-CL-SEF-4A/4B; 11,880CMH; 1600 Pa; centrifugal type; 7.5kW; 380V/3ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				
1216	1216(4)	ON-CL-SEF-05/06; 28,800CMH; 1130 Pa; centrifugal type; 12kW; 380V/3ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				
1216	1216(4)	ON-CL-SEF-07/08; 28,800CMH; 1130 Pa; centrifugal type; 12kW; 380V/3ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				
1216	1216(4)	ON-MZ-SEF-1A/1B; 13320CMH; 1,150 Pa; centrifugal type; 10kW; 380V/3ph/60Hz with VFD and vibrator insulator	set	2.00				
1216	1216(4)	ON-MZ-RAF-01/02; 53,550CMH; 1,150 Pa; centrifugal type; 32kW; 380V/3ph/60Hz with VFD and vibrator insulator; fire rated @250C/2hours	set	2.00				
1216	1216(4)	ON-MZ-RAF-03/04; 53,550CMH; 1,150 Pa; centrifugal type; 32kW; 380V/3ph/60Hz with VFD and vibrator insulator; fire rated @250C/2hours	set	2.00				
1216	1216(4)	ON-CL-RAF-01; 47,540CMH; 1,150 Pa; centrifugal type; 29kW; 380V/3ph/60Hz with VFD and vibrator insulator; fire rated @250C/2hours	set	1.00				
1216	1216(4)	ON-CL-RAF-02; 47,540CMH; 1,150 Pa; centrifugal type; 29kW; 380V/3ph/60Hz with VFD and vibrator insulator; fire rated @250C/2hours	set	1.00				
		Allowance for the provision of the following						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1216	1216	Duct work ancillaries and differential pressure sensor including wirings, cables, conduits, controls and all necessary connections to complete the system and as describe	item	1.00				
		<u>TUNNEL VENTILATION SYSTEM</u>						
		<u>Ductwork ancillaries including flexible connections and flanges conforming to the installation of duct accessories specified in MPF Technical specification 1211 Ductworks and Accessories</u>						
		Tunnel Ventilation Dampers						
1228	1228(1)	MSFD-108; 5000mm x 2500mm Multi blade, electric; 360,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-109/109B; 5000mm x 2500mm Multi blade, electric; 360,000cu.m/hr.	pc	2.00				
1228	1228(1)	MSFD-110; 3000mm x 3750mm Multi blade, electric; 360,000cu.m/hr.	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1228	1228(1)	MSFD-111; 2500mm x 4500mm Multi blade, electric; 396,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-112A/112B; 5000mm x 2500mm Multi blade, electric; 396,000cu.m/hr.	pc	2.00				
1228	1228(1)	MSFD-113; 5000mm x 2500mm Multi blade, electric; 396,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-114A/114B; 5000mm x 2500mm Multi blade, electric; 396,000cu.m/hr.	pc	2.00				
1228	1228(1)	MSFD-115; 3000mm x 3750mm Multi blade, electric; 396,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-116; 5000mm x 2500mm Multi blade, electric; 324,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-117A/117B; 5000mm x 2500mm Multi blade, electric ;324,000cu.m/hr.	pc	2.00				
1228	1228(1)	MSFD-118; 3000mm x 3750mm Multi blade, electric; 360,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-119; 3000mm x 3750mm Multi blade, electric; 396,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-120; 3000mm x 3750mm Multi blade, electric; 396,000cu.m/hr.	pc	1.00				
1228	1228(1)	MSFD-121; 3000mm x 3750mm Multi blade, electric; 324,000cu.m/hr.	pc	1.00				
		Motorized Smoke Fire Damper						
1211	1211(5)	ON-ST-TV5-01, 6600mm X 5000mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOT)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Ventilation fans; including all necessary accessories, controls, cables/wirings, conduits, vibration isolator and all other connections needed to complete the system						
1227	1227(1)	ON-MZ-TVF-01; Axial flow, fully reversible; direct driven; 360,000 m3/hr. @ 1200Pa Static Pressure; 250°C for 1 hr.;	set	1.00				
1227	1227(1)	ON-MZ-TVF-02; Axial flow, fully reversible; direct driven; 396,000 m3/hr. @ 1400 Pa; 250°C for 1 hr.	set	1.00				
1227	1227(1)	ON-MZ-TVF-03; Axial flow, fully reversible; direct driven; 396,000 m3/hr. @ 1500 Pa; 250°C for 1 hr.	set	1.00				
1227	1227(1)	ON-MZ-TVF-04; Axial flow, fully reversible; direct driven; 324,000 m3/hr. @ 1200 Pa; 250°C for 1 hr.	set	1.00				
		<u>Allowance for the provision of the following</u>						
1227	1227	Tunnel ventilation ducts and ancillaries including grilles, dampers, flanges, connections and all other necessary accessories	item	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		SUB-TOTAL (AIR CONDITIONING AND MECHANICAL VENTILATION)						
		ELECTRICAL AND AUXILIARY INSTALLATION						
		Mains and Sub-Mains Distribution Systems						
		Supply and installation of busduct and fittings including supply drop rods, fire sealant, vertical load supports, hangers, consumables all in accordance with the drawing (STN-MEP-ELL-ON-3323 to 3324) and specification						
1112	1112 (1)	4000A, 400V, 60Hz,4W Copper busduct with with 50 % Integral ground bus IP.54	m	300.00				
1112	1112 (2)	Flanged end	set	8.00				
1112	1112 (3)	Horizontal Elbow	set	16.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1112	1112 (4)	Vertical Elbow	set	8.00				
1112	1112 (5)	Trapeze hanger	item	1.00				
1112	1112 (6)	Spring hanger	item	1.00				
1112	1112 (7)	Flexible braided connector	set	8.00				
1112	1112 (8)	1200AT Tap-off breaker	set	2.00				
		Cable Tray; including all necessary accessories/ ancillaries, fittings hangers and supports; reference STN-MEP-ELL-ON-3301 to 3346						
1117	1117 (1a)	50mm x 100mm	m	400.00				
1117	1117 (1b)	100mm x 100mm	m	600.00				
1117	1117 (1c)	150mm x 100mm	m	1,600.00				
1117	1117 (1d)	200mm x 100mm	m					

DEPARTMENT OF TRANSPORTATION (DOT)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
				500.00				
1117	1117 (1e)	225mm x 100mm	m	200.00				
1117	1117 (1f)	300mm x 100mm	m	1,300.00				
1117	1117 (1g)	400mm x 100mm	m	400.00				
1117	1117 (1h)	450mm x 100mm	m	100.00				
1117	1117 (1i)	500mm x 100mm	m	100.00				
1117	1117 (1j)	600mm x 100mm	m	1,200.00				
1117	1117 (1k)	750mm x 100mm	m	1,000.00				
1117	1117 (1l)	900mm x 100mm	m	500.00				
		Intermediate metallic conduit (IMC); reference STN-MEP-ELL-ON-2012						
		Surface fixed; including all necessary supports and accessories						
1116	1116 (2a)	20 mm diameter	m	100.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (2b)	25 mm diameter	m	800.00				
1116	1116 (2c)	32 mm diameter	m	300.00				
1116	1116 (2d)	40 mm diameter	m	100.00				
1116	1116 (2e)	50 mm diameter	m	200.00				
1116	1116 (2f)	65 mm diameter	m	100.00				
1116	1116 (2g)	80 mm diameter	m	200.00				
1116	1116 (2h)	100 mm diameter	m	200.00				
		Rigid metallic conduit (RMC); reference STN-MEP-ELL-ON-3300 to 3344						
1116	1116 (3a)	15mm diameter	m	1,100.00				
1116	1116 (3b)	20mm diameter	m	500.00				
1116	1116 (3c)	25mm diameter	m	600.00				
1116	1116 (3d)	32mm diameter	m	1,100.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (3e)	40mm diameter	m	500.00				
1116	1116 (3f)	50mm diameter	m	200.00				
1116	1116 (3g)	65mm diameter	m	100.00				
		Feeder wires/cables; type XLPE; reference STN-MEP-ELL-ON-2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (2a)	2C x 14 sq. mm	m	100.00				
1121	1121 (2b)	3C x 14mm2	m	1,200.00				
1121	1121 (2c)	3C x 22mm2	m	200.00				
1121	1121 (2d)	3C x 30mm2	m	600.00				
1121	1121 (2e)	3C x 38mm2	m	900.00				
1121	1121 (2f)	3C x 50mm2	m	600.00				
1121	1121 (2g)	3C x 60mm2	m	1,100.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (2a)	2C x 14 sq. mm	m	800.00				
1121	1121 (2b)	3C x 14mm2	m	4,100.00				
1121	1121 (2c)	3C x 22mm2	m	600.00				
1121	1121 (2d)	3C x 30mm2	m	300.00				
1121	1121 (2e)	3C x 38mm2	m	700.00				
1121	1121 (2f)	3C x 50mm2	m	700.00				
1121	1121 (2g)	3C x 80mm2	m	300.00				
1121	1121 (2h)	3C x 200mm2	m	100.00				
1121	1121 (2i)	3C x 400mm2	m	300.00				
1121	1121 (2j)	4C x 14 sq. mm	m	1,500.00				
1121	1121 (2k)	4C x 22 sq. mm	m	400.00				
1121	1121 (2l)	4C x 30 sq. mm	m	600.00				
1121	1121 (2m)	4C x 38 sq. mm	m	100.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (2n)	4C x 50 sq. mm	m	100.00				
1121	1121 (2o)	4C x 80 sq. mm	m	200.00				
1121	1121 (2p)	4C x 100 sq. mm	m	500.00				
1121	1121 (2q)	4C x 150 sq. mm	m	400.00				
1121	1121 (2r)	4C x 200 sq. mm	m	400.00				
1121	1121 (2s)	4C x 250 sq. mm	m	4,600.00				
1121	1121 (2t)	4C x 400 sq. mm	m	3,700.00				
		Feeder wires/cables; type XLPE/ CPC; reference STN-MEP-ELL-ON-2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (4a)	1C x 5.5 sq. mm	m	8,300.00				
1121	1121 (4b)	1C x 8.0 sq. mm	m	2,100.00				
1121	1121 (4c)	1C x 14 sq. mm	m	600.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (4d)	1C x 22 sq. mm	m	400.00				
1121	1121 (4e)	1C x 30 sq. mm	m	200.00				
1121	1121 (4f)	1C x 50 sq. mm	m	300.00				
1121	1121 (4g)	1C x 38 sq. mm	m	300.00				
1121	1121 (4h)	1C x 60 sq. mm	m	300.00				
		Feeder wires/cables; type XLPE-F/ CPC; reference STN-MEP-ELL-ON-2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (5a)	1C x 5.5 sq. mm	m	6,600.00				
1121	1121 (5b)	1C x 8.0 sq. mm	m	1,800.00				
1121	1121 (5c)	1C x 14 sq. mm	m	1,200.00				
1121	1121 (5d)	1C x 22 sq. mm	m	100.00				
1121	1121 (5e)	1C x 30 sq. mm	m	300.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (5f)	1C x 38 sq. mm	m	200.00				
1121	1121 (5g)	1C x 50 sq. mm	m	300.00				
1121	1121 (5h)	1C x 60 sq. mm	m	700.00				
1121	1121 (5i)	1C x 80 sq. mm	m	500.00				
		Panelboards; including Busbar, Neutral bus, selector switch, contactors, relays, integral surge protection devices (SPD), phase indicating lights, power meters and auxilliary contacts for BMS interconnection and all necessary accessories in accordance with the manufacturer's instructions and as shown in drawings with reference STN-MEP-ELL-ON-2012 and						
		Panelboard						
1113	1113 (1a)	Panelboard; ON-CL-ELDB-01 (BOH LTG)	Assembly	1.00				
1113	1113 (1b)	Panelboard; ON-CL-ELDB-02 (FOH LTG)	Assembly	1.00				
1113	1113 (1c)	Panelboard; ON-CL-ELDB-03 FOH LIGHTING	Assembly	1.00				
1113	1113 (1d)	Panelboard; ON-CL-ELDB-04 FOH LTG.	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
METRO MANILA SUBWAY PROJECT (MMSP)
PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (1e)	Panelboard; ON-CL-ELDB-05 FOH LIGHTING	Assembly	1.00				
1113	1113 (1f)	Panelboard; ON-CL-ELDB-06 (BOH LIGHTING)	Assembly	1.00				
1113	1113 (1g)	Panelboard; ON-CL-EMCC-01	Assembly	1.00				
1113	1113 (1h)	Panelboard; ON-CL-EMCC-02	Assembly	1.00				
1113	1113 (1i)	Panelboard; ON-CL-EMCC-03	Assembly	1.00				
1113	1113 (1j)	Panelboard; ON-CL-EMCC-05	Assembly	1.00				
1113	1113 (1k)	Panelboard; ON-CL-EPDB-01 (FCU's)	Assembly	1.00				
1113	1113 (1l)	Panelboard; ON-CL-EPDB-02 (FOR FCU's)	Assembly	1.00				
1113	1113 (1m)	Panelboard; ON-CL-PDB-01 (SMALL POWER)	Assembly	1.00				
1113	1113 (1n)	Panelboard; ON-CL-PDB-02 (SMALL POWER)	Assembly	1.00				
1113	1113 (1o)	Panelboard; ON-CL-PDB-03	Assembly	1.00				
1113	1113 (1p)	Panelboard; ON-CL-PDB-04 (SMALL POWER)	Assembly	1.00				
1113	1113 (1q)	Panelboard; ON-CL-UDB-01 (EMG LTG & POWER)	Assembly	1.00				
1113	1113 (1r)	Panelboard; ON-CL-UDB-02 (EMG.LTG & POWER)	Assembly	1.00				
1113	1113 (1s)	Panelboard; ON-CL-UDB-03 FOH EMG. POWER	Assembly	1.00				
1113	1113 (1t)	Panelboard; ON-CL-UDB-04 FOH EMG. LTG.	Assembly	1.00				
1113	1113 (1u)	Panelboard; ON-MZ-ELDB-01 (BOH LIGHTING)	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
METRO MANILA SUBWAY PROJECT (MMSP)
PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (1v)	Panelboard; ON-MZ-ELDB-02 (BOH LIGHTING)	Assembly	1.00				
1113	1113 (1w)	Panelboard; ON-MZ-EMCC-01	Assembly	1.00				
1113	1113 (1x)	Panelboard; ON-MZ-EMCC-02	Assembly	1.00				
1113	1113 (1y)	Panelboard; ON-MZ-EMCC-03	Assembly	1.00				
1113	1113 (1z)	Panelboard; ON-MZ-EMCC-04	Assembly	1.00				
1113	1113 (1aa)	Panelboard; ON-MZ-EMCC-06	Assembly	1.00				
1113	1113 (1ab)	Panelboard; ON-MZ-EMCC-07	Assembly	1.00				
1113	1113 (1ac)	Panelboard; ON-MZ-EMCC-08	Assembly	1.00				
1113	1113 (1ad)	Panelboard; ON-MZ-EMDB-01	Assembly	1.00				
1113	1113 (1ae)	Panelboard; ON-MZ-EPDB-01 (FOR IDU's)	Assembly	1.00				
1113	1113 (1af)	Panelboard; ON-MZ-EPDB-02 (FOR IDU's)	Assembly	1.00				
1113	1113 (1ag)	Panelboard; ON-MZ-ESMDB-01	Assembly	1.00				
1113	1113 (1ah)	Panelboard; ON-MZ-MCC-01	Assembly	1.00				
1113	1113 (1ai)	Panelboard; ON-MZ-MCC-02	Assembly	1.00				
1113	1113 (1aj)	Panelboard; ON-MZ-MDB-01	Assembly	1.00				
1113	1113 (1ak)	Panelboard; ON-MZ-PDB-01 (SMALL POWER)	Assembly	1.00				
1113	1113 (1al)	Panelboard; ON-MZ-PDB-02 (SMALL POWER)	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
METRO MANILA SUBWAY PROJECT (MMSP)
PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (1am)	Panelboard; ON-MZ-SMDB-01	Assembly	1.00				
1113	1113 (1an)	Panelboard; ON-MZ-UDB-01 (EMG.LTG & POWER)	Assembly	1.00				
1113	1113 (1ao)	Panelboard; ON-MZ-UDB-02 (EMG.LTG. & POWER)	Assembly	1.00				
1113	1113 (1ap)	Panelboard; ON-MZ-USMDB-01	Assembly	1.00				
1113	1113 (1aq)	Panelboard; ON-PL-ELDB-01 FOH LIGHTING	Assembly	1.00				
1113	1113 (1ar)	Panelboard; ON-PL-ELDB-02 FOH LIGHTING	Assembly	1.00				
1113	1113 (1as)	Panelboard; ON-PL-ELDB-03 FOH LIGHTING	Assembly	1.00				
1113	1113 (1at)	Panelboard; ON-PL-EMCC-01	Assembly	1.00				
1113	1113 (1au)	Panelboard; ON-PL-PDB-01 SMALL POWER	Assembly	1.00				
1113	1113 (1av)	Panelboard; ON-PL-PDB-02 SMALL POWER	Assembly	1.00				
1113	1113 (1aw)	Panelboard; ON-PL-UDB-01 EMG.LTG & POWER	Assembly	1.00				
1113	1113 (1ax)	Panelboard; ON-PL-UDB-02 EMG. LTG & POWER	Assembly	1.00				
1113	1113 (1ay)	Panelboard; ON-PL-UDB-04 EMG.LTG & POWER	Assembly	1.00				
1113	1113 (1az)	Panelboard; ON-ST-ELDB-01 ENTRANCE-1	Assembly	1.00				
1113	1113 (1ba)	Panelboard; ON-ST-ELDB-02 ENTRANCE-02	Assembly	1.00				
1113	1113 (1bb)	Panelboard; ON-TN-ELPDB-01 FOR TUNNEL	Assembly	1.00				
1113	1113 (1bc)	Panelboard; ON-TN-ELPDB-02 FOR TUNNEL	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (1bd)	Panelboard; ON-CL-LCP-01	Assembly	1.00				
1113	1113 (1be)	Panelboard; ON-CL-LCP-02	Assembly	1.00				
1114	1114 (1bf)	Panelboard; ON-ADV-PDB-01	Assembly	1.00				
1115	1115 (1bg)	Panelboard; ON-ADV-PDB-02	Assembly	1.00				
1116	1116 (1bh)	Panelboard; ON-ADV-PDB-03	Assembly	1.00				
1117	1117 (1bi)	Panelboard; ON-ADV-PDB-04	Assembly	1.00				
1118	1118 (1bj)	Panelboard; ON-ADV-PDB-05	Assembly	1.00				
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described; reference STN-MEP-ELL-OS-3311 to 3334						
		Capacitor Bank						
1113	1113 (2a)	APFC Panel 01 & 02 ; 500 KVAR	Assembly	2.00				
		Enclosed Circuit Breaker (ECB); in NEMA 4X Enclosure						

DEPARTMENT OF TRANSPORTATION (DOTr)
METRO MANILA SUBWAY PROJECT (MMSP)
PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (3a)	15A TPN	Assembly	2.00				
1113	1113 (3b)	25A SPN	Assembly	11.00				
1113	1113 (3c)	25A TPN	Assembly	39.00				
1113	1113 (3d)	30A TPN	Assembly	22.00				
1113	1113 (3e)	35A TPN	Assembly	5.00				
1113	1113 (3f)	40A TPN	Assembly	37.00				
1113	1113 (3g)	50A TPN	Assembly	18.00				
1113	1113 (3h)	60A TPN	Assembly	28.00				
1113	1113 (3i)	70A TPN	Assembly	9.00				
1113	1113 (3j)	80A TPN	Assembly	14.00				
1113	1113 (3k)	100A TPN	Assembly	13.00				
1113	1113 (3l)	125A TPN	Assembly	2.00				
1113	1113 (3m)	150A TPN	Assembly	5.00				
1113	1113 (3n)	200A TPN	Assembly	5.00				
1113	1113 (3o)	225A TPN	Assembly	1.00				
1113	1113 (3p)	250A TPN	Assembly	3.00				
1113	1113 (3q)	300A TPN	Assembly	5.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
METRO MANILA SUBWAY PROJECT (MMSP)
PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (3r)	350A TPN	Assembly	6.00				
1113	1113 (3s)	450A TPN	Assembly	1.00				
1113	1113 (3t)	500A TPN	Assembly	3.00				
1113	1113 (3u)	600A TPN	Assembly	7.00				
		Isolators						
1113	1113 (3v)	20A SPN; isolator Fire Shutter	Assembly	12.00				
1113	1113 (3w)	20A TPN; isolator for Water HEater	Assembly	9.00				
1113	1113 (3x)	20A TPN; Isolator; HL	Assembly	6.00				
1113	1113 (3y)	Isolator fo FACP	Assembly	1.00				
1113	1113 (3z)	Isolator for DPMCP	Assembly	1.00				
1113	1113 (3aa)	Isolator for PLC Panel	Assembly	7.00				
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described; reference STN-MEP-ELL-OS-2011						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Automatic Transfer Switch						
1113	1113 (4)	300AT, 3P	Assembly					
		Automatic Transfer Switch; for Fire pump and Jockey pump						
1113	1113 (5)	1200AT, 3P	Assembly	1.00				
		Supply and fix the following items; including all necessary accessories such as Maintenance By-pass switch, LCD Status and control console, emergency power off and external battery system including cables in accordance with the manufacturer's instructions and as described with reference STN-MEP-ELL-OS-2011						
		Uninterruptible Power Supply (UPS)						
1114	1114 (1)	125KVA	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Supply and fix the following items; Battery racks, battery controller, sensors as well as transducer for BMS interface, including cables in accordance with the manufacturer's instructions and as described with reference STN-MEP-ELL-OS-2011						
		External Battery System						
1114	1114 (2)	External Battery System; 2 hours	set	2.00				
		General Lighting and Power						
		Conduit systems to receive final circuits; Intermediate Metallic Conduit (IMC) conduit including boxes, fittings and necessary flexible metallic conduit; reference STN-MEP-ELL-ON-3101-3146; STN-MEP-ELL-ON-3201-3246						
		From panelboards to						
1116	1116 (1a)	lighting points; locally controlled ceiling mounted	nr	4,194.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (1b)	lighting points; locally controlled wall mounted	nr	382.00				
1116	1116 (1c)	exit sign points	nr	106.00				
1116	1116 (1d)	switch points; 1 way 1 gang	nr	17.00				
1116	1116 (1e)	switch points; 1 way (emergency lighting)	nr	72.00				
1116	1116 (1f)	switch points; presence detector bypass switch (in metal clad)	nr	54.00				
1116	1116 (1g)	Surfaced Mounted switched socket outlet points	nr	42.00				
1116	1116 (1h)	Surfaced Mounted twin switched socket outlet points	nr	96.00				
1116	1116 (1i)	Surfaced Mounted twin switched socket outlet points on UPS Supply	nr	63.00				
1116	1116 (1j)	Fused Connection Unit complete with switch points for Hand dryer	nr	9.00				
1116	1116 (1k)	Fused Connection Unit complete with switch points for Fan Coil Unit	nr	23.00				
1116	1116 (1l)	Surfaced Mounted switched socket outlet points on UPS Supply	nr	24.00				
1116	1116 (1m)	Surfaced Mounted switched socket outlet points	nr	77.00				
1116	1116 (1n)	Surfaced Mounted socket outlet without switch points	nr	30.00				
1116	1116 (1o)	Fused Connection Unit complete with switch points	nr	11.00				
1116	1116 (1p)	10A Fused Connection Unit complete with switch for CCTV and Door Controller points	nr	69.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (1q)	Fused Connection Unit complete with switch points for MSFD & MOD (Metalclad type)	nr	109.00				
1116	1116 (1r)	Junction Box for "SN" fixture	nr	117.00				
1116	1116 (1s)	Junction Box for "PD" fixture	nr	115.00				
1116	1116 (1t)	Junction box; striplights	nr	8.00				
1116	1116 (1u)	Junction Box points for Escalator lighting	nr	8.00				
1116	1116 (1v)	Junction Box points for T&B mirror lighting	nr	6.00				
		Final circuits in single core LSOH/ Fire rated cables; drawing into intermediate metallic conduit (IMC) conduit; (conduits measured separately); reference STN-MEP-ELL-ON-3101-3146; STN-MEP-ELL-ON-3201-3246						
		From panelboards to						
1120	1120 (2a)	lighting points; locally controlled ceiling mounted	nr	4,194.00				
1120	1120 (2b)	lighting points; locally controlled wall mounted	nr	382.00				
1120	1120 (2c)	exit sign points	nr	106.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1120	1120 (2d)	switch points; 1 way 1 gang	nr	17.00				
1120	1120 (2e)	switch points; 1 way (emergency lighting)	nr	72.00				
1120	1120 (2f)	switch points; presence detector bypass switch (in metal clad)	nr	54.00				
1120	1120 (2g)	Surfaced Mounted switched socket outlet points	nr	42.00				
1120	1120 (2h)	Surfaced Mounted twin switched socket outlet points	nr	96.00				
1120	1120 (2i)	Surfaced Mounted twin switched socket outlet points on UPS Supply	nr	63.00				
1120	1120 (2j)	Fused Connection Unit complete with switch points for Hand dryer	nr	9.00				
1120	1120 (2k)	Fused Connection Unit complete with switch points for Fan Coil Unit	nr	23.00				
1120	1120 (2l)	Surfaced Mounted switched socket outlet points on UPS Supply	nr	24.00				
1120	1120 (2m)	Surfaced Mounted switched socket outlet points	nr	77.00				
1120	1120 (2n)	Surfaced Mounted socket outlet without switch points	nr	30.00				
1120	1120 (2o)	Fused Connection Unit complete with switch points	nr	11.00				
1120	1120 (2p)	10A Fused Connection Unit complete with switch for CCTV and Door Controller points	nr	69.00				
1120	1120 (2q)	Fused Connection Unit complete with switch points for MSFD & MOD (Metalclad type)	nr	109.00				
1120	1120 (2r)	Junction Box for "SN" fixture	nr	117.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1120	1120 (2s)	Junction Box for "PD" fixture	nr	115.00				
1120	1120 (2t)	Junction box; striplights	nr	8.00				
1120	1120 (2u)	Junction Box points for Escalator lighting	nr	8.00				
1120	1120 (2v)	Junction Box points for T&B mirror lighting	nr	6.00				
		Supply and fix specified or approved equal lighting fixtures and ancillaries; reference STN-MEP-ELL-ON-2012, STN-MEP-ELL-ON-3101-3146; STN-MEP-ELL-ON-3201-3246						
		Lighting fixtures						
1118	1118 (1a)	type A1; rated IP20 Batten type Lighting Fixture	set	179.00				
1118	1118 (1b)	type A1; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	94.00				
1118	1118 (1c)	type A2; rated IP20 Batten type Lighting Fixture	set	277.00				
1118	1118 (1d)	type A2; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	94.00				
1118	1118 (1e)	type A3; rated IP20 Batten type Lighting Fixture	set	1,181.00				
1118	1118 (1f)	type A3; rated IP20 Batten type Lighting Fixture connected	set					

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		to Emergency Power		504.00				
1118	1118 (1g)	type A4; rated IP20 Batten type Lighting Fixture	set	45.00				
1118	1118 (1h)	type A4; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	31.00				
1118	1118 (1g)	A5 - Base light LED linear module fixture, Batten type (100 - 240V, 8W, 3000K, 750lm, IP20, Lifetime 40,000 hrs., Medium B/A C/O 150mm diameter)	set	105.00				
1118	1118 (1h)	A5(E) -Base light LED linear module fixture, Batten type (100 - 240V, 8W, 3000K, 750lm, IP20, Lifetime 40,000 hrs., Medium B/A C/O 150mm diameter) with battery pack	set	46.00				
1118	1118 (1i)	type A6 - Base light LED Linear module fixture, Batten type (100-240V 13.6W 3000K 1800 lm IP20, Lifetime 40,000 hrs. W 70mm)	set	797.00				
1118	1118 (1j)	type B1; 2 x 2 recessed mounted LED Lighting Fixture	set	173.00				
1118	1118 (1k)	type B1; 2 x 2 recessed mounted LED Lighting Fixture connected to Emergency Power	set	88.00				
1118	1118 (1l)	type C1; recessed Downlight LED Lighting Fixture	set	104.00				
1118	1118 (1m)	type C1; recessed Downlight LED Lighting Fixture connected to Emergency Power	set	71.00				
1118	1118 (1n)	type C2; recessed Downlight LED Lighting Fixture	set	7.00				
1118	1118 (1o)	type C2; recessed Downlight LED Lighting Fixture connected to Emergency Power	set	-				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Switches						
1120	1120 (1a)	1 gang, light switch, flush mounted, 1 pole, 15 A, 250V	nr	17.00				
1119	1119 (1)	Presence Detector (PD)	nr	115.00				
1120	1120 (1b)	lighting switch, 1-way (emergency lighting)	nr	72.00				
1120	1120 (1c)	presence detector bypass switch	nr	54.00				
		Receptacle outlets						
1120	1120 (2a)	10A Surfaced Mounted switched socket outlet (Metal Clad)	set	42.00				
1120	1120 (2b)	10A Surfaced Mounted switched socket outlet (Metal Clad) (Digital Signage)	set	-				
1120	1120 (2c)	10A Surfaced Mounted twin switched socket outlet (Metal Clad)	set	96.00				
1120	1120 (2d)	10A Surfaced Mounted twin switched socket outlet (Metal Clad) on UPS Supply	set	63.00				
1120	1120 (2e)	10A Fused Connection Unit complete with switch for Hand dryer	set	9.00				
1120	1120 (2f)	10A Fused Connection Unit complete with switch for Fan Coil Unit	set	23.00				
1120	1120 (2g)	10A Surfaced Mounted switched socket outlet (Metal Clad)	set	24.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		on UPS Supply						
1120	1120 (2h)	16A Surfaced Mounted switched socket outlet (Metal Clad)	set	77.00				
1120	1120 (2i)	16A Surfaced Mounted socket outlet without switch (Metal Clad)	set	30.00				
1120	1120 (2j)	10A Fused Connection Unit complete with switch	set	11.00				
1120	1120 (2k)	10A Fused Connection Unit complete with switch for CCTV and Door Controller	set	69.00				
1120	1120 (2l)	10A Fused Connection Unit complete with switch for MSFD & MOD (Metalclad type)	set	109.00				
		Grounding System						
		Copper Tape; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-ELL-ON-2031, 3411 to 3446						
1109	1109 (1a)	25mm x 3mm	m	1,000.00				
1109	1109 (1b)	25mm x 6mm	m	4,000.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1109	1109 (1c)	40mm x 6mm	m	700.00				
		Copper Cable; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-ELL-ON-2031, 3411 to 3446						
1109	1109 (3)	120 sq.mm	m	800.00				
		Grounding Mat; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-ELL-ON-2031, 3411 to 3446						
1109	1109 (3)	400mm2 Copper Strip	By Civil Contractor					
		Grounding Electrode; including necessary connectors, pits, accessories and welds to structure; reference STN-MEP-ELL-ON-2031, 3401 to 3444						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1109	1109 (4)	20mm diameter x 3000mm long ground rod	By Civil Contractor					
		Grounding Terminal; including Enclosures, insulators and the likes with to reference STN-MEP-ELL-ON-2031, 3411 to 3446						
1109	1109 (5a)	Main Grounding terminal; reference STN-MEP-ELL-ON-2031, 3411 to 3446	set	9.00				
1109	1109 (5b)	Grounding terminal for HV,LV & ELV; STN-MEP-ELL-ON-2031, 3411 to 3446	set	5.00				
1109	1109 (5c)	Grounding terminal; reference STN-MEP-ELL-ON-2031, 3411 to 3446	set	52.00				
		Lightning protection System						
		Copper Tape; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-ELL-ON-2031, 3401 to 3406						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1122	1122 (1a)	25mm x 3mm	m	-				
1122	1122 (1b)	25mm x 3mm (Insulated)	m	100.00				
		Grounding Mat; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system						
1122	1122 (2)	400mm2 Copper Strip	m	-				
		Lightning Grounding Pit; including necessary connectors, accessories and welds ground wells; including 20mm diameter x 3000mm long ground rod reference; reference STN-MEP-ELL-ON-2031, 3401 to 3406						
1122	1122 (3)	Lightning Grounding Pit	set	3.00				
		ESE Air Terminal; complete with necessary accessories as complete						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1122	1122 (4)	Air Terminal (ESE type); complete with pole, mounting brackets, guy wires and all other necessary supports and accessories; reference STN-MEP-ELL-ON-2031, 3401 to 3406	set	3.00				
		Lightning Flash Counter; complete with necessary accessories as complete						
1122	1122 (5)	Lightning Flash Counter; reference STN-MEP-ELL-OS-2031	set	3.00				
		Telephone and Broadband Distribution System						
		Cable tray/trunking; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-ON-3662 to 3683						
1126	1126 (1a)	100mm x 100mm (for telephone)	m	400.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1126	1126 (1b)	200mm x 100mm (for telephone)	m	100.00				
1126	1126 (1c)	100mm x 100mm (for Building Cabling System (BCS))	m	100.00				
1126	1126 (1d)	150mm x 100mm (for Building Cabling System (BCS))	m	100.00				
1126	1126 (1e)	300mm x 100mm (for Building Cabling System (BCS))	m	200.00				
1126	1126 (1f)	600mm x 100mm (for Building Cabling System (BCS))	m					
		Cable Ladder; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-ON-3662 to 3683						
1126	1126 (2)	100mm x 100mm	m	100.00				
1126	1126 (3)	300mm x 100mm	m	100.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Conduit points in Intermediate Metallic Conduit (IMC) including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-ON-3662 to 3683						
		From Intermediate Distribution Frame (IDF) to individual workstation/ node outlets						
1126	1126 (4a)	telephone outlet mounted flushed with floor finishes	nr	18.00				
1126	1126 (4b)	telephone outlet; floor mounted	nr	50.00				
		Local Area Network (LAN) System						
		Cable tray; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-ON-3661 to 3673						
1127	1127 (1a)	100mm x 100mm	m	300.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1127	1127 (1a)	100mm x 100mm (for Building Cabling System (BCS))	m					
1127	1127 (1b)	150mm x 100mm (for Building Cabling System (BCS))	m					
1127	1127 (1c)	600mm x 100mm (for Building Cabling System (BCS))	m					
		Cable Ladder; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-ON-3661 to 3673						
1127	1127 (2a)	100mm x 100mm	m	20.00				
1127	1127 (2b)	600mm x 100mm	m					
		Conduit points in Intermediate Metallic Conduit (IMC) including all necessary fittings and accessories as well as hangers and supports						
		From Fiber terminal box (FTB) to individual workstation/						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		node outlets						
1127	1127 (4)	local area network (LAN) outlet points	nr	69.00				
		Access Control System						
		Cable tray; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-ON-3631 to 3655						
1124	1124 (1a)	50mm x 50mm (ACS)	m	800.00				
1124	1124 (1b)	200mm x 100mm (for ACS)	m					
		Approved Access Control system riser cables						
		Drawing into conduits(conduits measured separately)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		From access control pullbox to						
1124	1124 (4a)	Break Glass points	nr	34.00				
1124	1124 (4b)	Card Access Reader points	nr	34.00				
1124	1124 (4c)	Door Contact points	nr	58.00				
1124	1124 (4d)	Door Controller points	nr	34.00				
1124	1124 (4e)	Electromagnetic Lock points	nr	58.00				
1124	1124 (4f)	Push Button points	nr	34.00				
		Supply and fix specified or approved equal field devices and accessoriesreference STN-MEP-ELV-ON-3631 to 3655						
1124	1124 (5a)	Break Glass	set	34.00				
1124	1124 (5b)	Card Access Reader	set	34.00				
1124	1124 (5c)	Door Contact	set	58.00				
1124	1124 (5d)	Door Controller	set	34.00				
1124	1124 (5e)	Electromagnetic Lock	set	58.00				
1124	1124 (5f)	Push Button	set	34.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described; reference STN-MEP-ELV-ON-3631 to 3655						
1124	1124 (6)	Door Access Controller Server including necessary POE Network switch Hub and Access Control System Workstation with card enrollment reader and printer	set	1.00				
		Fire Detection and Alarm System (FDAS)						
		Electrical Metallic Tubing (EMT) conduit; including all necessary fittings and accessories as well as hangers and supports STN-MEP-FPS-ON-2101 to 2104, 3101-3136						
1123	1123 (1)	size as required	item	1.00				
		Approved FDAS system riser cables						
		Drawing into conduits(conduits measured separately)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (2)	type and size as required	item	1.00				
		Conduit points in Intermediate Metallic Conduit (IMC) including all necessary fittings and accessories as well as hangers and supports STN-MEP-FPS-ON-2101 to 2104, 3101-3136						
		From FACP to						
1123	1123 (3a)	smoke detector points	nr	511.00				
1123	1123 (3b)	combination detector points	nr	366.00				
1123	1123 (3c)	annunciator panel points	nr	3.00				
1123	1123 (3d)	manual call point points	nr	42.00				
1123	1123 (3e)	hooter with strobelight points	nr	45.00				
1123	1123 (3f)	control module points	nr	95.00				
1123	1123 (3g)	relay module points	nr	11.00				
1123	1123 (3h)	zone control module points	nr	-				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (3i)	monitor module points	nr	24.00				
1123	1123 (3j)	fault isolator module points	nr	55.00				
1123	1123 (3k)	fireman telephone jack points	nr	-				
1123	1123 (3l)	fireman telephone module points	nr	15.00				
1123	1123 (3m)	firefighting telephone points	nr	2.00				
		Approved FDAS wires/ cables drawing into conduits (conduits measured separately) including necessary cable tagging STN-MEP-FPS-ON-2101 to 2104, 3101-3136						
		From FACP to						
1123	1123 (4a)	smoke detector points	nr	511.00				
1123	1123 (4b)	combination detector points	nr	366.00				
1123	1123 (4c)	annunciator panel points	nr	3.00				
1123	1123 (4d)	manual call point points	nr	42.00				
1123	1123 (4e)	hooter with strobelight points	nr	45.00				
1123	1123 (4f)	control module points	nr	95.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (4g)	relay module points	nr	11.00				
1123	1123 (4h)	zone control module points	nr	-				
1123	1123 (4i)	monitor module points	nr	24.00				
1123	1123 (4j)	fault isolator module points	nr	55.00				
1123	1123 (4k)	fireman telephone jack points	nr	-				
1123	1123 (4l)	fireman telephone module points	nr	15.00				
1123	1123 (4m)	firefighting telephone points	nr	2.00				
		Supply and fix specified or approved equal field devices and accessories as shown in drawings with reference STN-MEP-FPS-ON-2101 to 2104, 3101-3136						
1123	1123 (5a)	addressable smoke detector (above false ceiling)	set	211.00				
1123	1123 (5b)	addressable smoke detector (below false ceiling)	set	300.00				
1123	1123 (5c)	addressable combination detector	set	366.00				
1123	1123 (5d)	annunciator panel	set	3.00				
1123	1123 (5e)	manual call point	set	42.00				
1123	1123 (5f)	hooter with strobelight	set	45.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (5g)	control module	set	95.00				
1123	1123 (5h)	relay module	set	11.00				
1123	1123 (5i)	zone control module	set	-				
1123	1123 (5j)	monitor module	set	24.00				
1123	1123 (5k)	fault isolator module	set	55.00				
1123	1123 (5l)	fireman telephone jack	set					
1123	1123 (5m)	fireman telephone module	set	15.00				
1123	1123 (5n)	firefighting telephone	set	2.00				
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described as shown in drawings with reference STN-MEP-FPS-ON-2101 to 2104, 3101-3136						
1123	1123 (6)	Fire Alarm Control Panel; including Monitors, main graphical annunciator Panel, workstations as well as necessary softwares including printer, network interface cards, Fiber optic converters, power supply and other necessary accessories	set	1.00				
		Allow for the provision of :						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (7)	Tunnel fireman's telephone including necessary controls, conduits and wirings as required	nr	1.00				
1130	1130 (1)	Building Management System (BMS)	item	1.00				
1130	1130 (2)	Disaster Preventive Monitor and Control Panel (DPMCP)	item	1.00				
		SUB-TOTAL (ELECTRICAL AND AUXILIARY INSTALLATION)						
		<u>FIRE PROTECTION WORKS</u>						
	-	<u>WET PIPE SPRINKLER SYSTEM</u>						
	-							

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	-	<u>Black Steel pipes and fittings; seamless, schedule 40; conforming to ASME B31.1 power piping code, JIS G 3454, jointing in accordance with designer's specification</u>						
	-	To walls and chased						
1202	1202(2)	65mm diameter	m	16.00				
1202	1202(3)	extra over for elbow	pc	10.00				
1202	1202(2)	80mm diameter	m	52.00				
1202	1202(3)	extra over for elbow	pc	18.00				
1202	1202(2)	150 mm diameter	m	8.00				
1202	1202(2)	200 mm diameter	m	30.00				
1202	1202(3)	extra over for elbow	pc	2.00				
1202	1202(3)	extra over for tee reducer	pc	2.00				
		To ceiling and suspended						
1202	1202(1)	25 mm diameter	m	1,643.00				
1202	1202(1)	32 mm diameter	m	204.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(1)	40 mm diameter	m	373.00				
1202	1202(1)	50 mm diameter	m	274.00				
1202	1202(2)	65 mm diameter	m	343.00				
1202	1202(3)	extra over for elbow	pc	7.00				
1202	1202(3)	extra over for tee	pc	3.00				
1202	1202(3)	extra over for tee reducer	pc	8.00				
1202	1202(3)	extra over for reducer	pc	7.00				
1202	1202(2)	80 mm diameter	m	368.00				
1202	1202(3)	extra over for elbow	pc	12.00				
1202	1202(3)	extra over for tee	pc	2.00				
1202	1202(3)	extra over for tee reducer	pc	13.00				
1202	1202(3)	extra over for reducer	pc	3.00				
1202	1202(2)	100 mm diameter	m	194.00				
1202	1202(3)	extra over for elbow	pc	3.00				
1202	1202(3)	extra over for tee	pc	2.00				
1202	1202(3)	extra over for tee reducer	pc	5.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(3)	extra over for reducer	pc	6.00				
1202	1202(2)	150 mm diameter	m	326.00				
1202	1202(3)	extra over for elbow	pc	9.00				
1202	1202(3)	extra over for tee reducer	pc	8.00				
1202	1202(3)	extra over for reducer	pc	2.00				
1202	1202(2)	200 mm diameter	m	687.00				
1202	1202(3)	extra over for elbow	pc	19.00				
1202	1202(3)	extra over for tee	pc	15.00				
1202	1202(3)	extra over for tee reducer	pc	22.00				
1202	1202(3)	extra over for reducer	pc	7.00				
1202	1202(3)	extra over for end cap/flanged	pc	4.00				
		To floors						
1202	1202(2)	80 mm diameter	m	130.00				
1202	1202(3)	extra over for elbow	pc	8.00				
1202	1202(3)	extra over for tee reducer	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(2)	100 mm diameter	m	6.00				
1202	1202(3)	extra over for elbow	pc	1.00				
1202	1202(2)	150 mm diameter	m	79.00				
1202	1202(3)	extra over for elbow	pc	1.00				
1202	1202(2)	200 mm diameter	m	30.00				
1202	1202(3)	extra over for elbow	pc	2.00				
1202	1202(2)	250 mm diameter	m	6.00				
1202	1202(3)	extra over for elbow	pc	2.00				
1202	1202(3)	extra over for tee	pc	2.00				
	-	<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Sprinkler heads						
1202	1202(5)	Standard pendent type sprinkler head; chrome finish; with intermediate temperature rating	pc	458.00				
1202	1202(5)	Upright type sprinkler head; chrome finish; with intermediate temperature rating	pc	77.00				
1202	1202(5)	Sidewall type sprinkler head; chrome finish; with intermediate temperature rating	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Fire Hose Cabinets						
		Standard recessed fire hose cabinet assembly; including full flush or surface mounting door with aluminum for all glass place; gauge 18 steel frame and box with powder coated finishes; 40mm diameter angle type valve; 40mm x 30m long double jacket rubber						
1202	1202(4)	as shown and described, ref. FHC type 1	pc	21.00				
1202	1202(4)	as shown and described, ref. FHC type 2	pc	9.00				
		Automatic Air Vent						
1202	1202(4)	fixing to 100mm diameter pipe	pc	3.00				
1202	1202(4)	fixing to 200mm diameter pipe	pc	4.00				
		Auxiliary drain valve						
1202	1202(4)	50 mm diameter	pc	6.00				
1202	1202(4)	150 mm diameter	pc	1.00				
		Butterfly Valve						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Hose Box						
1202	1202(4)	150 mm diameter	pc	2.00				
		In line inspector's sight glass						
1202	1202(4)	25 mm diameter	pc	5.00				
		Inspector's test valve						
1202	1202(4)	25 mm diameter	pc	5.00				
		Landing valve (LV) including chain and cap						
1202	1202(4)	65mm diameter	pc	8.00				
		Motorized Valve						
1202	1202(4)	150 mm diameter	pc	4.00				
		Pressure Gauge						
1202	1202(4)	fixing to 100mm diameter in FCV assembly	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(4)	fixing to 150mm diameter in FCV assembly	pc	1.00				
1202	1202(4)	fixing to 200mm diameter in FCV/ACV assembly	pc	4.00				
1202	1202(4)	fixing to 65mm diameter in pump room (JP)	pc	2.00				
1202	1202(4)	fixing to 150mm diameter in Pump room (FP)	pc	2.00				
		Supervisory switches						
1202	1202(4)	fixing to 100 mm diameter BI pipe	pc	2.00				
1202	1202(4)	fixing to 150 mm diameter BI pipe	pc	1.00				
1202	1202(4)	fixing to 200 mm diameter BI pipe	pc	2.00				
		Vortex Plate						
1202	1202(4)	600 x 600 mm	pc	1.00				
		Water Flow Switches; including drilling to BI pipe						
1202	1202(4)	fixing to 100 mm diameter BI pipe	pc	2.00				
1202	1202(4)	fixing to 150 mm diameter BI pipe	pc	1.00				
1202	1202(4)	fixing to 200 mm diameter BI pipe	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	-	<u>FIRE EXTINGUISHER</u>						
		<u>The following items to be supplied and fixed; including all necessary accessories in accordance with designer's instruction</u>						
		Portable fire extinguisher; including supporting frames or brackets and all other necessary accessories						
1202	1202(9)	FEX - Dry Chemical type, ABC class, 4.54kg	pc	88.00				
1202	1202(7)	FEX - CO2 type, 4.54kg	pc	21.00				
1202	1202(8)	WFEX - Foam Wheeled, ABC class, 22.68kg	pc	1.00				
1202	1202(7)	WFEX - CO2 type, 22.68kg	pc	1.00				
		Fire extinguisher cabinet, stainless body including 1/8" breakable glass with YS221 glass frame, push lock, supporting frames, brackets and all other necessary accessories for fixing as shown and as described						
1202	1202(10)	Type 1	pc	10.00				
1202	1202(10)	Type 2	pc	11.00				
1202	1202(10)	Type 3	pc	88.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	-	<u>CLEAN GAS FIRE SUPPRESSION SYSTEM</u>						
		<u>Allowance for the provision of the following</u>						
1239	1239(1)	Clean agent fire suppression system including pipes, fittings, control valves, devices, sensors, actuators, annunciator, wirings, conduits, control panel, clean agent tank and all other necessary accessories to complete the system						
1239	1239(1)	Location, as shown and described on plan	set	1.00				
	-	<u>TUNNEL FIRE PROTECTION</u>						
	-	-						
	-	<u>Black Steel pipes and fittings: seamless, schedule 40; conforming to ASME B31.1 power piping code, JIS G 3454, jointing in accordance with designer's specification</u>						
	-	-						
1202	1202(13) a8	150 mm diameter	m	3,200.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202 (14) a8	extra over for elbow	pc	28.00				
1202	1202 (15) a8	extra over for tee	pc	16.00				
		<u>Pipeworks and ancillaries including flanges and all necessary accessories and connections</u>						
		Check Valve						
1201	1201 (14) a10	150 mm diameter	pc	4.00				
		Automatic Air Vent						
1202	1202 (7) a3	mounting to 150 mm diameter	pc	4.00				
		Landing valve, double nozzle including cap and chain						
1202	1202 (7) a3	150 mm diameter	pc	16.00				
		Tunnel Fire hose box including 4 nos of fire hose complete with hose coupling						
1202	1202 (7) a3	Dimension as required	pc	16.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Ductile Iron (DI) pipes and fittings; conforming to ANSI A21, A10, 11.50 and 51 class 56; jointing in accordance with designer's specification</u>						
		To walls and chased						
1234	1234(2)	75mm diameter	m	24.00				
1234	1234(2.1)	extra over for elbow	pc	5.00				
1234	1234(2.1)	extra over for tee	pc	3.00				
1234	1234(2)	150mm diameter	m	12.00				
1234	1234(2.1)	extra over for elbow	pc	1.00				
1234	1234(2.1)	extra over for tee	pc	1.00				
1234	1234(2.1)	extra over for tee reducer	pc	3.00				
1234	1234(2.1)	extra over for end cap/flanged	pc	2.00				
1234	1234(2)	200mm diameter	m	6.00				
1234	1234(2.1)	extra over for elbow	pc	2.00				
1234	1234(2.1)	extra over for tee	pc	1.00				
1234	1234(2.1)	extra over for end cap/flanged	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		To ceiling and suspended						
1234	1234(2)	150mm diameter	m	6.00				
1234	1234(2.1)	extra over for elbow	pc	3.00				
1234	1234(2.1)	200mm diameter	m	83.00				
1234	1234(2)	extra over for elbow	pc	6.00				
		<u>Cast Iron (CI) pipes and fittings; Extra Heavy; jointing in accordance with designer's specification</u>						
		To walls and pipe chased						
1234	1234(1)	80mm diameter	m	20.00				
1234	1234(1.1)	extra over for elbow	pc	4.00				
1234	1234(1)	100mm diameter	m	1,114.00				
1234	1234(1.1)	extra over for elbow	pc	67.00				
1234	1234(1.1)	extra over for wye	pc	114.00				
		To ceiling and suspended						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1234	1234(1)	100mm diameter	m	1,860.00				
1234	1234(1.1)	extra over for elbow	pc	206.00				
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Gate valve						
1235	1235(5)	75mm diameter	pc	3.00				
1235	1235(5)	100mm diameter	pc	3.00				
		Flexible Connector						
1235	1235(5)	75mm diameter	pc	3.00				
1235	1235(5)	100mm diameter	pc	3.00				
		Non-return Valve						
1235	1235(5)	75mm diameter	pc	3.00				
1235	1235(5)	100mm diameter	pc	3.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Pressure Gauge						
1235	1235(5)	fixing to sump pump	pc	3.00				
		Floor Cleanout; complete with cover; setting to concrete; making around with approved grouting						
1235	1235(5)	100mm diameter	pc	7.00				
		<u>Drains including adaptors and p-trap as required; setting in concrete; making good around with approved grouting</u>						
		Floor drain						
1235	1235(5)	100mm diameter	pc	96.00				
		Scupper drain						
1235	1235(5)	100mm width	pc	39.00				
		Trench drain						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1235	1235(5)	100 mm diameter	pc	17.00				
		Area Drain/Catch Basin						
1235	1235(5)	dimension as required	pc	9.00				
		Aluminum Rectangular Pipe; jointing in accordance with designer's specification						
1235	1235 (7)	125mm x 125mm	pc	32.00				
1235	1235 (7)	75mm x 75mm	pc	20.00				
		Aluminum Pipe and fittings; jointing in accordance with designer's specification						
1235	1235 (7)	100mm diameter	m	28.00				
1235	1235 (7)	80mm diameter	m	8.00				
		Drain channels (open canal); serving station entrances; excluding of gratings						
		200mm wide, 200mm height	m	66.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Oil Grease Trap (OGT)						
1235	1235(5)	ON-UL-OGT-01; Retention capacity of 50 with flow rate of 360LPM	pc	1.00				
		<u>Supply and fix equipment and ancillaries: including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1201	1201(2)	ON-UPL-WWP-01 & 02; Waste Water Sump Pump; 7 L/s @ 37 m TDH, 5.73 running load; 17.2kW connecting load; 3 phase; 380Volts; 60Hz (2W,1S)	set	1.00				
1235								
		Works to existing main storm drainage line including pipes, connections and all other necessary works						
1235	1235(1)	200mm diameter CI pipes	item	1.00				
1235	1235(1)	100mm diameter Aluminum pipes	item	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1235	1235(1)	80mm diameter Aluminum pipes	item	7.00				
		<u>SEWAGE SYSTEM</u>						
		<u>Ductile Iron (DI) pipes and fittings: conforming to ANSI A21. A10, 11,50 and 51 class 56: jointing in accordance with designer's specification</u>						
		-						
		To walls and chased						
1234	1234(3)	75mm diameter	m	28.00				
1234	1234(3.1)	extra over for elbow	pc	2.00				
1234	1234(3)	100mm diameter	m	12.00				
1234	1234(3.1)	extra over for elbow	pc	2.00				
		To ceiling and suspended						
1234	1234(3)	75mm diameter	m	113.00				
1234	1234(3.1)	extra over for elbow	pc	8.00				
1234	1234(3)	100mm diameter	m	487.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1234	1234(3.1)	extra over for elbow	pc	12.00				
		<u>Cast Iron (CI) pipes and fittings; Extra Heavy; jointing in accordance with designer's specification</u>						
		To walls and pipe chased						
1235	1235(2)	32mm diameter	m	47.00				
1235	1235(2)	50mm diameter	m	4.00				
1235	1235(2)	75mm diameter	m	41.00				
1235	1235(2)	100mm diameter	m	78.00				
1235	1235(2.1)	extra over for elbow	pc	27.00				
1235	1235(2.1)	extra over for tee reducer	pc	9.00				
1235	1235(2.1)	extra over for reducer	pc	18.00				
		To ceiling and suspended						
1235	1235(2)	32mm diameter	m	19.00				
1235	1235(2)	40mm diameter	m	4.00				
1235	1235(2)	75mm diameter	m	58.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1235	1235(2.1)	extra over for elbow	pc	87.00				
1235	1235(2)	100mm diameter	m	956.00				
1235	1235(2.1)	extra over for elbow	pc	122.00				
1235	1235(2.1)	extra over for wye	pc	18.00				
1235	1235(2.1)	extra over for wye reducer	pc	66.00				
1235	1235(2.1)	extra over for tee	pc	20.00				
1235	1235(2)	150mm diameter	m	64.00				
1235	1235(2.1)	extra over for elbow	pc	7.00				
1235	1235(2.1)	extra over for wye	pc	4.00				
1235	1235(2.1)	extra over for wye reducer	pc	32.00				
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Flexible connector						
1234	1234(4)	100mm diameter	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Gate valve						
1234	1234(4)	100mm diameter	pc	5.00				
		Check valve						
1234	1234(4)	100mm diameter	pc	4.00				
		<u>Drains including adaptors and p-trap as required; setting in concrete; making good around with approved grouting</u>						
		Floor drain						
1234	1234(4)	75mm diameter, PVC outlet	pc	36.00				
		Shower drain						
1234	1234(4)	50mm diameter, PVC outlet	pc	4.00				
		Floor Cleanout; complete with cover; setting to concrete; making around with approved grouting						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1234	1234(4)	100mm diameter	pc	13.00				
		COP						
1234	1234(4)	150mm diameter	pc	4.00				
		Vent COWL						
1234	1234(4)	100mm diameter	pc	3.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1201	1201(3)	ON-MZ-SP-01 & 02; 8.03 L/s @ 35 m TDH, 5.73 running load; 11.46kW connecting load; 3 phase; 380Volts; 60Hz (1W+1S), at Sewage Ejector Pit-01	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1201	1201(3)	ON-MZ-SP-03 & 04; 3.01 L/s @ 30 m TDH, 1.91 running load; 3.82kW connecting load; 3 phase; 380volts; 60Hz (1W+1S) at Sewage Ejector Pit-02	set	1.00				
1201	1201(3)	ON-PL-JP-01 & 02; 0.32 L/s @ 30 m TDH, 0.37 running load; 0.74kW connecting load; 3 phase; 380volts; 60Hz (1W+1S) at Janitor Room	set	1.00				
		<u>Sewage Holding Tank, complete with pilings, fittings, flanges and all necessary accessories and connection to complete the system</u>						
1238	1238(4)	Sewage ejector tank 1 ; stainless steel, dimensions: 2m x 2m X 2m ; (L x B x H)	set	1.00				
1238	1238(4)	Sewage ejector tank 2 ; stainless steel, dimensions: 2m x 2m X 2m ; (L x B x H)	set	1.00				
1238	1238(4)	Janitor Room Pit ; RCC, dimensions: 1.5m x 1.5m x 1.5m ; (L x B x H)	set	1.00				
		<u>Works to existing main sewer line including pipes, connections and all other necessary works</u>						
1234	1234(1)	150mm diameter CI Pipes	item	1.00				
		<u>Allowance for the provision of the following</u>						
1236	1236(1)	Sewage Treatment Plant, capacity as required ref drawing STN-MEP-PLD-ON-4307	item	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>WATER SUPPLY SYSTEM</u>						
		<u>Excavating trenches, backfilling with selected materials, disposal of surplus excavated materials offsite, and making good all works disturbed</u>						
		for pipes less than 200mm diameter GI	m	18.00				
		<u>Bedding of pipes; including surround of pipes as necessary</u>						
		for pipes less than 200mm diameter GI	m	18.00				
		Galvanized Iron (GI) pipes and fittings, ERW, schedule 40, jointing in accordance with designer's specification						
		In trenches						
1237	1237(1)	20mm diameter	m	4.00				
1237	1237(1)	32mm diameter	m	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(1)	100mm diameter	m	10.00				
1237	1237(1.1)	extra over for elbow	pc	4.00				
1237	1237(1.1)	extra over for tee	pc	3.00				
		To floor						
1237	1237(1)	25mmdiameter	m	2.00				
1237	1237(1)	40mm diameter	m	11.00				
1237	1237(1)	80mm diameter	m	20.00				
1237	1237(1)	100mm diameter	m	21.00				
1237	1237(1.1)	extra over for elbow	pc	3.00				
1237	1237(1)	150mm diameter	m	8.00				
1237	1237(1.1)	extra over for elbow	pc	2.00				
1237	1237(1.1)	extra over for tee	pc	2.00				
1237	1237(1.1)	extra over for tee reducer	pc	1.00				
		To walls and chased						
1237	1237(1)	15mm diameter	m	48.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(1)	20mm diameter	m	126.00				
1237	1237(1)	25mm diameter	m	27.00				
1237	1237(1)	32mm diameter	m	32.00				
1237	1237(1)	75mmdiameter	m	12.00				
1237	1237(1.1)	extra over for tee reducer	pc	5.00				
1237	1237(1)	100mmdiameter	m	18.00				
		To ceiling and suspended						
1237	1237(1)	15mm diameter	m	14.00				
1237	1237(1)	20mm diameter	m	275.00				
1237	1237(1)	25mm diameter	m	77.00				
1237	1237(1)	32mm diameter	m	420.00				
1237	1237(1)	40mm diameter	m	84.00				
1237	1237(1)	50mm diameter	m	11.00				
1237	1237(1)	65mmdiameter	m	49.00				
1237	1237(1.1)	extra over for tee	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(1.1)	extra over for tee reducer	pc	7.00				
1237	1237(1.1)	extra over for reducer	pc	6.00				
1237	1237(1)	75mm diameter	m	517.00				
1237	1237(1.1)	extra over for elbow	pc	12.00				
1237	1237(1.1)	extra over for tee	pc	1.00				
1237	1237(1.1)	extra over for tee reducer	pc	12.00				
1237	1237(1.1)	extra over for reducer	pc	5.00				
1237	1237(1)	100mmdiameter	m	384.00				
1237	1237(1.1)	extra over for elbow	pc	6.00				
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Ball Valve						
1237	1237(4)	20mm diameter	pc	2.00				
1237	1237(4)	25mm diameter	pc	8.00				
1237	1237(4)	32mm diameter	pc	5.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Equalizing Valve						
1237	1237(4)	100mm diameter	pc	3.00				
		Flexible Connector						
1237	1237(4)	40mm diameter	pc	4.00				
1237	1237(4)	100mm diameter	pc	4.00				
		Motorized Float Valve						
1237	1237(4)	100mm diameter	pc	6.00				
		Gate valve						
1237	1237(4)	20mm diameter	pc	6.00				
1237	1237(4)	40mm diameter	pc	4.00				
1237	1237(4)	100mm diameter	pc	18.00				
1237	1237(4)	150mm diameter	pc	2.00				
		Hand Faucet (HF)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(4)	15mm diameter	pc	25.00				
		Non-return valve						
1237	1237(4)	40mm diameter	pc	2.00				
1237	1237(4)	100mm diameter	pc	4.00				
		Overflow pipe assembly						
1237	1237(4)	100mm diameter	pc	6.00				
		Pressure Gauge						
1237	1237(4)	fixing to40mm diameter pipe	pc	2.00				
1237	1237(4)	fixing to100mm diameter pipe	pc	2.00				
		Sub-meter						
1237	1237(4)	100mm diameter	pc	6.00				
		Water hammer arrester						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(4)	20mm diameter	pc	14.00				
1237	1237(4)	25mm diameter	pc	4.00				
		Water meter						
1237	1237(4)	100mm diameter	pc	1.00				
		Wye strainer						
1237	1237(4)	40mm diameter	pc	2.00				
1237	1237(4)	100mm diameter	pc	3.00				
1237	1237(4)	150mm diameter	pc	2.00				
		Basket strainer						
1237	1237(4)	100mm diameter	pc	6.00				
		<u>The following items to be supplied and fixed; including taking, delivery on site, unloading or assisting to unload, unpacking, returning packing, storing, all sundry materials for fixing, be responsible for the safe custody of</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Domestic water Tank; Stainless steel						
1238	1238(1)	50 cum capacity	set	2.00				
		Fire water Tank; stainless steel						
1238	1238(3)	98cum capacity	set	2.00				
		Make-up water Tank; stainless steel						
1238	1238(2)	45cum capacity	set	2.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						

DEPARTMENT OF TRANSPORTATION (DOT)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1201	1201(1)	ON-MZ-DWP-01 & 02; 7.3 L/s hydro-pneumatic pump @ 30 m TDH; 5.73kW running load; 11.46kW connecting load; 3Ph; 380V; 60Hz; including 200L pressure vessel w/ stainless steel tank	set	1.00				
1201	1201(1)	ON-MZ-MWP-01 & 02; 0.7 L/s hydro-pneumatic pump @ 40 m TDH; 0.8kW running load; 1.6kW connecting load; 3Ph; 380V; 60Hz; including 200L pressure vessel w/ stainless steel tank	set	1.00				
		<u>Works to existing main water line including pipes, connections and all other necessary works</u>						
1237	1237(2)	100mm diameter GI pipes	item	1.00				
		<u>HOT WATER SUPPLY SYSTEM</u>						
		<u>Polypropylene (PPrC) pipes and fittings, PN20, jointing in accordance with designer's specification</u>						
		To walls and chased						
1237	1237(2)	15mm diameter	m	7.00				
1237	1237(2)	20mm diameter	m	24.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5A
 STATION E & M WORKS (ORTIGAS NORTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		SUB-TOTAL (PLUMBING SERVICES)						
		SPARE PARTS						
		MEPF Spare Materials	ls	1.00				
		SUB-TOTAL (SPARE PARTS)						
		GRAND TOTAL - STATION E&M (ORTIGAS NORTH)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Allow for sealing openings in ducts around pipes, etc., with cement grout or other equal and approved sealing compound to Authorities' and Architect's approval.						
		Allow for builder's work in connection with mechanical and electrical services installations (i.e. plinths, curbs, concrete/steel beam support, lift separator beam and the like).						
		<u>LIFT HOISTING HOOK</u>						
		Lift hoisting hook fixed in position to the approval of Architect / Engineer.						
		<u>FIREPROOFING AND SLAB OVER AT TAS. SCV. IT CABLE DUCT AND THE LIKE</u>						
		Expanded galvanized steel mesh anchored to wall complete with approved finishes and all necessary fixing accessories; all in accordance to drawings and to Architect's approval.						
		SUB-TOTAL (BUILDER'S WORKS)						
		AIR-CONDITIONING AND MECHANICAL						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		VENTILATION						
		<u>CONDENSATE DRAIN SYSTEM</u>						
		<u>Allowance for Galvanized steel pipes and fittings including approved insulation, and all other necessary accessories to complete the system</u>						
1209	1209(1)	from FCU/AHU to nearest plumbing stub out	item	1.00				
		<u>REFRIGERANT PIPING SYSTEM</u>						
		<u>Copper (Cu) pipes and fittings, type L, hard drawn, including freon charging , jointing in accordance with designer's specification</u>						
1213	1213(3)	6.35mm diameter	m	44.00				
1213	1213(3)	9.53mm diameter	m	280.00				
1213	1213(3)	12.70mm diameter	m	246.00				
1213	1213(3)	15.88mm diameter	m	171.00				
1213	1213(3)	19.05mm diameter	m	286.00				
1213	1213(3)	22.23mm diameter	m	39.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Condenser Water System</u>						
		-						
		<u>Galvanized steel pipes and fittings; ERW; ASTM A-53, heavy grade; jointing in accordance with the designer's specification</u>						
1209	1209(1)	250mm diameter	m	260.00				
1209	1209(1.1)	extra over for elbow	pc	24.00				
1209	1209(1)	300mm diameter	m	104.00				
1209	1209(1.1)	extra over for elbow	pc	38.00				
1209	1209(1.1)	extra over for tee reducer	pc	24.00				
1209	1209(1.1)	extra over for reducer	pc	2.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	2.00				
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		-						
		Automatic Air Vent (AAV)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1210	1210(1)	mounting to 300mm diameter Galvanized steel pipes	pc	2.00				
		Automatic Tube Cleaner (ATC)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes,	pc	2.00				
		Balancing Valve						
1210	1210(1)	250mm diameter	pc	2.00				
1210	1210(1)	300mm diameter	pc	1.00				
		Butterfly valve						
1210	1210(1)	250mm diameter	pc	14.00				
1210	1210(1)	300mm diameter	pc	1.00				
		Drain Valve						
1210	1210(1)	dimension as required	pc	5.00				
		Flexible connector						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1210	1210(1)	250mm diameter	pc	10.00				
		Float valve						
1210	1210(1)	50mm diameter	pc	2.00				
		Flow switch (FS)						
1210	1210(1)	mounting to 250mm diameter galvanized steel pipes	pc	2.00				
		Gate valves						
1210	1210(1)	50mm diameter	pc	2.00				
		Isolation Valve						
1210	1210(1)	250mm diameter	pc	2.00				
		Motorized butterfly valve						
1210	1210(1)	250mm diameter	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Non-Return Valve						
1210	1210(1)	250mm diameter	pc	3.00				
		Pressure gauges (PG); complete with cock						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	10.00				
		Temperature Gauge (TG)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	4.00				
		Test Plug (TP)						
1210	1210(1)	mounting to 250mm diameter Galvanized steel pipes	pc	10.00				
		Wye Strainer						
1210	1210(1)	250mm diameter	pc	4.00				
1210	1210(1)	300mm diameter	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						
1218	1218(1)	OS-MZ-CDWP-01/02/03; condenser water pump; end-suction type, 333.51 LPM at 175 kPa; 15.5kW motor, 380V/3ph/60Hz (2W+1S), ref STN-MEP-VAC-OS-5101	set	3.00				
		Chemical pot feeder; including all necessary accessories and connections, electrical/control wiring, conduits and controls; complete as in the equipment schedule and as described						
		capacity as required	pc	1.00				
		Cooling tower, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1219	1219(1)	OS-GL-CT-01/02; 3334 LPM; counter flow type with vertical discharge, axial type fan ; with anti vibration & chemical treatment; belt and pulley driven, 1163kW heat rejection; 18.7kW motor rating; 380V/3ph/60Hz, ref STN-MEP-VAC-OS-5101	set	2.00				
		<u>Allowance for the provision of the following</u>						
		Make-up Water tank including all necessary pipeworks and ancillaries and as shown in schematic diagram.	item	1.00				
		-						
		<u>Chilled Water System</u>						
		<u>Galvanized steel pipes and fittings: ERW: ASTM A-53, heavy grade; jointing in accordance with the designer's specification</u>						
		To walls and chased						
1209	1209(1)	25mm diameter	m	680.00				
1209	1209(1)	32mm diameter	m	465.00				
1209	1209(1)	40mm diameter	m	223.00				
1209	1209(1)	50mm diameter	m	114.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1209	1209(1)	65mm diameter	m	131.00				
1209	1209(1)	100mm diameter	m	178.00				
1209	1209(1.1)	extra over for elbow	pc	13.00				
1209	1209(1)	125mm diameter	m	316.00				
1209	1209(1.1)	extra over for elbow	pc	38.00				
1209	1209(1.1)	extra over for tee	pc	6.00				
1209	1209(1.1)	extra over for reducer	pc	2.00				
1209	1209(1.1)	extra over for end cap/flanged	pc	2.00				
1209	1209(1)	150mm diameter	m	249.00				
1209	1209(1.1)	extra over for elbow	pc	8.00				
1209	1209(1.1)	extra over for tee	pc	2.00				
1209	1209(1.1)	extra over for reducer	pc	4.00				
1209	1209(1)	200mm diameter	m	63.00				
1209	1209(1.1)	extra over for elbow	pc	4.00				
1209	1209(1.1)	extra over for tee	pc	4.00				
1209	1209(1)	250mm diameter	m	70.00				
1209	1209(1.1)	extra over for elbow	pc	8.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1209	1209(1.1)	extra over for tee	pc	22.00				
1209	1209(1.1)	extra over for tee reducer	pc	14.00				
		Rubber Insulation, class "0"						
		32mm thick						
1212	1212(2)	25mm diameter	m	680.00				
1212	1212(2)	32mm diameter	m	465.00				
1212	1212(2)	40mm diameter	m	223.00				
1212	1212(2)	50mm diameter	m	114.00				
		40mm thick						
1212	1212(2)	65mm diameter	m	131.00				
1212	1212(2)	100mm diameter	m	178.00				
1212	1212(2)	125mm diameter	m	316.00				
1212	1212(2)	150mm diameter	m	249.00				
1212	1212(2)	200mm diameter	m	63.00				
		50mm thick						
1212	1212(2)	250mm diameter	m	70.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Automatic Air Vent (AAV)						
1210	1210(1)	mounting to 80mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 125mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 200mm diameter galvanized steel pipes	pc	2.00				
1210	1210(1)	mounting to 300mm diameter galvanized steel pipes	pc	4.00				
		Balancing Valve						
1210	1210(1)	40mm diameter	pc	3.00				
1210	1210(1)	50mm diameter	pc	1.00				
1210	1210(1)	100mm diameter	pc	2.00				
1210	1210(1)	125mm diameter	pc	4.00				
1210	1210(1)	200mm diameter	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		BTU meter						
1210	1210(1)	mounting to 32mm diameter galvanized steel pipes	pc	1.00				
		Butterfly valve						
1210	1210(1)	40mm diameter	pc	6.00				
1210	1210(1)	50mm diameter	pc	2.00				
1210	1210(1)	100mm diameter	pc	6.00				
1210	1210(1)	125mm diameter	pc	12.00				
1210	1210(1)	200mm diameter	pc	17.00				
1210	1210(1)	250mm diameter	pc	4.00				
		Drain Valve						
1210	1210(1)	dimension as required	pc	11.00				
		Flexible connector						
1210	1210(1)	40mm diameter	pc	6.00				
1210	1210(1)	50mm diameter	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						
1217	1217(1)	OS-MZ-CHWP-01-03; WCC Chilled Water Pump; end suction type; 2702.84 LPM at 350 kPA PD; 23kW motor rating complete with VFD; 380V/3ph/60Hz; ref STN-MEP-VAC-OS-5101	set	3.00				
1217	1217(1)	OS-CL-CHWP-01-02; ACC Chilled water pump; end suction type; 267.378 LPM at 275 kPA PD; 2.2kW motor rating; 380V/3ph/60Hz; ref STN-MEP-VAC-OS-5101	set	2.00				
		Chiller, complete with driving motor; all necessary accessories and connections; electrical/control wirings, conduit and controls; complete as in the equipment schedule and as described						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Water Cooled Chiller,						
1221	1221(1)	OS-MZ-WCC-01/02; Water-cooled chiller; 930kW cooling capacity; 2703 LPM; screw type with VSD drive; 172kW motor rating; including anti vibration, and leak detection device, 1kw/RT efficiency; 380V/3ph/60Hz; ref STN-MEP-VAC-OS-5101	set	2.00				
		Air Cooled Chiller						
1220	1220(1)	OS-GL-ACC-01/02; Air-cooled chiller; 92kW cooling capacity; 267.38 LPM; scroll type; 31.4kW motor rating with leak detection device; 1.3kw/RT eff.; 380V/3ph/60Hz, ref STN-MEP-VAC-OS- 5101	set	2.00				
		Expansion tanks; including all necessary pipeworks, insulation, cladding, valves, painting, accessories and connections; complete as in the equipment schedule and as described						
1210	1210(5)	OS-MZ-EXP-01, 35/7 C temp.; 0.5m3 expansion volume; 250kPa fill pressure, 1.5kW motor, 380V/3ph/60Hz; ref STN-MEP-VAC-OS-5104	set	1.00				
1210	1210(5)	OS-CL-EXP-01, 35/7 C temp.; 0.1m3 expansion volume; 250kPa fill pressure, 1.1kW motor, 380V/3ph/60Hz; ref STN-MEP-VAC-OS-5104	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Air separator; including all necessary accessories and connections, complete as in the equipment schedule and as described						
1210	1210(4)	OS-MZ-AS-01; 2703 lpm capacity, PN16, 7 deg C, ref STN-MEP-VAC-OS-5104	pc	1.00				
1210	1210(4)	OS-CL-AS-01; 267 lpm capacity, PN16, 7 deg C, ref STN-MEP-VAC-OS-5104	pc	1.00				
		Chemical pot feeder; including all necessary accessories and connections, electrical/control wiring, conduits and controls; complete as in the equipment schedule and as described						
		capacity as required	set	1.00				
		<u>Mechanical Ventilation System</u>						
		<u>Galvanized steel sheet rectangular ducts and fittings; conforming to SMACNA HVAC Duct Construction Standards</u>						
1211	1211(2)	Gauge 26	m2	856.00				
1211	1211(2)	Gauge 24	m2	2,438.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(2)	Gauge 22	m2	562.00				
1211	1211(2)	Gauge 20	m2	45.00				
		<u>Galvanized steel sheet ductwork ancillaries including flexible connections and flanges; conforming to the MPF Technical Specifications specified in 1211 Ductworks and Accessories</u>						
		Exhaust Air Louver with plenum						
1211	1211(6)	OS-ST-EAL-01, 2000X5000	pc	1.00				
1211	1211(6)	OS-ST-EAL-02, 3000X3300	pc	1.00				
		Fresh Air Louver						
1211	1211(6)	OS-ST-FAL-01, 3000X4500	pc	1.00				
1211	1211(6)	OS-ST-FAL-02, 3000X3300	pc	1.00				
1211	1211(6)	OS-ST-FAL-03, 3000X1000	pc	1.00				
		Exhaust Air Grille						
1211	1211(6)	EAG 1A-1F; bar grille; 400mm x 400mm	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	EAG 2; bar grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	EAG 3; bar grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	EAG 4A-4B; bar grille; 400mm x 300mm	pc	2.00				
1211	1211(6)	EAG 5; bar grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	EAG 6A-6D; bar grille; 400mm x 400mm	pc	4.00				
1211	1211(6)	EAG 7A-7O; bar grille; 400mm x 300mm	pc	15.00				
1211	1211(6)	EAG 8A-8F; bar grille; 400mm x 400mm	pc	6.00				
1211	1211(6)	EAG 9; bar grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	EAG 10; bar grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	EAG 11; bar grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	EAG 12A-12F; bar grille; 400mm x 300mm	pc	6.00				
1211	1211(6)	EAG 13A-13D; bar grille; 400mm x 300mm	pc	4.00				
1211	1211(6)	EAG 14; bar grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	EAG 15; bar grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	EAG 16A-16E; bar grille; 150mm x 150mm	pc	5.00				
1211	1211(6)	EAG 17A-17F; bar grille; 150mm x 150mm	pc	6.00				
1211	1211(6)	EAG 18A-18E; bar grille; 400mm x 300mm	pc	5.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	EAG 19A-19X; bar grille; 150mm x 150mm	pc	24.00				
1211	1211(6)	EAG 20; bar grille; 200mm x 150mm	pc	1.00				
1211	1211(6)	EAG 21; bar grille; 200mm x 150mm	pc	1.00				
1211	1211(6)	EAG 22-23; bar grille; 300mm x 200mm	pc	2.00				
1211	1211(6)	EAG 24-26; bar grille; 200mm x 200mm	pc	3.00				
1211	1211(6)	EAG 27-30; bar grille; 150mm x 150mm	pc	4.00				
1211	1211(6)	EAG 31-32; bar grille; 200mm x 200mm	pc	2.00				
1211	1211(6)	EAG 33-35; bar grille; 300mm x 200mm	pc	3.00				
1211	1211(6)	EAG 36-37; bar grille; 200mm x 200mm	pc	2.00				
		Fresh Air Grille						
1211	1211(6)	FAG 1A-1F; Bar Grille; 400mm x 400mm	pc	6.00				
1211	1211(6)	FAG 2A-2B; Bar Grille; 400mm x 300mm	pc	2.00				
1211	1211(6)	FAG 3; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 4A-4D; Bar Grille; 400mm x 400mm	pc	4.00				
1211	1211(6)	FAG 5; Bar Grille; 1500mm x 900mm	pc	1.00				
1211	1211(6)	FAG 6A-6O; Bar Grille; 400mm x 300mm	pc	15.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	FAG 7; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 8; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 9; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 10; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 11; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 12; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	FAG 13; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 14; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	FAG 15; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	FAG 16; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	FAG 17; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 18; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	FAG 19; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	FAG 20A-20F; Bar Grille; 400mm x 300mm	pc	6.00				
1211	1211(6)	FAG 21A-21C; Bar Grille; 400mm x 300mm	pc	3.00				
1211	1211(6)	FAG 22; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 23; Bar Grille; 200mm x 200mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	FAG 24; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	FAG 25A-25B; Bar Grille; 300mm x 200mm	pc	2.00				
1211	1211(6)	FAG 26; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 27; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 28; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 29; Bar Grille; 150mm x 150mm	pc	1.00				
1211	1211(6)	FAG 30; Bar Grille; 150mm x 150mm	pc	1.00				
1211	1211(6)	FAG 31A-31E; Bar Grille; 400mm x 300mm	pc	5.00				
1211	1211(6)	FAG 32; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	FAG 33; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	FAG 34; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	FAG 35; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	FAG 36; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	FAG 37; Bar Grille; 200mm x 150mm	pc	1.00				
1211	1211(6)	FAG 38; Bar Grille; 200mm x 150mm	pc	1.00				
1211	1211(6)	FAG 39; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	FAG 40; Bar Grille; 150mm x 100mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	FAG 41; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 42; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 43; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	FAG 44; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	FAG 45; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	FAG 46; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	FAG 47; Bar Grille; 200mm x 200mm	pc	1.00				
		Return Air Diffuser						
1211	1211(6)	1400mm x 600mm	pc	24.00				
1211	1211(6)	600mm x 600mm	pc	92.00				
		Volume damper						
1211	1211(5)	150mm x 100mm	pc	5.00				
1211	1211(5)	150mm x 150mm	pc	1.00				
1211	1211(5)	200mm x 150mm	pc	1.00				
1211	1211(5)	200mm x 200mm	pc	10.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	300mm x 200mm	pc	6.00				
1211	1211(5)	300mm x 300mm	pc	7.00				
1211	1211(5)	400mm x 150mm	pc	1.00				
1211	1211(5)	400mm x 200mm	pc	1.00				
1211	1211(5)	400mm x 300mm	pc	25.00				
1211	1211(5)	400mm x 400mm	pc	18.00				
1211	1211(5)	600mm x 600mm	pc	1.00				
1211	1211(5)	1500mm x 900mm	pc	7.00				
1211	1211(5)	2250mm x 600mm	pc	1.00				
		Motorized smoke and fire damper						
1211	1211(5)	MSFD-01; 300mm x 250mm	pc	1.00				
1211	1211(5)	MSFD-03-04; 400mm x 300mm	pc	2.00				
1211	1211(5)	MSFD-08; 400mm x 300mm	pc	1.00				
1211	1211(5)	MSFD-47-48; 400mm x 300mm	pc	2.00				
1211	1211(5)	MSFD-51-52; 400mm x 300mm	pc	2.00				
1211	1211(5)	MSFD-55-56; 900mm x 600mm	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	MSFD-57; 600mm x 500mm	pc	1.00				
1211	1211(5)	MSFD-58-59; 900mm x 600mm	pc	2.00				
1211	1211(5)	MSFD-60; 600mm x 500mm	pc	1.00				
1211	1211(5)	MSFD-63A/63B; 750mm x 700mm	pc	2.00				
1211	1211(5)	MSFD-63A/63B; 1000mm x 300mm	pc	2.00				
1211	1211(5)	MSFD-66-70; 500mm x 500mm	pc	5.00				
1211	1211(5)	MSFD-74-76; 300mm x 300mm	pc	3.00				
1211	1211(5)	MSFD-81-82; 1000mm x 400mm	pc	2.00				
		Fire Damper						
1211	1211(5)	200mm x 200mm	pc	24.00				
1211	1211(5)	250mm x 250mm	pc	5.00				
1211	1211(5)	300mm x 200mm	pc	4.00				
1211	1211(5)	300mm x 300mm	pc	14.00				
1211	1211(5)	350mm x 350mm	pc	6.00				
1211	1211(5)	500mm x 150mm	pc	1.00				
1211	1211(5)	500mm x 500mm	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Non-Return Damper						
1211	1211(5)	250mm x 250mm	pc	2.00				
1211	1211(5)	300mm x 300mm	pc	1.00				
1211	1211(5)	350mm x 350mm	pc	1.00				
1211	1211(5)	400mm x 300mm	pc	5.00				
1211	1211(5)	500mm x 500mm	pc	1.00				
1211	1211(5)	1000mm x 400mm	pc	1.00				
1211	1211(5)	1000mm x 600mm	pc	1.00				
1211	1211(5)	1250mm x 1250mm	pc	2.00				
1211	1211(5)	1500mm x 600mm	pc	1.00				
1211	1211(5)	1500mm x 900mm	pc	1.00				
		Pressure relief damper						
1211	1211(5)	PRD-01, 500mmx300mm @AFC Room	pc	1.00				
1211	1211(5)	PRD-02, 500mmx800m @Electrical Supply Room	pc	1.00				
1211	1211(5)	PRD-03, 500mmx800mm@Generator Room	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	PRD-04, 400mmx300mm @SER	pc	1.00				
1211	1211(5)	PRD-05, 500mmx800mm@SSS	pc	1.00				
1211	1211(5)	PRD-06, 400mmx300mm @SUR	pc	1.00				
1211	1211(5)	PRD-07, 500mmx300mm @TER Room	pc	1.00				
1211	1211(5)	PRD-09, 500mmx300mm @TUR Room	pc	1.00				
1211	1211(5)	PRD-10, 500mmx500mm @UPS Room	pc	1.00				
1211	1211(5)	PRD-11, 400mmx300mm @Telecom Room 1	pc	1.00				
1211	1211(5)	PRD-15, 400mmx300mm @Telecom Room 2	pc	1.00				
1211	1211(5)	PRD-16, 400mmx300mm @Telecom Room 3	pc	1.00				
1211	1211(5)	PRD-17, 400mmx300mm @Telecom Room 4	pc	1.00				
		Plenum box						
1211	1211(6)	2400mm x 600mm x 1200mm	pc	4.00				
1211	1211(6)	2300mm x 2000mm x 2000mm	pc	2.00				
		Fresh Air Filter						
1211	1211(6)	OS-CL-FIL-01	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	OS-CL-FIL-02	pc	1.00				
1211	1211(6)	OS-MZ-FIL-01	pc	1.00				
1211	1211(6)	OS-MZ-FIL-02	pc	1.00				
		Sound Attenuator						
1211	1211(6)	SA-03; 6560 cmh; 2100mm x 700mm x 900mm; 64Pa; downstream	pc	1.00				
1211	1211(6)	SA-04; 6560 cmh; 2100mm x 700mm x 900mm; 64Pa; upstream	pc	1.00				
1211	1211(6)	SA-05; 4020 cmh; 900mm x 300mm x 400mm; 32Pa; downstream	pc	1.00				
1211	1211(6)	SA-06; 4020 cmh; 900mm x 300mm x 400mm; 32Pa; upstream	pc	1.00				
1211	1211(6)	SA-07; 3460 cmh; 900mm x 300mm x 400mm; 32Pa; downstream	pc	1.00				
1211	1211(6)	SA-08; 3460 cmh; 900mm x 300mm x 400mm; 32Pa; upstream	pc	1.00				
1211	1211(6)	SA-31; 6560 cmh; 600mm x 600mm x 500mm; 26Pa; downstream	pc	1.00				
1211	1211(6)	SA-32; 6560 cmh; 2100mm x 600mm x 500mm; 26Pa; downstream	pc	1.00				
1211	1211(6)	SA-33; 4020 cmh; 1500mm x 600mm x 500mm; 17Pa; upstream	pc	1.00				
1211	1211(6)	SA-34; 4020 cmh; 1500mm x 600mm x 500mm; 8Pa;	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		upstream						
1211	1211(6)	SA-35; 14125 cmh; 2100mm x 900mm x 800mm; 17Pa; upstream	pc	1.00				
1211	1211(6)	SA-36; 14125 cmh; 2100mm x 900mm x 800mm; 2Pa; downstream	pc	1.00				
1211	1211(6)	SA-37; 14125 cmh; 2100mm x 900mm x 800mm; 17Pa; upstream	pc	1.00				
1211	1211(6)	SA-38; 14125 cmh; 2100mm x 900mm x 800mm; 2Pa; downstream	pc	1.00				
1211	1211(6)	SA-39; 17940 cmh; 2100mm x 750mm x 700mm; 57Pa; upstream	pc	1.00				
1211	1211(6)	SA-40; 17940 cmh; 2100mm x 750mm x 700mm; 40Pa; downstream	pc	1.00				
1211	1211(6)	SA-45A-45B; 18720 cmh; 900mm x 750mm x 700mm; 57Pa; downstream	pc	2.00				
1211	1211(6)	SA-46A-46B; 18720 cmh; 900mm x 750mm x 700mm; 57Pa; upstream	pc	2.00				
1211	1211(6)	SA-47A-47B; 18720 cmh; 900mm x 750mm x 700mm; 57Pa; downstream	pc	2.00				
1211	1211(6)	SA-48A-48B; 18720 cmh; 900mm x 750mm x 700mm; 57Pa; upstream	pc	2.00				
1211	1211(6)	SA-49A-49B; 18720 cmh; 1500mm x 750mm x 700mm; 57Pa; downstream	pc	2.00				
1211	1211(6)	SA-50A-50B; 18720 cmh; 1500mm x 750mm x 700mm; 57Pa; upstream	pc	2.00				
1211	1211(6)	SA-51; 18720 cmh; 1500mm x 750mm x 700mm;	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		57Pa; upstream						
1211	1211(6)	SA-52; 18720 cmh; 1500mm x 750mm x 700mm; 57Pa; downstream	pc	1.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Ventilation fans; including all accessories, controls, wirings, conduits, vibration isolator, backdraft damper and all other connections needed to complete the system						
1216	1216(3)	OS-CL-EAF-1A/1B; 15900CMH; 350 Pa; centrifugal type; 0.37kW; 220V/1ph/60Hz with VFD, fire rated @ 250°C/2hrs	set	2.00				
1216	1216(3)	OS-CL-EAF-02; 6,680CMH; 300 Pa; centrifugal type; 1.3kW; 380V/3ph/60Hz	set	1.00				
1216	1216(3)	OS-CL-EAF-03; 3980CMH; 220 Pa; centrifugal type; 0.75kW; 220V/1ph/60Hz	set	1.00				
1216	1216(2)	OS-CL-EAF-04; 900CMH; 280 Pa; axial type; 0.37kW; 220V/1ph/60Hz	set	1.00				
1216	1216(3)	OS-CL-EAF-05; 1070CMH; 660 Pa; axial type type; 0.55kW; 220V/1ph/60Hz	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1216	1216(2)	OS-CL-EAF-06; 240CMH; 270 Pa; axial type; 0.37kW; 220V/1ph/60Hz; with hydrogen sensor; spark/explosion proof	set	1.00				
1216	1216(3)	OS-CL-EAF-07; 4270CMH; 650 Pa; centrifugal type; 2kW; 380V/3ph/60Hz; with VFD and Vibrator isolator	set	1.00				
1216	1216(2)	OS-CL-EAF-08; 3,380CMH; 350 Pa; axial type; 0.8kW; 220V/1ph/60Hz; with VFD and vibrator isolator	set	1.00				
1216	1216(2)	OS-CL-EAF-09; 1,750CMH; 350 Pa; axial type; 0.55kW; 220V/1ph/60Hz; with VFD and vibrator isolator	set	1.00				
1216	1216(3)	OS-MZ-EAF-1A/1B; 14,335CMH; 1,050 Pa; centrifugal type; 8kW; 380V/3ph/60Hz; with VFD	set	2.00				
1216	1216(3)	OS-MZ-EAF-2; 17,930CMH; 770 Pa; centrifugal type; 7.5kW; 380V/3ph/60Hz; with VFD and Vibrator isolator	set	1.00				
1216	1216(3)	OS-MZ-EAF-03; 1840CMH; 750 Pa; axial type; 0.9kW; 220V/1ph/60Hz; with VFD and Vibrator isolator	set	1.00				
1216	1216(3)	OS-MZ-EAF-3A/3B; 1,200CMH; 750Pa; Centrifugal type; 0.75kW; 220V/1ph/60Hz; with VFD and vibrator isolator	set	2.00				
1216	1216(2)	OS-MZ-EAF-4A/4B; 6000CMH; 300 Pa; Axial type; 1.5kW; 380V/3ph/60Hz; with VFD	set	2.00				
1216	1216(3)	OS-CL-FAF-1A/1B; 1,590CMH; 350 Pa; Centrifugal type; 0.37kW; 220V/1ph/60Hz; with VFD	set	2.00				
1216	1216(3)	OS-CL-FAF-02; 6,680CMH; 400 Pa; Centrifugal type; 1.7kW; 220V/3ph/60Hz	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1216	1216(3)	OS-CL-FAF-03; 3980CMH; 220 Pa; Centrifugal type; .75kW; 220V/3ph/60Hz	set	1.00				
1216	1216(3)	OS-MZ-FAF-1A/1B; 14,125CMH; 1100Pa; Centrifugal type; 8kW; 380V/3ph/60Hz; with VFD	set	2.00				
1216	1216(3)	OS-MZ-FAF-02; 17,930CMH; 770Pa; Centrifugal type; 7.5kW; 380V/3ph/60Hz; with VFD and vibrator isolator	set	1.00				
1216	1216(2)	OS-MZ-FAF-3; 1,840CMH; 750Pa; Axial type; 0.9kW; 220V/1ph/60Hz; with VFD and vibrator isolator	set	1.00				
1216	1216(3)	OS-MZ-FAF-3A/3B; 1,190CMH; 750Pa; Centrifugal type; 0.75kW; 220V/1ph/60Hz; with VFD and vibrator isolator	set	2.00				
		<u>SMOKE EXHAUST SYSTEM</u>						
		<u>Galvanized carbon steel sheet rectangular ducts and fittings; fire rated; conforming to SMACNA HVAC Duct Construction Standards</u>						
1211	1211(2)	Gauge 16	m2	3,740.00				
		<u>Thermal Insulation; Insulfrax 40mm thick; 2.0hour fire rated; 96kg/cu.m</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Fire Damper						
1211	1211(5)	500mm x 500mm	pc	2.00				
1211	1211(5)	600mm x 500mm	pc	1.00				
1211	1211(5)	1500mm x 600mm	pc	1.00				
		Non-Return Damper						
1211	1211(5)	750mm x 600mm	pc	1.00				
1211	1211(5)	900mm x 900mm	pc	2.00				
1211	1211(5)	950mm x 950mm	pc	2.00				
1211	1211(5)	1200mm x 850mm	pc	1.00				
		Smoke Exhaust Grilles						
1211	1211(6)	SEG 1; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	SEG 2; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	SEG 3; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	SEG 4; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	SEG 5; Bar Grille; 300mm x 300mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	SEG 6; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 7; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	SEG 8; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 9; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 10; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 11; Bar Grille; 600mm x 600mm	pc	1.00				
1211	1211(6)	SEG 12; Bar Grille; 1200mm x 600mm	pc	1.00				
1211	1211(6)	SEG 13; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	SEG 14; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	SEG 15; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 16; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 17; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 18; Bar Grille; 1200mm x 600mm	pc	1.00				
1211	1211(6)	SEG 19A-19D; Bar Grille; 150mm x 100mm	pc	4.00				
1211	1211(6)	SEG 20; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	SEG 21; Bar Grille; 600mm x 600mm	pc	1.00				
1211	1211(6)	SEG 22; Bar Grille; 300mm x 300mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(6)	SEG 23A-23B; Bar Grille; 400mm x 400mm	pc	2.00				
1211	1211(6)	SEG 24; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 25; Bar Grille; 300mm x 300mm	pc	1.00				
1211	1211(6)	SEG 26; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 27; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 28; Bar Grille; 400mm x 400mm	pc	1.00				
1211	1211(6)	SEG 29; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	SEG 30; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	SEG 31; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	SEG 32; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	SEG 33; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	SEG 34; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	SEG 35; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	SEG 36; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	SEG 37; Bar Grille; 400mm x 200mm	pc	1.00				
1211	1211(6)	SEG 38A-38P; bar grille; 1000mm x 150mm	pc	16.00				
1211	1211(6)	SEG 38A-38P; bar grille; 1000mm x 150mm	pc	16.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Return Air Diffuser						
1211	1211(6)	1400mm x 600mm	pc	24.00				
1211	1211(6)	600mm x 600mm	pc	92.00				
		Motorized Smoke Fire Damper						
1211	1211(5)	MSFD-15-19, 600X300	pc	5.00				
1211	1211(5)	MSFD-20-22,300X200	pc	3.00				
1211	1211(5)	MSFD-24/26,600X500	pc	2.00				
1211	1211(5)	MSFD-27-28,900X450	pc	2.00				
1211	1211(5)	MSFD-29, 300X350	pc	1.00				
1211	1211(5)	MSFD-32-35, 600X400	pc	4.00				
1211	1211(5)	MSFD-40, 600X450	pc	1.00				
1211	1211(5)	MSFD-41-44, 900X900	pc	4.00				
1211	1211(5)	MSFD-45-46, 500X350	pc	2.00				
1211	1211(5)	MSFD-49-50, 600X300	pc	2.00				
1211	1211(5)	MSFD-53-54, 1500X900	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	MSFD-61-62, 1500X900	pc	2.00				
1211	1211(5)	MSFD-71-72, 500X500	pc	2.00				
1211	1211(5)	MSFD-73, 500X300	pc	1.00				
1211	1211(5)	MSFD-77, 1350X1200	pc	1.00				
1211	1211(5)	MSFD-78-79, 1500X900	pc	1.00				
1211	1211(5)	MSFD-80, 1500X800	pc	1.00				
		Sound Attenuator						
1211	1211(5)	SA-13; 4560cmh; 300mm x 400mm x 900mm; 60Pa; downstream	pc	1.00				
1211	1211(5)	SA-14; 4560cmh; 300mm x 400mm x 900mm; 60Pa; upstream	pc	1.00				
1211	1211(5)	SA-15; 9660cmh; 650mm x 500mm x 1500mm; 60Pa; downstream	pc	1.00				
1211	1211(5)	SA-16; 9660cmh; 650mm x 500mm x 1500mm; 60Pa; upstream	pc	1.00				
1211	1211(5)	SA-17; 4800cmh; 500mm x 350mm x 1500mm; 60Pa; downstream	pc	1.00				
1211	1211(5)	SA-18; 4800cmh; 500mm x 350mm x 1500mm; 60Pa; upstream	pc	1.00				
1211	1211(5)	SA-27; 28800cmh; 800mm x 800mm x 2100mm; 60Pa; downstream	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Ventilation fans; including all accessories, controls, wirings, conduits, vibration isolator and all other connections needed to complete the system						
1216	1216(4)	OS-CL-RAF-01; 29942CMH; 750Pa; Centrifugal type; 12kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD and vibrator isolator	set	1.00				
1216	1216(4)	OS-CL-RAF-02; 29942CMH; 750Pa; Centrifugal type; 12kW; 380V/3ph/60Hz; ; fire rated @ 250C/2hrs; with VFD and vibrator isolator	set	1.00				
1216	1216(4)	OS-MZ-RAF-01/02; 53,550CMH; 900Pa; Centrifugal type; 18kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD and vibrator isolator	set	2.00				
1216	1216(4)	OS-MZ-RAF-03/04; 53,550CMH; 900Pa; Centrifugal type; 18kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD and vibrator isolator	set	2.00				
1216	1216(4)	OS-CL-SEF-1A/1B; 4,560 CMH; 1600 Pa; Centrifugal type; 4.7kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD	set	2.00				
1216	1216(4)	OS-CL-SEF-2A/2B; 9,000 CMH; 1350 Pa; Centrifugal type; 6.5kW; 380V/3ph/60Hz; with VFD	set	2.00				
1216	1216(4)	OS-CL-SEF-3A/3B; 4,800 CMH; 1,600 Pa; Centrifugal type; 5kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD	set	2.00				
1216	1216(4)	OS-CL-SEF-04/05; 28,800 CMH; 1,130 Pa; Centrifugal type; 17kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1216	1216(4)	OS-CL-SEF-06/07; 28,800 CMH; 1,130 Pa; Centrifugal type; 17kW; 380V/3ph/60Hz; fire rated @ 250C/2hrs; with VFD	set	2.00				
1216	1216(4)	OS-MZ-SEF-1A/1B; 6750; 750Pa; Centrifugal type; 3.5kW; 220V/1ph/60hz; with VFD and vibrator isolator	set	2.00				
		<u>Allowance for the provision of the following</u>						
1216	1216	Duct work ancillaries and differential pressure sensor including wirings, cables, conduits, controls and all necessary connections to complete the system and as describe	item	1.00				
		<u>PRESSURIZATION SYSTEM</u>						
		<u>Galvanized steel sheet ductwork ancillaries including flexible connections and flanges; conforming to the MPF Technical Specifications specified in 1211 Ductworks and Accessories</u>						
		Pressure Relief Damper						
1211	1211(5)	PRD-12, 1000mmx700mm @ Staircase Pressurization	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1211	1211(5)	PRD-13, 1000mmx700mm @ Staircase Pressurization	pc	1.00				
1211	1211(5)	PRD-14, 1000mmx700mm @ Staircase Pressurization	pc	1.00				
		Fresh Air Grille						
1211	1211(6)	FAG 48; Bar Grille; 2250mm x 600mm	pc	1.00				
1211	1211(6)	FAG 49; Bar Grille; 1500mm x 900mm	pc	1.00				
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Ventilation fans; including all accessories, controls, wirings, conduits, vibration isolator and all other connections needed to complete the system						
1216	1216(4)	OS-CL-FAF-4A/4B, axial fan, 18720cmh @300Pa, 5.5KW, with VFD; 380V/3ph/60Hz	set	2.00				
1216	1216(4)	OS-CL-FAF-5A/5B, axial fan, 18720cmh @300Pa, 5.5KW, with VFD; 380V/3ph/60Hz	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1216	1216(4)	OS-GL-FAF-1A/1B, axial fan, 18720cmh @300Pa, 5.5KW, with VFD; 380V/3ph/60Hz	set	2.00				
		<u>Allowance for the provision of the following</u>						
1211	1211(6)	Duct work ancillaries and differential pressure sensor including wirings, cables, conduits, controls and all necessary connections to complete the system and as described	item	1.00				
		<u>AIR CONDITIONING SYSTEM</u>						
		<u>Galvanized steel sheet rectangular ducts and fittings; conforming to SMACNA HVAC Duct Construction Standards</u>						
1211	1211(2)	Gauge 26	m2	28.00				
1211	1211(2)	Gauge 24	m2	1,669.00				
1211	1211(2)	Gauge 22	m2	1,568.00				
1211	1211(2)	Gauge 20	m2	1,161.00				
		<u>Thermal Insulation; Elastomeric closed cell rubberized 25mm thick</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1212	1212(1)	fixing externally to rectangular ducts	m2	4,426.00				
		Galvanized steel sheet ductwork ancillaries including flexible connections and flanges; conforming to the MPF Technical Specifications specified in 1211 Ductworks and Accessories						
		Volume damper						
1211	1211(5)	250mm diameter	pc	408.00				
1211	1211(5)	150mm x 100mm	pc	2.00				
1211	1211(5)	150mm x 150mm	pc	2.00				
1211	1211(5)	250mm x 100mm	pc	7.00				
1211	1211(5)	300mm x 200mm	pc	5.00				
1211	1211(5)	600mm x 150mm	pc	166.00				
		ACP						
1211	1211(5)	400mm X 200mm	pc	2.00				
1211	1211(5)	400mm X 300mm	pc	1.00				
1211	1211(5)	450mm X 300mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Return Air Grille						
1211	1211(6)	RAG 1; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	RAG 2A-2B; Bar Grille; 300mm x 200mm	pc	2.00				
1211	1211(6)	RAG 3; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	RAG 4; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	RAG 5; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	RAG 6; Bar Grille; 150mm x 150mm	pc	1.00				
1211	1211(6)	RAG 7; Bar Grille; 150mm x 150mm	pc	1.00				
1211	1211(6)	RAG 8; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	RAG 9; Bar Grille; 150mm x 100mm	pc	1.00				
1211	1211(6)	RAG 10; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	RAG 11; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	RAG 12; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	RAG 13; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	RAG 14; Bar Grille; 300mm x 200mm	pc	1.00				
1211	1211(6)	RAG 15; Bar Grille; 200mm x 200mm	pc	1.00				
1211	1211(6)	RAG 16; Bar Grille; 200mm x 200mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Supply Air diffuser						
1211	1211(6)	683 cmh capacity; allowance only	pc	138.00				
		Flexible duct						
1211	1211(4)	250mm diameter x 1m	pc	408.00				
		Motorized damper						
1211	1211(5)	MOD-01; 1250mm x 800mm	pc	1.00				
1211	1211(5)	MOD-02 1500mm x 1000mm	pc	1.00				
1211	1211(5)	MOD-03; 1500mm x 700mm	pc	1.00				
1211	1211(5)	MOD-04; 2000mm x 750mm	pc	1.00				
1211	1211(5)	MOD-05; 1200mm x 800mm	pc	1.00				
1211	1211(5)	MOD-06; 1200mm x 850mm	pc	1.00				
1211	1211(5)	MOD-07; 1500mm x 800mm	pc	1.00				
1211	1211(5)	MOD-08; 1500mm x 900mm	pc	1.00				
1211	1211(5)	MOD-09; 1000mm x 600mm	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Fan Coil Unit, VRF/Multi-split type; complete with insulation, thermostats, speed regulators and all necessary accessories and connections						
1213	1213(2)	OS-MZ-IU-1A/1B; 5.6kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				
1213	1213(2)	OS-MZ-IU-2A/2B; 14kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				
1213	1213(2)	OS-MZ-IU-3A/3B; 14 kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				
1213	1213(2)	OS-MZ-IU-4A/4B; 28 kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				
1213	1213(2)	OS-MZ-IU-5A/5B; 7.1 kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				
1213	1213(2)	OS-MZ-IU-6A/6B; 14 kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1213	1213(2)	OS-MZ-IU-7A/7B; 3.6kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	2.00				
1213	1213(2)	OS-MZ-IU-8A/8B/8C; 28kW cooling cap; 220V/1ph/60Hz; R-410A refrigerant	set	3.00				
1213	1213(2)	OS-MZ-AHUDX-01, 38.8 KW cooling cap; complete with VFD 380V/3ph/60Hz; R-410A	set	1.00				
		Air Cooled Condensing Unit (ACCU), VRF/Multi-split type; including all necessary accessories and connections						
1213	1213(1)	OS-GL-OU-01; 122 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	OS-GL-OU-02; 122 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
1213	1213(1)	OS-GL-OU-03; 28 kW cooling cap; 380V/3ph/60Hz; R-410A refrigerant	set	1.00				
		Fan Coil Unit (FCU), chilled water type; complete with insulation, thermostats, speed regulators and all necessary accessories and connections						
1214	1214(1)	OS-CL-FCU-01; ducted type; 1.5kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1214	1214(1)	OS-CL-FCU-02; ducted type; 1.8kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-03; ducted type; 2.7kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-04; ducted type; 0.7kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-05; ducted type; 0.9kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-06; ducted type; 5.2kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-07; ducted type; 4.5kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-08; ducted type; 1.2kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-9; ducted type; 1.6kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-10; ducted type; 2.8kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-11A & 11B; ducted type; 8.7kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	2.00				
1214	1214(1)	OS-CL-FCU-12; ducted type; 2.1kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-13; ducted type; 1.6kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-14; ducted type; 1kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1214	1214(1)	OS-CL-FCU-15; ducted type; 1.5kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
1214	1214(1)	OS-CL-FCU-16; ducted type; 1.1kW cooling cap; 200 Pa; 220V/1ph/60Hz	set	1.00				
		Air Handling Unit (AHU), chilled water type; complete with insulation, thermostats, speed regulators, valves, sensors and all necessary accessories and connections						
1215	1215(1)	OS-MZ-AHU-01; 310 kW cooling cap; 900 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				
1215	1215(1)	OS-MZ-AHU-02; 310 kW cooling cap; 900 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				
1215	1215(1)	OS-CL-AHU-01; 396 kW cooling cap; 750 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				
1215	1215(1)	OS-CL-AHU-02; 368.9 kW cooling cap; 750 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				
		Fresh Air Handling Unit (FAHU), chilled water type; complete with insulation, thermostats, speed regulators and all necessary accessories and connections						
1215	1215(1)	OS-CL-FAH-01; 27.3kW cooling capacity; 500 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1215	1215(1)	OS-CL-FAH-02; 14.0kW cooling capacity; 500 Pa; 380V/3ph/60Hz; w/ VFD	set	1.00				
		TUNNEL VENTILATION SYSTEM						
		Tunnel Ventilation Dampers						
1228	1228(1)	MSFD - 83A/83B; 3120mm x 2000mm	pc	2.00				
1228	1228(1)	MSFD - 84; 2500mm x 4500mm	pc	1.00				
1228	1228(1)	MSFD - 85; 3000mm x 3750mm	pc	1.00				
1228	1228(1)	MSFD - 86; 2500mm x 4500mm	pc	1.00				
1228	1228(1)	MSFD - 87A/87B; 3120mm x 2000mm	pc	2.00				
1228	1228(1)	MSFD - 88A/88B; 3120mm x 2000mm	pc	2.00				
1228	1228(1)	MSFD - 89; 2500mm x 4500mm	pc	1.00				
1228	1228(1)	MSFD - 90; 3000mm x 3750mm	pc	1.00				
1228	1228(1)	MSFD - 91A/91B; 3120mm x 2000mm	pc	2.00				
1228	1228(1)	MSFD - 92; 2500mm x 4500mm	pc	1.00				
		Motorized Smoke Fire Damper						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		-						
		Ventilation fans; including all necessary accessories, controls, cables/wirings, conduits, vibration isolator and all other connections needed to complete the system						
		-						
1227	1227(1)	OS-MZ-TVF-01; Axial flow, fully reversible; direct driven; 396,000 m3/hr. @ 1387 Pa; 250°C for 1 hr.	set	1.00				
1227	1227(1)	OS-MZ-TVF-02; Axial flow, fully reversible; direct driven; 360,000 m3/hr. @ 1137Pa; 250°C for 1 hr.	set	1.00				
1227	1227(1)	OS-MZ-TVF-03; Axial flow, fully reversible; direct driven; 360,000 m3/hr. @ 1145 Pa; 250°C for 1 hr.	set	1.00				
1227	1227(1)	OS-MZ-TVF-04; Axial flow, fully reversible; direct driven; 360,000 m3/hr. @ 1080 Pa; 250°C for 1 hr.	set	1.00				
		-						
		<u>Allowance for the provision of the following</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1227	1227	Tunnel ventilation ducts and ancillaries including grilles, dampers, flanges, connections and all other necessary accessories	item	1.00				
		SUB-TOTAL (AIR CONDITIONING AND MECHANICAL VENTILATION)						
		ELECTRICAL AND AUXILIARY INSTALLATION						
		Mains and Sub-Mains Distribution Systems						
		Supply and installation of busduct and fittings including supply drop rods, fire sealant, vertical load supports, hangers, consumables all in accordance with the drawing (STN-MEP-ELL-OS-2011) and STN-MEP-ELL-OS-3300 to 3344						
1112	1112 (1)	4000A, 400V, 60Hz,4W Copper busduct with with 50 % Integral ground bus IP.54	m	400.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1112	1112 (2)	Flanged end	set	14.00				
1112	1112 (3)	Horizontal Elbow	set	23.00				
1112	1112 (4)	Vertical Elbow	set	14.00				
1112	1112 (5)	Trapeze hanger	item	1.00				
1112	1112 (6)	Spring hanger	item	1.00				
1112	1112 (7)	Flexible braided connector	set	8.00				
1112	1112 (7)	1200AT Tap-off breaker	set	2.00				
		Cable Tray; including all necessary accessories/ ancillaries, fittings hangers and supports; reference STN-MEP-ELL-OS-3300 to 3344						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1117	1117 (1a)	50mm x 100mm	m	500.00				
1117	1117 (1b)	100mm x 100mm	m	400.00				
1117	1117 (1c)	150mm x 100mm	m	1,100.00				
1117	1117 (1d)	200mm x 100mm	m	600.00				
1117	1117 (1e)	225mm x 100mm	m	100.00				
1117	1117 (1f)	300mm x 100mm	m	1,300.00				
1117	1117 (1g)	400mm x 100mm	m	600.00				
1117	1117 (1h)	450mm x 100mm	m	200.00				
1117	1117 (1i)	500mm x 100mm	m	200.00				
1117	1117 (1j)	600mm x 100mm	m	400.00				
1117	1117 (1k)	750mm x 100mm	m	900.00				
1117	1117 (1L)	900mm x 100mm	m	200.00				
		Intermediate metallic conduit (IMC); reference STN-MEP-ELL-OS-3300 to 3344						
		Surface fixed; including all necessary supports and accessories						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (2a)	20 mm diameter	m	200.00				
1116	1116 (2b)	25 mm diameter	m	700.00				
1116	1116 (2c)	32 mm diameter	m	600.00				
1116	1116 (2d)	40 mm diameter	m	200.00				
1116	1116 (2e)	50 mm diameter	m	200.00				
1116	1116 (2f)	65 mm diameter	m	100.00				
1116	1116 (2g)	80 mm diameter	m	200.00				
1116	1116 (2h)	90 mm diameter	m	100.00				
1116	1116 (2i)	100 mm diameter	m	100.00				
		Rigid metallic conduit (RMC); reference STN-MEP-ELL-OS-3300 to 3344						
1116	1116 (3a)	15mm diameter	m	900.00				
1116	1116 (3b)	20mm diameter	m	400.00				
1116	1116 (3c)	25mm diameter	m	500.00				
1116	1116 (3d)	32mm diameter	m	900.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (3e)	40mm diameter	m	400.00				
1116	1116 (3f)	50mm diameter	m	200.00				
1116	1116 (3g)	65mm diameter	m	100.00				
		Feeder wires/cables; type XLPE; reference STN-MEP-ELL-OS-2001 to 2006 and 2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (2a)	2C x 14 sq.mm	m	200.00				
1121	1121 (2b)	3C x 14 sq.mm	m	1,200.00				
1121	1121 (2c)	3C x 22 sq.mm	m	200.00				
1121	1121 (2d)	3C x 30 sq.mm	m	100.00				
1121	1121 (2e)	3C x 38 sq.mm	m	600.00				
1121	1121 (2f)	3C x 60 sq.mm	m	300.00				
1121	1121 (2g)	3C x 150 sq.mm	m	400.00				
1121	1121 (2h)	3C x 200 sq.mm	m	200.00				
1121	1121 (2i)	3C x 250 sq.mm	m	300.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (2j)	4C x 14 sq. mm	m	100.00				
1121	1121 (2k)	4C x 22 sq. mm	m	4,600.00				
1121	1121 (2l)	4C x 30 sq. mm	m	500.00				
1121	1121 (2m)	4C x 50 sq. mm	m	400.00				
1121	1121 (2n)	4C x 100 sq. mm	m	100.00				
1121	1121 (2o)	4C x 125 sq. mm	m	400.00				
1121	1121 (2p)	4C x 150 sq. mm	m	100.00				
1121	1121 (2q)	4C x 200 sq. mm	m	100.00				
1121	1121 (2r)	4C x 250 sq. mm	m	300.00				
1121	1121 (2s)	4C x 325 sq. mm	m	400.00				
1121	1121 (2t)	4C x 400 sq. mm	m	300.00				
		Feeder wires/cables; type XLPE-F; reference STN-MEP-ELL-OS-2001 to 2006 and 2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (4a)	2C x 14 sq.mm	m	1,200.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (4b)	3C x 14 sq.mm	m	2,700.00				
1121	1121 (4c)	3C x 22 sq.mm	m	1,100.00				
1121	1121 (4d)	3C x 30 sq.mm	m	400.00				
1121	1121 (4e)	3C x 38 sq.mm	m	1,100.00				
1121	1121 (4f)	3C x 50 sq.mm	m	200.00				
1121	1121 (4g)	3C x 60 sq.mm	m	700.00				
1121	1121 (4h)	3C x 80 sq.mm	m	2,100.00				
1121	1121 (4i)	3C x 100 sq.mm	m	1,300.00				
1121	1121 (4j)	3C x 125 sq.mm	m	300.00				
1121	1121 (4k)	3C x 200 sq.mm	m	100.00				
1121	1121 (4l)	3C x 250 sq.mm	m	200.00				
1121	1121 (4m)	4C x 14 sq. mm	m	1,700.00				
1121	1121 (4n)	4C x 22 sq. mm	m	1,100.00				
1121	1121 (4o)	4C x 30 sq. mm	m	500.00				
1121	1121 (4p)	4C x 50 sq. mm	m	400.00				
1121	1121 (4q)	4C x 60 sq. mm	m	500.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (4r)	4C x 80 sq. mm	m	800.00				
1121	1121 (4s)	4C x 100 sq. mm	m	200.00				
1121	1121 (4t)	4C x 125 sq. mm	m	700.00				
1121	1121 (4u)	4C x 200 sq. mm	m	2,200.00				
1121	1121 (4v)	4C x 250 sq. mm	m	2,500.00				
1121	1121 (4w)	4C x 325 sq. mm	m	400.00				
1121	1121 (4x)	4C x 400 sq. mm	m	200.00				
		Feeder wires/cables; type XHHW/ CPC; reference STN-MEP-ELL-OS-2001 to 2006 and 2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (5a)	1C x 14 sq. mm	m	100.00				
1121	1121 (5b)	1C x 30 sq. mm	m	100.00				
1121	1121 (5c)	1C x 60 sq. mm	m	200.00				
		Feeder wires/cables; type XLPE/ CPC; reference STN-MEP-ELL-OS-2001 to 2006 and 2012						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Drawing into conduits; (conduits measured separately)						
1121	1121 (6a)	1C x 5.5 sq. mm	m	7,100.00				
1121	1121 (6b)	1C x 8.0 sq. mm	m	900.00				
1121	1121 (6c)	1C x 14 sq. mm	m	500.00				
1121	1121 (6d)	1C x 30 sq. mm	m	100.00				
1121	1121 (6e)	1C x 22 sq. mm	m	100.00				
1121	1121 (6f)	1C x 50 sq. mm	m	200.00				
		Feeder wires/cables; type XLPE-F/ CPC; reference STN-MEP-ELL-OS-2001 to 2006 and 2012						
		Drawing into conduits; (conduits measured separately)						
1121	1121 (7a)	1C x 5.5 sq. mm	m	10,900.00				
1121	1121 (7b)	1C x 8.0 sq. mm	m	2,600.00				
1121	1121 (7c)	1C x 14 sq. mm	m	1,200.00				
1121	1121 (7d)	1C x 22 sq. mm	m	800.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1121	1121 (7e)	1C x 30 sq. mm	m	200.00				
1121	1121 (7f)	1C x 38 sq. mm	m	100.00				
1121	1121 (7g)	1C x 50 sq. mm	m	300.00				
1121	1121 (7h)	1C x 60 sq. mm	m	600.00				
1121	1121 (7i)	1C x 80 sq. mm	m	500.00				
		Panelboards; including Busbar, Neutral bus, selector switch, contactors, relays, integral surge protection devices (SPD), phase indicating lights, power meters and auxilliary contacts for BMS interconnection and all necessary accessories in accordance with the manufacturer's instructions and as shown in drawings with reference STN-MEP-ELL-OS-2007 to 2047						
		Panelboard						
1113	1113(1)a	Panelboard : OS-GL-ELDB-02	Assembly	1.00				
1113	1113(1)b	Panelboard : OS-GL-ELDB-01	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113(1)c	Panelboard : OS-CL-ELDB-01	Assembly	1.00				
1113	1113(1)d	Panelboard : OS-GL-ELDB-03	Assembly	1.00				
1113	1113(1)e	Panelboard : OS-CL-ELDB-03	Assembly	1.00				
1113	1113(1)f	Panelboard : OS-CL-ELDB-02	Assembly	1.00				
1113	1113(1)g	Panelboard : OS-CL-ELDB-05	Assembly	1.00				
1113	1113(1)h	Panelboard : OS-CL-ELDB-04	Assembly	1.00				
1113	1113(1)i	Panelboard : OS-PL-ELDB-01	Assembly	1.00				
1113	1113(1)j	Panelboard : OS-CL-ELDB-06	Assembly	1.00				
1113	1113(1)k	Panelboard : OS-PL-ELDB-03	Assembly	1.00				
1113	1113(1)l	Panelboard : OS-MZ-ELDB-01	Assembly	1.00				
1113	1113(1)m	Panelboard : OS-MZ-ELDB-02	Assembly	1.00				
1113	1113(1)n	Panelboard : OS-PL-ELDB-02	Assembly	1.00				
1113	1113(1)o	Panelboard : OS-CL-PDB-01	Assembly	1.00				
1113	1113(1)p	Panelboard : OS-PL-ELDB-04	Assembly	1.00				
1113	1113(1)q	Panelboard : OS-MZ-PDB-01	Assembly	1.00				
1113	1113(1)r	Panelboard : OS-CL-PDB-02	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113(1)s	Panelboard : OS-CL-PDB-04	Assembly	1.00				
1113	1113(1)t	Panelboard : OS-MZ-PDB-02	Assembly	1.00				
1113	1113(1)u	Panelboard : OS-PL-PDB-03	Assembly	1.00				
1113	1113(1)v	Panelboard : OS-MZ-EPDB-02	Assembly	1.00				
1113	1113(1)w	Panelboard : OS-MZ-EPDB-01	Assembly	1.00				
1113	1113(1)x	Panelboard : OS-CL-EPDB-01	Assembly	1.00				
1113	1113(1)y	Panelboard : OS-TN-ELPDB-01	Assembly	1.00				
1113	1113(1)z	Panelboard : OS-TN-ELPDB-02	Assembly	1.00				
1113	1113(1)aa	Panelboard : OS-CL-EPDB-02	Assembly	1.00				
1113	1113(1)ab	Panelboard : OS-CL-UDB-02	Assembly	1.00				
1113	1113(1)ac	Panelboard : OS-CL-UDB-01	Assembly	1.00				
1113	1113(1)ad	Panelboard : OS-CL-UDB-04	Assembly	1.00				
1113	1113(1)ae	Panelboard : OS-CL-UDB-03	Assembly	1.00				
1113	1113(1)af	Panelboard : OS-MZ-UDB-01	Assembly	1.00				
1113	1113(1)ag	Panelboard : OS-CL-UDB-05	Assembly	1.00				
1113	1113(1)ah	Panelboard : OS-PL-UDB-01	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113(1)ai	Panelboard : OS-MZ-UDB-02	Assembly	1.00				
1113	1113(1)aj	Panelboard : OS-ADV-PDB-01	Assembly	1.00				
1113	1113(1)ak	Panelboard : OS-PL-UDB-02	Assembly	1.00				
1113	1113(1)al	Panelboard : OS-ADV-PDB-03	Assembly	1.00				
1113	1113(1)am	Panelboard : OS-ADV-PDB-02	Assembly	1.00				
1113	1113(1)an	Panelboard : OS-TN-ELPDB-03	Assembly	1.00				
1113	1113(1)ao	Panelboard : OS-TN-ELPDB-04	Assembly	1.00				
1113	1113(1)ap	Panelboard : OS-ADV-PDB-04	Assembly	1.00				
1113	1113(1)aq	Panelboard : OS-CL-EMCC-02	Assembly	1.00				
1113	1113(1)ar	Panelboard : OS-CL-EMCC-01	Assembly	1.00				
1113	1113(1)as	Panelboard : OS-CL-MCC-01	Assembly	1.00				
1113	1113(1)at	Panelboard : OS-CL-EMCC-03	Assembly	1.00				
1113	1113(1)au	Panelboard : OS-CL-EMCC-04	Assembly	1.00				
1113	1113(1)av	Panelboard : OS-MZ-EMCC-07	Assembly	1.00				
1113	1113(1)aw	Panelboard : OS-MZ-EMCC-06	Assembly	1.00				
1113	1113(1)ax	Panelboard : OS-MZ-EMCC-05	Assembly	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113(1)ay	Panelboard : OS-MZ-USMDB-01	Assembly	1.00				
1113	1113(1)az	Panelboard : OS-MZ-ESMDB-03	Assembly	1.00				
1113	1113(1)ba	Panelboard : OS-MZ-EMCC-03	Assembly	1.00				
1113	1113(1)bb	Panelboard : OS-MZ-EMCC-02	Assembly	1.00				
1113	1113(1)bc	Panelboard : OS-MZ-EMCC-01	Assembly	1.00				
1113	1113(1)bd	Panelboard : OS-MZ-ESMDB-01	Assembly	1.00				
1113	1113(1)be	Panelboard : OS-MZ-ESMDB-02	Assembly	1.00				
1113	1113(1)bf	Panelboard : OS-MZ-EMDB-01	Assembly	1.00				
1113	1113(1)bg	Panelboard : OS-MZ-MDB-01	Assembly	1.00				
1113	1113(1)bh	Panelboard : OS-MZ-SMDB-01	Assembly	1.00				
1113	1113(1)bi	Panelboard : OS-MZ-EMCC-04	Assembly	1.00				
1113	1113(1)bj	Panelboard : OS-PL-EMCC-01	Assembly	1.00				
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described; reference STN-MEP-ELL-OS-2012						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Capacitor Bank						
1113	1113 (2a)	APFC Panel 01 & 02 ; 500 KVAR	Assembly	2.00				
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described; reference STN-MEP-ELL-OS-2001 to 2006						
		Enclosed Circuit Breaker (ECB); in NEMA 4X Enclosure						
1113	1113 (3a)	25A TPN	Assembly	22.00				
1113	1113 (3b)	30A TPN	Assembly	33.00				
1113	1113 (3c)	35A TPN	Assembly	12.00				
1113	1113 (3d)	40A TPN	Assembly	33.00				
1113	1113 (3e)	45A TPN	Assembly	13.00				
1113	1113 (3f)	50A TPN	Assembly	7.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (3g)	60A TPN	Assembly	11.00				
1113	1113 (3h)	70A TPN	Assembly	3.00				
1113	1113 (3i)	80A TPN	Assembly	11.00				
1113	1113 (3j)	90A TPN	Assembly	4.00				
1113	1113 (3k)	100A TPN	Assembly	19.00				
1113	1113 (3l)	110A TPN	Assembly	2.00				
1113	1113 (3m)	125A TPN	Assembly	2.00				
1113	1113 (3n)	150A TPN	Assembly	3.00				
1113	1113 (3o)	200A TPN	Assembly	5.00				
1113	1113 (3p)	220A TPN	Assembly	1.00				
1113	1113 (3q)	225A TPN	Assembly	1.00				
1113	1113 (3r)	250A TPN	Assembly	4.00				
1113	1113 (3s)	300A TPN	Assembly	5.00				
1113	1113 (3t)	350A TPN	Assembly	1.00				
1113	1113 (3u)	450A TPN	Assembly	3.00				
1113	1113 (3v)	500A TPN	Assembly	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1113	1113 (3w)	600A TPN	Assembly	3.00				
1113	1113 (3x)	25A SPN	Assembly	15.00				
1113	1113 (3y)	30A SPN	Assembly	2.00				
1113	1113 (3z)	35A SPN	Assembly	2.00				
		Isolators						
1113	1113 (3aa)	20A SPN; isolator Fire Shutter	Assembly	9.00				
1113	1113 (3ab)	20A TPN; isolator for Water HEater	Assembly	7.00				
1113	1113 (3ac)	20A TPN; Isolator; HL	Assembly	5.00				
1113	1113 (3ad)	Isolator fo FACP	Assembly	1.00				
1113	1113 (3ae)	Isolator for DPMCP	Assembly	1.00				
1113	1113 (3af)	Isolator for PLC Panel	Assembly	5.00				
		Supply and fix the following items; including all necessary accessories in accordance with the manufacturer's instructions and as described; reference STN-MEP-ELL-OS-2011						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Automatic Transfer Switch						
1113	1113 (4)	300AT, 3P	Assemblies					
		Automatic Transfer Switch; for Fire pump and Jockey pump						
1113	1113 (5)	1200AT, 3P	Assemblies	1.00				
		Supply and fix the following items; including all necessary accessories such as Maintenance By-pass switch, LCD Status and control console, emergency power off and external battery system including cables in accordance with the manufacturer's instructions and as described with reference STN-MEP-ELL-OS-2011						
		Uninterruptible Power Supply (UPS)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1114	1114 (1)	125KVA	set	2.00				
		Supply and fix the following items; Battery racks, battery controller, sensors as well as transducer for BMS interface, including cables in accordance with the manufacturer's instructions and as described with reference STN-MEP-ELL-OS-2011						
		External Battery System						
1114	1114 (2)	External Battery System; 2 hours	set	2.00				
		General Lighting and Power						
		Conduit systems to receive final circuits; Intermediate Metallic Conduit (IMC) conduit including boxes, fittings and necessary flexible metallic conduit; reference STN-MEP-ELL-OS-3100 to 3244						
		From panelboards to						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (1a)	lighting points; locally controlled ceiling mounted	nr	3,383.00				
1116	1116 (1b)	lighting points; locally controlled wall mounted	nr	316.00				
1116	1116 (1c)	exit sign points	nr	86.00				
1116	1116 (1d)	switch points; 1 way 1 gang	nr	14.00				
1116	1116 (1e)	switch points; 1 way (emergency lighting)	nr	58.00				
1116	1116 (1f)	switch points; presence detector bypass switch (in metal clad)	nr	44.00				
1116	1116 (1g)	Surfaced Mounted switched socket outlet points	nr	40.00				
1116	1116 (1h)	Surfaced Mounted twin switched socket outlet points	nr	94.00				
1116	1116 (1i)	Surfaced Mounted twin switched socket outlet points on UPS Supply	nr	44.00				
1116	1116 (1j)	Fused Connection Unit complete with switch points for Hand dryer	nr	7.00				
1116	1116 (1k)	Fused Connection Unit complete with switch points for Fan Coil Unit	nr	17.00				
1116	1116 (1l)	Surfaced Mounted switched socket outlet points on UPS Supply	nr	23.00				
1116	1116 (1m)	Surfaced Mounted switched socket outlet points	nr	96.00				
1120	1120 (2k)	Surfaced Mounted socket outlet without switch points	nr	12.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1116	1116 (1n)	Fused Connection Unit complete with switch points	nr	53.00				
1116	1116 (1o)	10A Fused Connection Unit complete with switch for CCTV and Door Controller	set	-				
1116	1116 (1p)	Fused Connection Unit complete with switch points for MSFD & MOD (Metalclad type)	nr	105.00				
1120	1120 (1r)	Junction Box points for "SN" fixture	nr	116.00				
1116	1116 (1s)	Junction Box points for "PD" fixture	nr	93.00				
1116	1116 (1t)	Junction box; striplights	nr	9.00				
1116	1116 (1u)	Junction Box points for Escalator lighting	nr	9.00				
1116	1116 (v)	Junction Box points for T&B mirror lighting	nr	6.00				
		Final circuits in single core LSOH/ Fire rated cables; drawing into intermediate metallic conduit (IMC) conduit; (conduits measured separately); reference STN-MEP-ELL-OS-3100 to 3244						
		From panelboards to						
1120	1120 (2a)	lighting points; locally controlled ceiling mounted	nr	3,383.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1120	1120 (2b)	lighting points; locally controlled wall mounted	nr	316.00				
1120	1120 (2c)	exit sign points	nr	86.00				
1120	1120 (2d)	switch points; 1 way 1 gang	nr	14.00				
1120	1120 (2e)	switch points; 1 way (emergency lighting)	nr	58.00				
1120	1120 (2f)	switch points; presence detector bypass switch (in metal clad)	nr	44.00				
1120	1120 (2g)	Surfaced Mounted switched socket outlet points	nr	40.00				
1120	1120 (2h)	Surfaced Mounted twin switched socket outlet points	nr	94.00				
1120	1120 (2i)	Surfaced Mounted twin switched socket outlet points on UPS Supply	nr	44.00				
1120	1120 (2j)	Fused Connection Unit complete with switch points for Hand dryer	nr	7.00				
1120	1120 (2k)	Fused Connection Unit complete with switch points for Fan Coil Unit	nr	17.00				
1120	1120 (2l)	Surfaced Mounted switched socket outlet points on UPS Supply	nr	23.00				
1120	1120 (2m)	Surfaced Mounted switched socket outlet points	nr	96.00				
1120	1120 (2n)	Surfaced Mounted socket outlet without switch points	nr	12.00				
1120	1120 (2o)	Fused Connection Unit complete with switch points	nr	53.00				
1120	1120 (2p)	10A Fused Connection Unit complete with switch for CCTV and Door Controller	set	-				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1120	1120 (2q)	Fused Connection Unit complete with switch points for MSFD & MOD (Metalclad type)	nr	105.00				
1120	1120 (2r)	Junction Box points for "SN" fixture	nr	116.00				
1120	1120 (2r)	Junction Box points for "PD" fixture	nr	93.00				
1120	1120 (2s)	Junction box; striplights	nr	9.00				
1120	1120 (2t)	Junction Box points for Escalator lighting	nr	9.00				
1120	1120 (2u)	Junction Box points for T&B mirror lighting	nr	6.00				
		Supply and fix specified or approved equal lighting fixtures and ancillaries; reference STN-MEP-ELL-OS-3100 to 3244						
		Lighting fixtures						
1118	1118 (1a)	type A1; rated IP20 Batten type Lighting Fixture	set	153.00				
1118	1118 (1b)	type A1; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	76.00				
1118	1118 (1c)	type A2; rated IP20 Batten type Lighting Fixture	set	226.00				
1118	1118 (1d)	type A2; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	74.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1118	1118 (1e)	type A3; rated IP20 Batten type Lighting Fixture	set	954.00				
1118	1118 (1f)	type A3; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	407.00				
1118	1118 (1g)	type A4; rated IP20 Batten type Lighting Fixture	set	36.00				
1118	1118 (1h)	type A4; rated IP20 Batten type Lighting Fixture connected to Emergency Power	set	25.00				
1118	1118 (1i)	A5 - Base light LED linear module fixture, Batten type (100 - 240V, 8W, 3000K, 750lm, IP20, Lifetime 40,000 hrs., Medium B/A C/O 150mm diameter)	set	85.00				
1118	1118 (1j)	A5(E) -Base light LED linear module fixture, Batten type (100 - 240V, 8W, 3000K, 750lm, IP20, Lifetime 40,000 hrs., Medium B/A C/O 150mm diameter) connected to Emergency Power	set	35.00				
1118	1118 (1k)	type A6 - Base light LED Linear module fixture, Batten type (100-240V 13.6W 3000K 1800 lm IP20, Lifetime 40,000 hrs. W 70mm)	set	644.00				
1118	1118 (1l)	type B1; 2 x 2 recessed mounted LED Lighting Fixture	set	144.00				
1118	1118 (1m)	type B1; 2 x 2 recessed mounted LED Lighting Fixture connected to Emergency Power	set	70.00				
1118	1118 (1n)	type C1; recessed Downlight LED Lighting Fixture	set	84.00				
1118	1118 (1o)	type C1; recessed Downlight LED Lighting Fixture connected to Emergency Power	set	57.00				
1118	1118 (1p)	type C2; recessed Downlight LED Lighting Fixture	set	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Lighting Control Panel (LCP); including Busbar, Neutral bus, selector switch, contactors, relays, integral surge protection devices (SPD), phase indicating lights, power meters and auxilliary contacts for BMS interconnection and all necessary accessories in accordance with the manufacturer's instructions and as shown in drawings with reference STN-MEP-ELL-OS-3100 to 3244						
1119	1119	Lighting Control Panel (LCP)	Assembly	7.00				
		Allow for the provision of :						
1120	1120	Lighting fixtures for Elevator Car including necessary controls, conduits and wirings as required	item	1.00				
		Allow for the provision of :						
1121	1121 (a)	Tunnel lightings and outlet including necessary controls, conduits and wirings as required	lot	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1120	1120	Supply and Fix specified or approved equal field devices and accessories; reference STN-MEP-ELL-OS-3100 to 3244						
		Switches						
1120	1120 (1a)	1 gang, light switch, flush mounted, 1 pole, 15 A, 250V	nr	14.00				
1119	1119 (1)	Presence Detector (PD)	nr	93.00				
1120	1120 (1b)	lighting switch, 1-way (emergency lighting)	nr	58.00				
1120	1120 (1c)	presence detector bypass switch	nr	44.00				
		Receptacle outlets						
1120	1120 (2a)	10A Surfaced Mounted switched socket outlet (Metal Clad)	set	40.00				
1120	1120 (2b)	10A Surfaced Mounted twin switched socket outlet (Metal Clad)	set	94.00				
1120	1120 (2c)	10A Surfaced Mounted twin switched socket outlet (Metal Clad) on UPS Supply	set	44.00				
1120	1120 (2d)	10A Fused Connection Unit complete with switch for Hand dryer	set	7.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1109	1109 (1b)	25mm x 6mm	m	3,300.00				
1109	1109 (1c)	40mm x 6mm	m	500.00				
		Copper Cable; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-ELL-OS-2031, 3410 to 3444						
1109	1109 (2)	125 sq.mm	m	800.00				
		Grounding Mat; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-ELL-OS-2031, 3401 to 3444						
1109	1109 (3)	400mm2 Copper Strip	By Civil Contractor					
		Grounding Electrode; including necessary connectors, pits, accessories and welds to structure; reference STN-MEP-ELL-OS-2031, 3401 to 3444						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1109	1109 (4)	20mm diameter x 3000mm long ground rod	By Civil Contractor					
		Grounding Terminal; including Enclosures, insulators and the likes with to reference STN-MEP-ELL-OS-2031, 3441 to 3444						
1109	1109 (5a)	Main Equipment Grounding terminal; reference STN-MEP-ELL-OS-2031, 3401 to 3444	set	2.00				
1109	1109 (5b)	Grounding terminal for HV,LV & ELV; reference STN-MEP-ELL-OS-2031, 3410 to 3444	set	5.00				
1109	1109 (5c)	Grounding terminal; reference STN-MEP-ELL-OS-2031, 3410 to 3444	set	53.00				
		Lightning protection System						
		Copper Tape; including necessary connectors, exothermic welds, accessories and welds/ bonds to structure to complete the system; reference STN-MEP-						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		ELL-OS-2031, 3400 to 3444						
1122	1122 (1a)	25mm x 3mm	m	60.00				
1122	1122 (1b)	25mm x 3mm (Insulated)	m	-				
		Lightning Grounding Pit; including necessary connectors, accessories and welds ground wells; including 20mm diameter x 3000mm long ground rod reference; reference STN-MEP-ELL-OS-2031, 3401 to 3444						
1122	1122 (3)	Lightning Grounding Pit	set	2.00				
		ESE Air Terminal; complete with necessary accessories as complete						
1122	1122 (4)	Air Terminal (ESE type); complete with pole, mounting brackets, guy wires and all other necessary supports and accessories; reference STN-MEP-ELL-OS-2031,	set	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		3400 to 3444						
		Lightning Flash Counter; complete with necessary accessories as complete						
1122	1122 (5)	Lightning Flash Counter; reference STN-MEP-ELL-OS-2031	set	2.00				
		Telephone and Broadband Distribution System						
		Cable tray/trunking; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-OS-2044						
1126	1126 (1a)	100mm x 100mm (for telephone)	m	300.00				
1126	1126 (1b)	200mm x 100mm (for telephone)	m	100.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Conduit points in Intermediate Metallic Conduit (IMC) including all necessary fittings and accessories as well as hangers and supports						
		From Fiber terminal box (FTB) to individual workstation/ node outlets						
1127	1127 (4)	local area network (LAN) outlet points	nr	86.00				
		Access Control System						
		Cable tray; including all necessary fittings and accessories as well as hangers and supports; reference STN-MEP-ELV-OS-3641 to 3661						
1124	1124 (1a)	50mm x 50mm (ACS)	m	700.00				
1124	1124 (1a)	100mm x 50mm (ACS)	m					

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1124	1124 (1b)	200mm x 100mm (for ACS)	m					
		Approved Access Control system riser cables						
		Drawing into conduits(conduits measured separately)						
1124	1124 (2)	sized and typed as required	item	1.00				
		Conduit points in Intermediate Metallic Conduit (IMC) including all necessary fittings and accessories as well as hangers and supports						
		From access control pullbox to						
1124	1124 (3a)	Break Glass points	nr	34.00				
1124	1124 (3b)	Card Access Reader points	nr	34.00				
1124	1124 (3c)	Door Contact points	nr	58.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1124	1124 (3d)	Door Controller points	nr	34.00				
1124	1124 (3e)	Electromagnetic Lock points	nr	58.00				
1124	1124 (3f)	Push Button points	nr	34.00				
		Approved wires/cables drawing into conduits (conduits measured separately) including necessary cable tagging						
		From access control pullbox to						
1124	1124 (4a)	Break Glass points	nr	34.00				
1124	1124 (4b)	Card Access Reader points	nr	34.00				
1124	1124 (4c)	Door Contact points	nr	58.00				
1124	1124 (4d)	Door Controller points	nr	34.00				
1124	1124 (4e)	Electromagnetic Lock points	nr	58.00				
1124	1124 (4f)	Push Button points	nr	34.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Fire Detection and Alarm System (FDAS)						
		Electrical Metallic Tubing (EMT) conduit; including all necessary fittings and accessories as well as hangers and supports						
1123	1123 (1)	size as required	item	1.00				
		Approved FDAS system riser cables						
		Drawing into conduits(conduits measured separately)						
1123	1123 (2)	type and size as required	item	1.00				
		Conduit points in Intermediate Metallic Conduit (IMC) including all necessary fittings and accessories as well as hangers and supports						
		From FACP to						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (3a)	smoke detector points	nr	437.00				
1123	1123 (3b)	combination detector points	nr	258.00				
1123	1123 (3c)	annunciator panel points	nr	3.00				
1123	1123 (3d)	manual call point points	nr	35.00				
1123	1123 (3e)	hooter with strobelight points	nr	35.00				
1123	1123 (3f)	control module points	nr	95.00				
1123	1123 (3g)	relay module points	nr	11.00				
1123	1123 (3h)	zone control module points	nr	-				
1123	1123 (3i)	monitor module points	nr	24.00				
1123	1123 (3j)	fault isolator module points	nr	45.00				
1123	1123 (3k)	fireman telephone jack points	nr	-				
1123	1123 (3l)	fireman telephone module points	nr	19.00				
1123	1123 (3m)	firefighting telephone points	nr	3.00				
		Approved FDAS wires/ cables drawing into conduits (conduits measured separately) including necessary						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		cable tagging						
		From FACP to						
1123	1123 (4a)	smoke detector points	nr	437.00				
1123	1123 (4b)	combination detector points	nr	258.00				
1123	1123 (4c)	annunciator panel points	nr	3.00				
1123	1123 (4d)	manual call point points	nr	35.00				
1123	1123 (4e)	hooter with strobelight points	nr	35.00				
1123	1123 (4f)	control module points	nr	95.00				
1123	1123 (4g)	relay module points	nr	11.00				
1123	1123 (4h)	zone control module points	nr	-				
1123	1123 (4i)	monitor module points	nr	24.00				
1123	1123 (4j)	fault isolator module points	nr	45.00				
1123	1123 (4k)	fireman telephone jack points	nr	-				
1123	1123 (4l)	fireman telephone module points	nr	19.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1123	1123 (4m)	firefighting telephone points	nr	3.00				
		Supply and fix specified or approved equal field devices and accessories as shown in drawings with reference STN-MEP-ELL-OS-2101 to 2104, 3101-3134						
1123	1123 (5a)	addressable smoke detector (above false ceiling)	set	191.00				
1123	1123 (5b)	addressable smoke detector (below false ceiling)	set	246.00				
1123	1123 (5c)	addressable combination detector	set	258.00				
1123	1123 (5d)	annunciator panel	set	3.00				
1123	1123 (5e)	manual call point	set	35.00				
1123	1123 (5f)	hooter with strobelight	set	35.00				
1123	1123 (5g)	control module	set	95.00				
1123	1123 (5h)	relay module	set	11.00				
1123	1123 (5i)	zone control module	set					
1123	1123 (5j)	monitor module	set	24.00				
1123	1123 (5k)	fault isolator module	set	45.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1130	1130 (1)	Building Management System (BMS)	item	1.00				
1130	1130 (2)	Disaster Preventive Monitor and Control Panel (DPMCP)	item	1.00				
		SUB-TOTAL (ELECTRICAL AND AUXILIARY INSTALLATION)						
		FIRE PROTECTION WORKS						
		WET PIPE SPRINKLER SYSTEM						
		<u>Black Steel pipes and fittings; seamless, schedule 40; conforming to ASME B31.1 power piping code, JIS G 3454, jointing in accordance with designer's specification</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		To walls and chased						
1202	1202(2)	65mm diameter	m	34.00				
1202	1202(3)	extra over for elbow	pc	6.00				
1202	1202(3)	extra over for tee reducer	pc	6.00				
1202	1202(3)	extra over for reducer	pc	6.00				
1202	1202(2)	80mm diameter	m	100.00				
1202	1202(3)	extra over for tee	pc	14.00				
1202	1202(3)	extra over for tee reducer	pc	16.00				
1202	1202(3)	extra over for reducer	pc	15.00				
1202	1202(2)	200 mm diameter	m	34.00				
1202	1202(3)	extra over for elbow	pc	1.00				
1202	1202(3)	extra over for tee reducer	pc	2.00				
		To ceiling and suspended						
1202	1202(1)	25 mm diameter	m	1,000.00				
1202	1202(1)	32 mm diameter	m	155.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(1)	40 mm diameter	m	211.00				
1202	1202(1)	50 mm diameter	m	138.00				
1202	1202(2)	65 mm diameter	m	310.00				
1202	1202(3)	extra over for elbow	pc	20.00				
1202	1202(3)	extra over for tee	pc	6.00				
1202	1202(3)	extra over for tee reducer	pc	42.00				
1202	1202(3)	extra over for reducer	pc	21.00				
1202	1202(2)	80 mm diameter	m	418.00				
1202	1202(3)	extra over for elbow	pc	47.00				
1202	1202(3)	extra over for tee	pc	5.00				
1202	1202(3)	extra over for tee reducer	pc	16.00				
1202	1202(3)	extra over for reducer	pc	10.00				
1202	1202(2)	100 mm diameter	m	305.00				
1202	1202(3)	extra over for elbow	pc	8.00				
1202	1202(3)	extra over for tee	pc	2.00				
1202	1202(3)	extra over for tee reducer	pc	13.00				
1202	1202(3)	extra over for reducer	pc	11.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(2)	150 mm diameter	m	215.00				
1202	1202(3)	extra over for elbow	pc	15.00				
1202	1202(3)	extra over for tee	pc	1.00				
1202	1202(3)	extra over for tee reducer	pc	8.00				
1202	1202(3)	extra over for reducer	pc	3.00				
1202	1202(2)	200 mm diameter	m	271.00				
1202	1202(3)	extra over for elbow	pc	7.00				
1202	1202(3)	extra over for tee	pc	3.00				
1202	1202(3)	extra over for tee reducer	pc	14.00				
1202	1202(3)	extra over for reducer	pc	6.00				
		To floors						
1202	1202(1)	50 mm diameter	m	4.00				
1202	1202(2)	200 mm diameter	m	31.00				
1202	1202(3)	extra over for elbow	pc	6.00				
1202	1202(2)	250 mm diameter	m	10.00				
1202	1202(3)	extra over for elbow	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(3)	extra over for tee reducer	pc	5.00				
1202	1202(3)	extra over for end cap/flanged	pc	2.00				
1202	1202(2)	300 mm diameter	m	13.00				
1202	1202(3)	extra over for tee reducer	pc	4.00				
1202	1202(3)	extra over for end cap/flanged	pc	2.00				
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Sprinkler heads						
1202	1202(5)	Standard pendent type sprinkler head; chrome finish; with intermediate temperature rating	pc	393.00				
1202	1202(5)	Upright type sprinkler head; chrome finish; with intermediate temperature rating	pc	76.00				
1202	1202(5)	Sidewall type sprinkler head; chrome finish; with intermediate temperature rating	pc	4.00				
		Fire Hose Cabinets						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Standard surface mounted fire hose cabinet assembly; including full flush or surface mounting door with aluminum for all glass place; gauge 18 steel frame and box with powder coated finishes; 40mm diameter angle type valve; 40mm x 30m long double jacket rubber						
1202	1202(4)	as shown and described, ref. FHC type 1	pc	18.00				
1202	1202(4)	as shown and described, ref. FHC type 2	pc	7.00				
		Automatic Air Vent						
1202	1202(4)	fixing to 150mm diameter pipe	pc	6.00				
		Auxiliary drain valve						
1202	1202(4)	50 mm diameter	pc	6.00				
		Butterfly Valve						
1202	1202(4)	50 mm diameter	pc	1.00				
1202	1202(4)	100 mm diameter	pc	1.00				
1202	1202(4)	200 mm diameter	pc	4.00				
1202	1202(4)	250 mm diameter	pc	2.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Check Valve						
1202	1202(4)	100 mm diameter	pc	1.00				
1202	1202(4)	150 mm diameter	pc	7.00				
1202	1202(4)	200 mm diameter	pc	1.00				
		Flexible connector						
1202	1202(4)	200 mm diameter	pc	6.00				
		Floor control valve; butterfly type with electrical contacts						
1202	1202(4)	150 mm diameter	pc	6.00				
		Hose Box						
1202	1202(4)	150 mm diameter	pc	2.00				
		In line inspector's sight glass						
1202	1202(4)	25 mm diameter	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Inspector's test valve						
1202	1202(4)	25 mm diameter	pc	6.00				
		Landing valve (LV) including chain and cap						
1202	1202(4)	65mm diameter	pc	8.00				
		Motorized Valve						
1202	1202(4)	150 mm diameter	pc	4.00				
		Pressure Gauge						
1202	1202(4)	fixing to 150mm diameter in FCV assembly	pc	12.00				
1202	1202(4)	fixing to 65mm diameter in pump room (JP)	pc	2.00				
1202	1202(4)	fixing to 150mm diameter in Pump room (FP)	pc	2.00				
		Supervisory switches						
1202	1202(4)	fixing to 150 mm diameter BI pipe	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Vortex Plate						
1202	1202(4)	600 x 600 mm	pc	1.00				
		Water Flow Switches; including drilling to BI pipe						
1202	1202(4)	fixing to 150 mm diameter BI pipe	pc	6.00				
		Wye Strainer						
1202	1202(4)	50 mm diameter	pc	1.00				
		Fire department Connection 150mm x 65mm diameter inlet connection; 4-way cast brass with plug spring check snoots; complete with plug and chains to match Fire Department requirements	pc	1.00				
1202	1202(4)	Pump Test Header 150mm x 65mm four-way inlet connection; cast brass with plug spring check snoots; complete with plug and chains to match Fire Department requirements	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1241	1241(2)	OS-CC-JP-01; Jockey pump with control panel; vertical in line pump; electric motor driven, 2.38CMH @ 100 head MWC; 1.5 KW; 3ph, 380V, ref STN-MEP-FPS-OS-5101	set	1.00				
		<u>Allowance for the provision of the following</u>						
		Electrical connection from floor control assembly to FACP riser including wires, conduits and all necessary accessories to complete the system	item	1.00				
1202	1202(4)	Drainpipe connection to sump pit	item	1.00				
		<u>FIRE EXTINGUISHER</u>						
		<u>The following items to be supplied and fixed; including all necessary accessories in accordance with designer's instruction</u>						
		Portable fire extinguisher; including supporting frames or brackets and all other necessary accessories						
1202	1202(9)	FEX - Dry Chemical type, ABC class, 4.54kg	pc	79.00				
1202	1202(8)	FEX - Clean Gas type, 4.54kg	pc	17.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1202	1202(9)	WFEX - Dry chemical type, ABC class, 22.68kg	pc	1.00				
1202	1202(8)	WFEX - Clean Gas type, 22.68kg	pc	1.00				
		Fire extinguisher cabinet, stainless body including 1/8" breakable glass with YS221 glass frame, push lock, supporting frames, brackets and all other necessary accessories for fixing as shown and as described						
1202	1202(10)	Type 1	pc	12.00				
1202	1202(10)	Type 2	pc	10.00				
1202	1202(10)	Type 3	pc	74.00				
		<u>CLEAN GAS FIRE SUPPRESSION SYSTEM</u>						
		<u>Allowance for the provision of the following</u>						
1239	1239(1)	Clean agent fire suppression system including pipes, fittings, control valves, devices, sensors, actuators, annunciator, wirings, conduits, control panel, clean agent tank and all other necessary accessories to complete the system						
		Location, as shown and described on plan	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>TUNNEL FIRE PROTECTION</u>						
		<u>Black Steel pipes and fittings; seamless, schedule 40; conforming to ASME B31.1 power piping code, JIS G 3454, jointing in accordance with designer's specification</u>						
		-						
1202	1202(13) a8	150 mm diameter	m	2,400.00				
1202	1202 (14) a8	extra over for elbow	pc	28.00				
1202	1202 (15) a8	extra over for tee	pc	12.00				
		<u>Pipeworks and ancillaries including flanges and all necessary accessories and connections</u>						
		Check Valve						
1201	1201 (14) a10	150 mm diameter	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Automatic Air Vent						
1202	1202 (7) a3	mounting to 150 mm diameter	pc	4.00				
		Landing valve, double nozzle including cap and chain						
1202	1202 (7) a3	150 mm diameter	pc	12.00				
		Tunnel Fire hose box including 4 nos of fire hose complete with hose coupling						
1202	1202 (7) a3	Dimension as required	pc	12.00				
		SUB-TOTAL (FIRE PROTECTION SERVICES)						
		TRANSPORT						
		<u>Supply, delivery and installation of specified or approved equal equipment and ancillaries in compliance with the Bid documents</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Elevators; machine room-less (MRL), complete with machines, controllers, safety devices, guide rails, counter weights, electrical/control wiring and conduits; including all necessary accessories and connections						
1203	1203(1)	PE-1; Passenger Elevator, 1600kg, 2stops/openings, front opening, 10.18m traveling ht, 60 m/m speed,	set	1.00				
1203	1203(1)	PE-2; Passenger Elevator, 1600kg, 3stops/openings, front and rear opening; 11.54m traveling ht, 60 m/m speed	set	1.00				
		Escalators; complete with machines, controllers, safety devices, guide rails, electrical/control wiring and conduits; including all necessary accessories and connections						
1233	1233(1)	ESCA-1, semi-indoor type, 4.05m rise, 1550mm width, 30° inclination, 0.5mps-0.75mps, changeable speed, with post type sensor	set	1.00				
1233	1233(1)	ESCA-2, semi-indoor type, 3.3m rise, 1550mm width, 30° inclination, 0.5mps-0.75mps, changeable speed, with post type sensor	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Floor Cleanout; complete with cover; setting to concrete; making around with approved grouting						
1235	1235(5)	100mm diameter	pc	6.00				
		Drains including adaptors and p-trap as required; setting in concrete; making good around with approved grouting						
		Floor drain						
1235	1235(5)	100mm diameter	pc	159.00				
		Scupper drain						
1235	1235(5)	100mm width	pc	31.00				
		Trench drain						
1235	1235(5)	100 mm diameter	pc	12.00				
		Area Drain/Catch Basin						
1235	1235(5)	dimension as required	pc	5.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Aluminum Rectangular Pipe; jointing in accordance with designer's specification						
1235	1235 (7)	125mm x 125mm	pc	53.00				
1235	1235 (7)	75mm x 75mm	pc	17.00				
		Aluminum Pipe and fittings; jointing in accordance with designer's specification						
1235	1235 (7)	100mm diameter	m	16.00				
1235	1235 (7)	80mm diameter	m	16.00				
		Drain channels (open canal); serving station entrances; excluding of gratings						
		200mm wide, 200mm height	m	122.00				
		300mm wide, 300mm height	m	137.00				
		Oil Grease Trap (OGT)						
1235	1235(5)	OS-UL-OGT-01; Retention Capacity of 50 with a flow rate of 95gal/min	pc	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1201	1201(2)	OS-UPL-WWP-01, 02 & 03; Waste Water Sump Pump; 7 L/s @ 37 m TDH, 7.5KW running load; 22.5kW connecting load; 3 phase; 380Volts; 60Hz (2W,1S)	set	1.00				
		<u>Works to existing main storm drainage line including pipes, connections and all other necessary works</u>						
1235	1235(1)	200mm diameter CI pipes	item	1.00				
1235	1235(1)	100mm diameter Aluminum pipes	item	4.00				
1235	1235(1)	80mm diameter Aluminum pipes	item	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>SEWAGE SYSTEM</u>						
		<u>Ductile Iron (DI) pipes and fittings; conforming to ANSI A21, A10, 11,50 and 51 class 56; jointing in accordance with designer's specification</u>						
		To walls and chased						
1234	1234(3)	75mm diameter	m	26.00				
1234	1234(3.1)	extra over for elbow	pc	2.00				
1234	1234(3)	100mm diameter	m	12.00				
1234	1234(3.1)	extra over for elbow	pc	2.00				
1234	1234(3)	150mm diameter	m	8.00				
1234	1234(3.1)	extra over for elbow	pc	2.00				
		To ceiling and suspended						
1234	1234(3)	75mm diameter	m	157.00				
1234	1234(3.1)	extra over for elbow	pc	18.00				
1234	1234(3)	100mm diameter	m	300.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1234	1234(3.1)	extra over for elbow	pc	14.00				
1234	1234(3)	150mm diameter	m	80.00				
1234	1234(3.1)	extra over for elbow	pc	11.00				
1234	1234(3.1)	extra over for tee	pc	1.00				
1234	1234(3.1)	extra over for tee reducer	pc	14.00				
1234	1234(3.1)	extra over for end cap/flanged	pc	8.00				
1234	1234(3)	200mm diameter	m	4.00				
		<u>Cast Iron (CI) pipes and fittings; Extra Heavy; jointing in accordance with designer's specification</u>						
		To walls and pipe chased						
1235	1235(2)	50mm diameter	m	86.00				
1235	1235(2)	100mm diameter	m	54.00				
1235	1235(2.1)	extra over for elbow	pc	3.00				
		To ceiling and suspended						
1235	1235(2)	50mm diameter	m	99.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Flexible connector						
1234	1234(4)	80mm diameter	pc	4.00				
		Gate valve						
1234	1234(4)	80mm diameter	pc	12.00				
		Check valve						
1234	1234(4)	80mm diameter	pc	4.00				
		Drains including adaptors and p-trap as required; setting in concrete; making good around with approved grouting						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1201	1201(3)	OS-MZ-SP-01 & 02; Sewage Ejector pit; 3.01 L/s @ 30 m TDH, 1.91KW running load; 3.82kW connecting load; 3 phase; 380Volts; 60Hz, (1W+1S)	set	1.00				
1201	1201(3)	OS-MZ-SP-03 & 04; Sewage Ejector pit; 8.03 L/s @ 35m TDH, 5.73KW running load; 11.46kW connecting load; 3 phase; 380volts; 60Hz (1W+1S)	set	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1201	1201(3)	OS-PL-JP-01 & 02; 0.32 L/s @ 30 m TDH, 0.37 running load; 0.74kW connecting load; 3 phase; 380volts; 60Hz (1W+1S) at Janitor Room	set	1.00				
		<u>Sewage Holding Tank, complete with pilings, fittings, flanges and all necessary accessories and connection to complete the system</u>						
1238	1238(4)	Sewage ejector tank 1 ; stainless steel, dimensions: 2m x 2m X 2m ; (L x B x H)	set	1.00				
1238	1238(4)	Sewage ejector tank 2 ; stainless steel, dimensions: 2m x 2m X 2m ; (L x B x H)	set	1.00				
1238	1238(4)	Janitor Room Pit ; RCC, dimensions: 1.5m x 1.5m x 1.5m ; (L x B x H)	set	1.00				
		<u>Works to existing main sewer line including pipes, connections and all other necessary works</u>						
1234	1234(1)	200mm diameter CI Pipes	item	1.00				
		<u>Allowance for the provision of the following</u>						
1236	1236(1)	Sewage Treatment Plant, capacity as required ref drawing STN-MEP-PLD-OS-4307	item	1.00				
		<u>WATER SUPPLY SYSTEM</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Excavating trenches, backfilling with selected materials, disposal of surplus excavated materials offsite, and making good all works disturbed</u>						
		for pipes less than 200mm diameter GI	m	25.00				
		<u>Bedding of pipes; including surround of pipes as necessary</u>						
		for pipes less than 200mm diameter GI	m	25.00				
		for pipes 200mm diameter PPrC	m					
		Galvanized Iron (GI) pipes and fittings, ERW, schedule 40, jointing in accordance with designer's specification						
		In trenches						
1237	1237(1)	20mm diameter	m	5.00				
1237	1237(1)	32mm diameter	m	5.00				
1237	1237(1)	100mm diameter	m	15.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(1.1)	extra over for elbow	pc	11.00				
1237	1237(1.1)	extra over for tee	pc	2.00				
		To floor						
1237	1237(1)	25mmdiameter	m	2.00				
1237	1237(1)	32mm diameter	m	7.00				
1237	1237(1)	40mm diameter	m	14.00				
1237	1237(1)	50mm diameter	m	1.00				
1237	1237(1)	65mm diameter	m	8.00				
1237	1237(1.1)	extra over for tee reducer	pc	8.00				
1237	1237(1.1)	extra over for end cap/flanged	pc	4.00				
1237	1237(1)	100mm diameter	m	48.00				
1237	1237(1.1)	extra over for elbow	pc	24.00				
1237	1237(1.1)	extra over for tee	pc	11.00				
1237	1237(1)	150mm diameter	m	21.00				
1237	1237(1.1)	extra over for tee reducer	pc	8.00				
1237	1237(1.1)	extra over for end cap/flanged	pc	4.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		To walls and chased						
1237	1237(1)	15mm diameter	m	80.00				
1237	1237(1)	20mm diameter	m	313.00				
1237	1237(1)	25mm diameter	m	186.00				
1237	1237(1)	32mm diameter	m	52.00				
1237	1237(1)	40mm diameter	m	37.00				
1237	1237(1)	100mmdiameter	m	6.00				
1237	1237(1.1)	extra over for elbow	pc	2.00				
		To ceiling and suspended						
1237	1237(1)	15mm diameter	m	15.00				
1237	1237(1)	20mm diameter	m	126.00				
1237	1237(1)	25mm diameter	m	19.00				
1237	1237(1)	32mm diameter	m	101.00				
1237	1237(1)	40mm diameter	m	60.00				
1237	1237(1)	50mm diameter	m	36.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Ball Valve						
1237	1237(4)	15mm diameter	pc	6.00				
1237	1237(4)	20mm diameter	pc	2.00				
1237	1237(4)	25mm diameter	pc	1.00				
		Bip tap (BT)						
1237	1237(4)	15mm diameter	pc	9.00				
		Butterfly Valve						
1237	1237(4)	20mm diameter	pc	8.00				
1237	1237(4)	25mm diameter	pc	5.00				
1237	1237(4)	32mm diameter	pc	3.00				
1237	1237(4)	40mm diameter	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1237	1237(4)	50mm diameter	pc	2.00				
1237	1237(4)	65mm diameter	pc	1.00				
1237	1237(4)	100mm diameter	pc	8.00				
		Check Valve						
1237	1237(4)	40mm diameter	pc	2.00				
1237	1237(4)	100mm diameter	pc	2.00				
		Equalizing Valve						
1237	1237(4)	100mm diameter	pc	3.00				
		Flexible Connector						
1237	1237(4)	40mm diameter	pc	4.00				
1237	1237(4)	100mm diameter	pc	4.00				
		Motorized Float Valve						
1237	1237(4)	100mm diameter	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Gate valve						
1237	1237(4)	20mm diameter	pc	6.00				
1237	1237(4)	32mm diameter	pc	1.00				
1237	1237(4)	40mm diameter	pc	2.00				
1237	1237(4)	75mm diameter	pc	6.00				
1237	1237(4)	100mm diameter	pc	10.00				
		Hand Faucet (HF)						
1237	1237(4)	15mm diameter	pc	32.00				
		Non-return valve						
1237	1237(4)	32mm diameter	pc	2.00				
1237	1237(4)	100mm diameter	pc	2.00				
		Overflow pipe assembly						
1237	1237(4)	100mm diameter	pc	6.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Pressure Gauge						
1237	1237(4)	fixing to 40mm diameter pipe	pc	2.00				
		Sub-meter						
1237	1237(4)	100mm diameter	pc	4.00				
		Water hammer arrester						
1237	1237(4)	20mm diameter	pc	8.00				
1237	1237(4)	25mm diameter	pc	6.00				
		Water meter						
1237	1237(4)	100mm diameter	pc	1.00				
		Wye strainer						
1237	1237(4)	40mm diameter	pc	2.00				
1237	1237(4)	100mm diameter	pc	3.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1201	1201(1)	OS-CON-DWP-01 & 02; 7.3 L/s hydro-pneumatic pump @ 30 m TDH; 5.73kW running load; 11.46kW connecting load; 3Ph; 380V; 60Hz; including 200L pressure vessel, with stainless steel tank	set	1.00				
1201	1201(1)	OS-MZ-MWP-01 & 02; 0.7 L/s hydro-pneumatic pump@ 40 m TDH; 0.8kW running load; 1.6kW connecting load; 3Ph; 380V; 60Hz; including 200L pressure vessel, with stainless steel tank	set	1.00				
		<u>Works to existing main water line including pipes, connections and all other necessary works</u>						
1237	1237(2)	100mm diameter GI pipes	item	1.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		HOT WATER SUPPLY SYSTEM						
		<u>Polypropylene (PPrC) pipes and fittings, PN20, jointing in accordance with designer's specification</u>						
		To walls and chased						
1237	1237(2)	15mm diameter	m	53.00				
1237	1237(2)	20mm diameter	m	9.00				
		<u>Pipeworks ancillaries including adaptors and flanges as required, all in accordance with technical specification</u>						
		Gate valve						
1237	1237(4)	20mm diameter	pc	7.00				

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the safe custody of</u>						
		Water heater; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1237	1237(5)	Electric water heater; 25L capacity; horizontal wall mounted, 2kW; 3ph; 380V; 60Hz, ref SL no.1	pc	2.00				
1237	1237(5)	Electric water heater; 15L capacity; horizontal wall mounted, 1.5kW; 3ph; 380V; 60Hz, ref SL no.2 to 4	pc	5.00				
		TUNNEL DRAINAGE SYSTEM						
		<u>Supply and fix equipment and ancillaries; including taking delivery on site, unloading or assisting to unload, unpacking, returning packing storing, all sundry materials for fixing, be responsible for the</u>						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		<u>safe custody of</u>						
		-						
		Pumps; complete with driving motor, all necessary accessories and connection, electrical/control wirings, conduits and complete as in the equipment schedule and as described						
1201	1201(2)	OS-TUN-TSP-01&02; Tunnel Main Sump Pump; 1.88 L/s @ 24 m TDH, 1.12KW running load; 2.24kW connecting load; 3 phase; 380Volts; 60Hz (1W, 1S)	set	1.00				
		<u>Allowance for the provision of the following</u>						
		Tunnel drainage system pipeworks including fittings, valves, ancillaries and all other necessary accessories to complete the system	item	1.00				
		SUB-TOTAL (PLUMBING SERVICES)						

DEPARTMENT OF TRANSPORTATION (DOTr)
 METRO MANILA SUBWAY PROJECT (MMSP)
 PHASE-1 : CP104

BILL OF QUANTITIES No.: 5B
 STATION E & M (ORTIGAS SOUTH)

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		SPARE PARTS						
		MEPF Spare Materials	ls	1.00				
		SUB-TOTAL (SPARE PARTS)						
		GRAND TOTAL - STATION E & M (ORTIGAS SOUTH)						