

General Bid Bulletin No. 11
Annex C

METRO MANILA SUBWAY PROJECT PHASE 1
PACKAGE CP104 (Ortigas North and Ortigas South)

Section VI Works Requirements- Employer's Drawings (DRW)

Please replace the following drawings:

STN-MEP-VAC-CWD-1106

Ventilation & Air Conditioning Typical Installation Detail Sheet-6

Section IV Bidding Form Bill of Quantities (BOQ)

**DEPARTMENT OF TRANSPORTATION
REPUBLIC OF THE PHILIPPINES**

**METRO MANILA SUBWAY PROJECT
PHASE 1**

BID DOCUMENTS

FOR

**PACKAGE CP104
TWO UNDERGROUND STATIONS
(ORTIGAS NORTH AND ORTIGAS SOUTH)
AND TUNNELS**

Volume IA of V

PART 1

BIDDING PROCEDURES

**Bill of Quantities (BOQ)
(a part of Section IV. Bidding Forms)**

**DEPARTMENT OF TRANSPORTATION
REPUBLIC OF THE PHILIPPINES**

**METRO MANILA SUBWAY PROJECT
PHASE 1**

BIDDING DOCUMENTS

SUMMARY OF DOCUMENTS

Volume I Part 1: Bidding Procedures

Section I Instructions to Bidders (ITB)

Section II Bid Data Sheet (BDS)

Section III Evaluation and Qualification Criteria (EQC)

Section IV Bidding Forms (BF)

Section V Eligible Source Countries of Japanese ODA Loan (ODA)

Volume IA Part 1: Bill of Quantities (BOQ)

(a part of Section IV. Bidding Forms)

Volume II Part 2: Works Requirements

Section VI Works Requirements-General Specification (GS)

Technical Specification (TS)

Volume III Part 2: Works Requirements

Section VI Works Requirements-Employer's Drawings (DRW)

Volume IV Part 3: Conditions of Contract and Contract Forms

Section VII. General Conditions of Contract (GC)

Section VIII. Particular Conditions of Contract (PC)

Section IX. Contract Forms (CF)

Volume V Part 4 Relevant Information: One set of CD's (Ready Only) copy

PART 1 BIDDING PROCEDURE

SECTION IV BIDDING FORMS

BILL OF QUANTITIES

(a Part of Section IV. Bidding Forms)

Work Items - Bill No. 1 and Bill No. 6

DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO.1
 GENERAL REQUIREMENTS

Bill No.	DESCRIPTION	AMOUNT	
		LOCAL (PHP)	FOREIGN 0
	CP104		
Bill No. 1	GENERAL REQUIREMENTS		
	TOTAL GENERAL REQUIREMENTS		

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

BILL OF QUANTITIES No.: 1
 GENERAL REQUIREMENTS

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
G103	G103	POSSESSION OF SITE AND CONTRACTOR'S MOBILIZATION						
	G103(1)	Mobilization and Demobilization of Contractor's Personnel, Plant and Equipment	LS	1				
G104	G104	CONTRACTOR'S TEMPORARY FACILITIES						
	G104(1)	Installation, Making use and Dismantling of the Contractor's Temporary Facilities	LS	1				
G105	G105	PROJECT INFORMATION SIGN BOARDS						
	G105(1)	Project Information Sign Boards	LS	1				
G108	G108	SITE OFFICES FOR THE ENGINEER						
	G108(1)	Provision of Site Office for the Engineer	LS	1				
	G108(2)	Furniture and equipment for the Engineer	LS	1				
	G108(3)	Operating & Maintenance costs for the Engineer's office	LS	1				
	G108(4)	Provision of Motor Vehicles	LS	1				
G114	G114	TRAFFIC MANAGEMENT						
	G114(1)	Traffic management	LS	1				
G117	G117	SITE SAFETY						
	G117(1)	Site Safety	LS	1				
G118	G118	ENVIRONMENTAL AND SOCIAL MANAGEMENT						
	G118(1)	General Environmental items not included elsewhere	LS	1				
	G118(2)	Preparation and submission of Contractor's Environmental Management and Monitoring Plan (CEMMP)	LS	1				

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

BILL OF QUANTITIES No.: 1
 GENERAL REQUIREMENTS

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	G118(3)	Operation and Management of the CEMMP	LS	1				
	G118(4)	Environmental Guarantee Fund Payment	LS	1				
G123	G123	VIDEO RECORDINGS						
	G123(1)	Video recording	LS	1				
G126	G126	INTERFACE MANAGEMENT, COORDINATION AND COMMUNICATION						
	G126(1)	Interface Management, Coordination and Communication	LS	1				
G128	G128	DEFECTS LIABILITY						
	G128(1)	Attendance on the Inspection	LS	1				
G130	G130	SECURITIES AND INSURANCES						
	G130(1)	Securities	LS	1				
	G130(2)	Insurance Payment	LS	1				
G139	G139	DILAPIDATION SURVEY						
	G139(1)	Pre-Construction Condition Survey	LS	1				
	G139(2)	Post-Construction Condition Survey	LS	1				
G140	G140	BIM REQUIREMENTS						
	G140(1)	BIM requirements	LS	1				
G142	G142	TEMPORARY WORKS						
	G142(1)	Third party verifier	LS	1				
		GRAND TOTAL (GENERAL REQUIREMENT)						

DEPARTMENT OF TRANSPORTATION

METRO MANILA SUBWAY PROJECT

PHASE 1

Bill NO. 6

STATION PLAZA

Bill No.	DESCRIPTION	AMOUNT	
		LOCAL (PHP)	FOREIGN (JPY)
	CP104		
Bill No. 6	STATION PLAZA		
Bill No. 6A	ORTIGAS NORTH STATION		
Bill No. 6B	ORTIGAS SOUTH STATION		
	TOTAL STATION PLZA		

DEPARTMENT OF TRANSPORTATION
METRO MANILA SUBWAY PROJECT
PHASE 1
Bill NO. 6A
STATION PLAZA
DEPARTMENT OF TRANSPORTATION

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	PART A	EARTHWORKS						
103	103 (1)	Structure excavation	m3	2,357.56				
105	105 (1)	Subgrade Preparation (Common Material)	m2	4,164.01				
802	802 (1)	Fill and Backfill	m3	1,097.48				
200	200	Aggregate Subbase Course	m3	1,866.09				
202	202	Crushed Aggregate Base Course	m3	91.50				
202	202-A	Compacted sand	m3	118.21				
1000	1000	Termite Control	m2	4,164.01				
		SUB-TOTAL (PART A - EARTHWORKS)						
	PART D	BUILDING WORKS						
	D.1	STRUCTURAL WORKS						
400	400(1)	Structural Concrete, Class "AAA" (27.6 MPa) for Footing	m3	122.60				
400	400(2)	Structural Concrete, Class "AAA" (27.6 MPa) for Columns and Walls	m3	63.25				
400	400(5)	Structural Concrete, Class "AAA" (27.6 MPa) for Slabs on grade	m3	65.63				
400	400(6)	Structural Concrete, Class "AAA" (27.6 MPa) for all other structural members	m3	51.00				
400	400(7)	Blinding Concrete (Lean Concrete), 17 MPa	m3	13.42				

**DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6A
 STATION PLAZA
 DEPARTMENT OF TRANSPORTATION**

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
300	301(1)	PCC Pavement (Unreinforced)	m2	3,420.00				
402	402(2)	Concrete reinforcement; Grade 60	kg	32,256.04				
402	402(1)	Concrete reinforcement; Grade 40	kg	4,949.79				
405	405 (1)	Structural steel	kg	67,234.10				
414	414	Forms and Falseworks	m2	1,640.99				
901	901	Concrete Accessories	ls	1.00				
		SUB-TOTAL (D.1 - STRUCTURAL WORKS)						
	D.2	ARCHITECTURAL WORKS						
		Steel Doors and Frames						
604	604(4)	Cyclone Wire Gates	each	3.00				
		SUB-TOTAL (Steel Doors and Frames)						
		Roofings						
1015	1015-A	Solid Polycarbonate Roof Sheets	m2	704.94				
1013	1013 (2c)	Gutter	lm	298.99				
		SUB-TOTAL (Roofings)						

**DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6A
 STATION PLAZA
 DEPARTMENT OF TRANSPORTATION**

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Waterproofing						
1016	1016	Fiber reinforced asphalt emulsion	m2	351.48				
		SUB-TOTAL (Waterproofing)						
		Masonry Works						
		150mm thk CHB	m2	302.55				
403	403 (1)	Mortar and Grouting	m2	605.09				
		SUB-TOTAL (Masonry Works)						
		Finishes						
724	724	Concrete Pavers	m2	5,713.07				
726	726	Surface applied Tactile Tiles	m2	197.40				
311	311	Napoli Stone	m2	281.20				
725	725	Granite Stone	m2	187.64				
		Paint Finish						
710	710(1)	to walls, column and piers	m2	1,532.83				
710	710(2)	to structural steel members	m2	3,886.29				
606	606 (2)	Pavement markings (Reflectorized Thermoplastic)	m2	3,420.00				

**DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6A
 STATION PLAZA
 DEPARTMENT OF TRANSPORTATION**

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		Tool Joint Finish						
		to walls, column and piers	m2	605.09				
		SUB-TOTAL (Finishes)						
		Miscellaneous Structures						
603	603-A	Bollards	no	84.00				
604	604(2)	Cyclone Wire Fence	lm	475.24				
604	604(1)	Barbed Wire	lm	167.77				
		Cast In Place Concrete Curb & Gutter						
600	600(1)	Curb and Gutter (Type 1)	m	399.75				
600	600(1)	Curb and Gutter (Type 2)	m	427.49				
600	600(1)	Concrete drop curb	m	130.15				
600	600(1)	Concrete curb	m	487.79				
		SUB-TOTAL (Miscellaneous Structures)						
		Signages						
605	605(1)	Warning Signs	each	7.00				
605	605(2)	Regulatory Signs	each	6.00				

**DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6A
 STATION PLAZA
 DEPARTMENT OF TRANSPORTATION**

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
807	807(2)	Grass						
		Arachis pinto	pcs	7,115.00				
		Axonopus compressus	m2	166.33				
		Wedelia trilobata	pcs	2,766.00				
807	807(4)	Soil	m3	268.00				
807	807(7)	Curbs	lm	155.00				
		Allowance for Plantboxes	ls	1.00				
		Allowance for Paint for Plantboxes	ls	1.00				
		Allowance for Benches	ls	1.00				
		Allowance for Park Furnitures	ls	1.00				
		SUB-TOTAL (Softscape)						
		SUB-TOTAL (D.2 - ARCHITECTURAL WORKS)						
	D.3	MISCELLANEOUS WORKS						
1200	1200	Builder's works in connection to services	ls	1.00				

**DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6A
 STATION PLAZA
 DEPARTMENT OF TRANSPORTATION**

NO.	PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
		SUB-TOTAL (D.3 - MISCELLANEOUS WORKS)						
	PART E	MEPFS						
500-513		Drainage System	ls	1.00				
1200-1205		Fire Distribution System	ls	1.00				
1200-1205		Water Distribution System	ls	1.00				
1100-1110		Electrical Works	ls	1.00				
		SUB-TOTAL (PART E - MEPFS)						
		GRAND TOTAL STATION PLAZA (ORTIGAS NORTH)						

DEPARTMENT OF TRANSPORTATION
METRO MANILA SUBWAY PROJECT
PHASE 1
Bill NO. 6B
STATION PLAZA

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
	PART A	EARTHWORKS						
103	103 (1)	Structure excavation	m3	409.24				
105	105 (1)	Subgrade Preparation (Common Material)	m2	1,936.82				
802	802 (1)	Fill and Backfill	m3	294.83				
200	200	Aggregate Subbase Course	m3	62.62				
202	202	Crushed Aggregate Base Course	m3	171.78				
202	202-A	Compacted sand	m3	26.36				
1000	1000	Termite Control	m2	661.87				
		SUB-TOTAL (PART A - EARTHWORKS)						
	PART D	BUILDING WORKS						
	D.1	STRUCTURAL WORKS						
400	400(1)	Structural Concrete, Class "AAA" (27.6 MPa) for Footing	m3	16.85				
400	400(2)	Structural Concrete, Class "AAA" (27.6 MPa) for Columns and Walls	m3	9.75				
400	400(5)	Structural Concrete, Class "AAA" (27.6 MPa) for Slabs on grade	m3	29.11				
400	400(6)	Structural Concrete, Class "AAA" (27.6 MPa) for all other structural members	m3	6.04				

DEPARTMENT OF TRANSPORTATION
METRO MANILA SUBWAY PROJECT
PHASE 1
Bill NO. 6B
STATION PLAZA

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
405	405 (2)	Blinding Concrete (Lean Concrete), 17 MPa	m3	3.44				
300	301(1)	PCC Pavement (Unreinforced)	m2	188.10				
402	402(2)	Concrete reinforcement; Grade 60	kg	12,971.52				
402	402(1)	Concrete reinforcement; Grade 40	kg	1,606.85				
405	405 (1)	Structural steel	kg	14,410.64				
414	414	Forms and Falseworks	ls	1.00				
901	901	Concrete Accessories	ls	1.00				
		SUB-TOTAL (D.1 - STRUCTURAL WORKS)						
		D.2 ARCHITECTURAL WORKS						
		Steel Doors and Frames						
604	604(4)	Cyclone Wire Gates	each	2.00				
		SUB-TOTAL (Steel Doors and Frames)						
		Roofings						
1015	1015-A	Solid Polycarbonate Roof Sheets	m2	182.72				

DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6B
 STATION PLAZA

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
1013	1013 (2c)	Gutter	lm	87.01				
		SUB-TOTAL (Roofings)						
		Waterproofing						
1016	1016	Fiber reinforced asphalt emulsion	m2	238.13				
		SUB-TOTAL (Waterproofing)						
		Floor Finishes						
724	724	Concrete Pavers	m2	1,329.32				
726	726	Surface applied Tactile Tiles	m2	45.00				
		Paint Finish						
710	710(1)	to walls, column and piers	m2	835.90				
710	710(2)	to structural steel members	m2	867.47				
606	606 (2)	Pavement markings (Reflectorized Thermoplastic)	m2	361.57				
		SUB-TOTAL (Floor Finishes)						
		Miscellaneous Structures						

DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6B
 STATION PLAZA

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
604	604(2)	Cyclone Wire Fence	lm	296.24				
		Cast In Place Concrete Curb & Gutter						
600	600(1)	Curb and Gutter (Type 1)	lm	168.90				
600	600(1)	Concrete drop curb	lm	137.74				
600	600(1)	Concrete curb	lm	138.77				
		SUB-TOTAL (Miscellaneous Structures)						
		Signages						
605	605(1)	Warning Signs	each	2.00				
605	605(2)	Regulatory Signs	each	2.00				
		SUB-TOTAL (Signages)						
		SUB-TOTAL (D.2 - ARCHITECTURAL WORKS)						
	D.4	MISCELLANEOUS WORKS						
1200	1200	Builder's works in connection to services	ls	1.00				
		SUB-TOTAL (D.4 - MISCELLANEOUS WORKS)						
	PART E	MEPFS						

**DEPARTMENT OF TRANSPORTATION
 METRO MANILA SUBWAY PROJECT
 PHASE 1
 Bill NO. 6B
 STATION PLAZA**

No.	PAY ITEM No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE		AMOUNT	
					LOCAL (PHP)	FOREIGN ()	LOCAL (PHP)	FOREIGN ()
500-513		Drainage System	ls	1.00				
1200-1205		Fire Distribution System	ls	1.00				
1100-1110		Electrical Works	ls	1.00				
		SUB-TOTAL (PART E - MEPFS)						
		GRAND TOTAL - STATION PLAZA (ORTIGAS SOUTH)						