



REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY

CONSTRUCTION OF FIT-OUT AND LANDSCAPE WORKS FOR THE TWENTY-THREE (23) STOREY PHILIPPINE STATISTICS AUTHORITY (PSA) OFFICE BUILDING WITH COVERED ROOF DECK

PSA COMPLEX, EAST AVENUE, DILIMAN, QUEZON CITY

DETAILED ARCHITECTURAL AND ENGINEERING DESIGN (DAED)

P L U M B I N G A N D S A N I T A R Y

NOTE:
PURSUANT TO SECTION 4 OF ANNEX "A" OF THE REVISED IMPLEMENTING RULES AND REGULATION OF R.A. 9184, APPROVAL BY THE AUTHORIZED DPWH OFFICIALS OF DETAILED ENGINEERING SURVEYS AND DESIGN UNDERTAKEN BY CONSULTANTS NEITHER DIMINISHES THE RESPONSIBILITY OF THE LATTER FOR THE TECHNICAL INTEGRITY OF THE SURVEYS AND DESIGN NOR TRANSFER ANY PART OF THAT RESPONSIBILITY TO THE APPROVING OFFICIALS.

THE DESIGN CONSULTANT SHALL BE HELD RESPONSIBLE FOR THE FAILURE OF THE FACILITY/ES / STRUCTURES DUE TO FAULTY DESIGN EXCEPT FOR THE CHANGES MADE WITHOUT THE CONFORMITY OF THE CONSULTANTS.

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LEGEND, SYMBOLS AND ABBREVIATIONS

WATER DISTRIBUTION SYSTEM

—	CWL /	COLD WATER LINE
—	PWL	POTABLE WATER LINE
—	PWR	POTABLE WATER RISER
—	PDF	POTABLE WATER DOWNFEED
—	HB	HOSE BIBB
—	GV	GATE VALVE
—	WM	WATER METER
—	CV	CHECK VALVE

WASTE, SEWER & VENT SYSTEM

—	SP	SOIL PIPE
—	WP	WASTE PIPE
—	KWP	KITCHEN WASTE PIPE
—	VAC	VENT AT CEILING
—	FCO	FLOOR CLEANOUT
—	CCO	CEILING CLEANOUT
—	VS/WS/SS	VENT / WASTE / SOIL STACK
—	FD	FLOOR DRAIN
—	VSTR	VENT STACK THRU ROOF
—	VSTW	VENT STACK THRU WALL

STORM DRAINAGE SYSTEM

—	DP	DRAIN PIPE
—	ACDP	AIRCON DRAIN PIPE
—	INS.	INSULATION
—	FCUD /	FAN COIL UNIT DRAIN /
—	ACUD	AIRCON UNIT DRAIN
—	DS	DOWNSPOUT
—	ACDS	AIRCON DRAIN STACK
—	DD / GD	DECK DRAIN / GUTTER DRAIN
—	AD / CB	AREA DRAIN/CATCH BASIN
—	FD	FLOOR DRAIN W/ FUNNEL
—	T&G	TRENCH & GRATING
—	TD / PD	TRENCH DRAIN / PARKING DRAIN

PLUMBING FIXTURES

—	WC	WATER CLOSET
—	LAV	LAVATORY
—	UR	URINAL
—	KS / PS	KITCHEN SINK / PANTRY SINK
—	GT	GREASE TRAP

OTHERS

—	S	SLOPE
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GENERAL NOTES

- ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE PROVISIONS OF THE PHILS. PLUMBING CODE. THE NATIONAL PLUMBING CODE AND RULES & REGULATIONS OF CONCERNED CITY.
- COORDINATE THE DRAWING WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN.
- ALL PIPES SHALL BE INSTALLED AS INDICATED ON PLANS. ANY RELOCATIONS REQUIRED FOR PROPER EXECUTION OF OTHER TRADE SHALL BE WITH PRIOR APPROVAL OF THE ARCHITECT/ENGINEER.
- PROPOSED SANITARY UTILITIES SHALL CONFORM TO THE ACTUAL LOCATION. DEPTH AND INVERT ELEVATION OF ALL EXISTING PIPES AND STRUCTURES AS VERIFIED BY THE CONTRACTOR.
- ALL SLOPES FOR HORIZONTAL DRAINAGE SHALL MAINTAIN 1% UNLESS OTHERWISE SPECIFIED.
- SIZE OF WATER SUPPLY PIPES TO FIXTURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE, COORDINATION THE WORKS WITH SEWER LINE EFFLUENT DISPOSAL POINT & WATER LINE SERVICE CONNECTING POINT UNLESS OTHERWISE SPECIFIED.
- ALL PIPE SIZES ARE IN MILLIMETERS AND ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- ALL PIPE DIAMETER ARE INSIDE DIMENSION (NOMINAL) UNLESS OTHERWISE SPECIFIED.
- VERIFY ARCHITECTURAL PLANS FOR THE EXACT LOCATION OR SETTING OUT OF FLOOR DRAINS, FLOOR CLEAN-OUTS AND OTHER PLUMBING APPURTENANCES.
- ALL CONCEALED VALVES OR VALVES AT CEILING LEVEL SHALL BE PROVIDED WITH ACCESS MANHOLE.
- ALL VALVES AND FLANGES SHALL BE RATED WITH 150 PSI MIN. FOR SYSTEM WITH PRESSURE RATING OF MORE THAN 150 PSI. USE VALVE AND FLANGE WITH 300 PSI RATING MIN.

MATERIAL SPECIFICATIONS

COLD WATER LINES

FOR PUMP PIPING, RISERS AND DOWNFEEDS SHALL BE GALVANIZED IRON (G.I.) PIPES, SCHED. 40, CONFORMING TO A-120-80, ASTM A53. FITTINGS SHALL BE CLASS 150. JOINTING SHALL BE FLANGE CONNECTION. "SUPERIOR", "SUPREME" OR APPROVED EQUAL.

HOT WATER LINES

SHALL BE POLYPROPYLENE PIPE AND FITTINGS, CONFORMING TO ISO 15874 PN-20 MINIMUM. RATING JOINTING SHALL BE BY SOCKET FUSION. "RAUFUSION", "AMICO", "BELDEN", BRAND OR APPROVED EQUAL.

SCHEDULE OF G.I. PIPE DIAMETER EQUIVALENT TO PPRC / HDPE				
DESIGNED PIPE SIZE NOMINAL DIAMETER - G.I. PIPE SCH. 40 INSIDE DIMENSION (MM)	PIPE DIAMETER EQUIVALENT TO PPRC/HDPE PIPE(PN-20)		PIPE DIAMETER EQUIVALENT TO PPRC/HDPE PIPE(PN-16)	
	OUTSIDE DIMENSION (MM)	THICKNESS (MM)	OUTSIDE DIMENSION (MM)	THICKNESS (MM)
20	32	5.4	25	3.5
25	40	6.7	32	4.4
32	50	8.3	40	6.9
40	63	10.5	63	8.6
50	75	12.5	75	10.3
65	90	15	90	12.3
75	110	18.3	110	15.1
100	140	23.3	140	23.3
150	—	—	—	—
200	—	—	—	—

SEWER/WASTE LINES

SHALL BE POLYVINYL CHLORIDE (PVC) PIPES CONFORMING TO ASTM D2729, SERIES 1000 WITH IZOD IMPACT TEST OF 80 JOULES (MINIMUM) AND TENSILE STRENGTH OF 48MPa (MINIMUM). PIPES SHALL BE MADE OF VIRGIN PVC RESIN AND COMPOUND WITH CELL #12454D. FITTINGS SHALL CONFORM TO ASTM D3311. PIPE AND FITTINGS SHALL BE LEAD FREE. JOINTING SHALL BE BY SOLVENT CEMENT. "CROWN PIPES", EMERALD ULTIMA", "MOLDEX" OR APPROVED EQUAL.

VENT LINES / STACKS

SHALL BE POLYVINYL CHLORIDE (PVC) PIPES CONFORMING TO ASTM D2729, SERIES 1000 WITH IZOD IMPACT TEST OF 80 JOULES (MINIMUM) AND TENSILE STRENGTH OF 48MPa (MINIMUM). PIPES SHALL BE MADE OF VIRGIN PVC RESIN AND COMPOUND WITH CELL #12454D. FITTINGS SHALL CONFORM TO ASTM D3311. PIPE AND FITTINGS SHALL BE LEAD FREE. JOINTING SHALL BE BY SOLVENT CEMENT. "CROWN PIPES", EMERALD ULTIMA", "MOLDEX" OR APPROVED EQUAL.

DOWNSPOUTS

SHALL BE POLYVINYL CHLORIDE (PVC) PIPES CONFORMING TO ASTM D2729, SERIES 1000 WITH IZOD IMPACT TEST OF 80 JOULES (MINIMUM) AND TENSILE STRENGTH OF 48MPa (MINIMUM). PIPES SHALL BE MADE OF VIRGIN PVC RESIN AND COMPOUND WITH CELL #12454D. FITTINGS SHALL CONFORM TO ASTM 3311. PIPE AND FITTINGS SHALL BE LEAD FREE. JOINTING SHALL BE BY SOLVENT CEMENT. "CROWN PIPES", EMERALD ULTIMA", "MOLDEX" OR APPROVED EQUAL.

STORM DRAINAGE COLLECTOR

SHALL BE POLYVINYL CHLORIDE (PVC) PIPES AND FITTINGS, SERIES 1000 II, HIGH IMPACT, "EMERALD", "MOLDEX", "CROWN PIPES" BRAND OR APPROVED EQUAL. JOINTING SHALL BE BY SOLVENT CEMENT JOINTING CONFORMING TO ASTM D2564.

FCU/AHU/REFRIGERANT DRAIN LINES

SHALL BE POLYVINYL CHLORIDE (PVC) PIPES CONFORMING TO ASTM D2729, SERIES 1000 WITH IZOD IMPACT TEST OF 80 JOULES (MINIMUM) AND TENSILE STRENGTH OF 48MPa (MINIMUM). PIPES SHALL BE MADE OF VIRGIN PVC RESIN AND COMPOUND WITH CELL #12454D. FITTINGS SHALL CONFORM TO ASTM 3311. PIPE AND FITTINGS SHALL BE LEAD FREE. JOINTING SHALL BE BY SOLVENT CEMENT. "CROWN PIPES", EMERALD ULTIMA", "MOLDEX" OR APPROVED EQUAL.

WATER METER

"ARAD", "AMICO", SYNERGY,"FLOW" OR MWSI APPROVED.

VALVES

"UNIVALVE", BERMAD", "DOROT", "KITZ" OR APPROVED EQUAL.

DRAINS

"JAMAN BY EUROBRASS", "JPI", "FLAMINGO" OR APPROVED EQUAL.

FIRE STOPPING SYSTEM

"HILT" OR APPROVED EQUAL.



