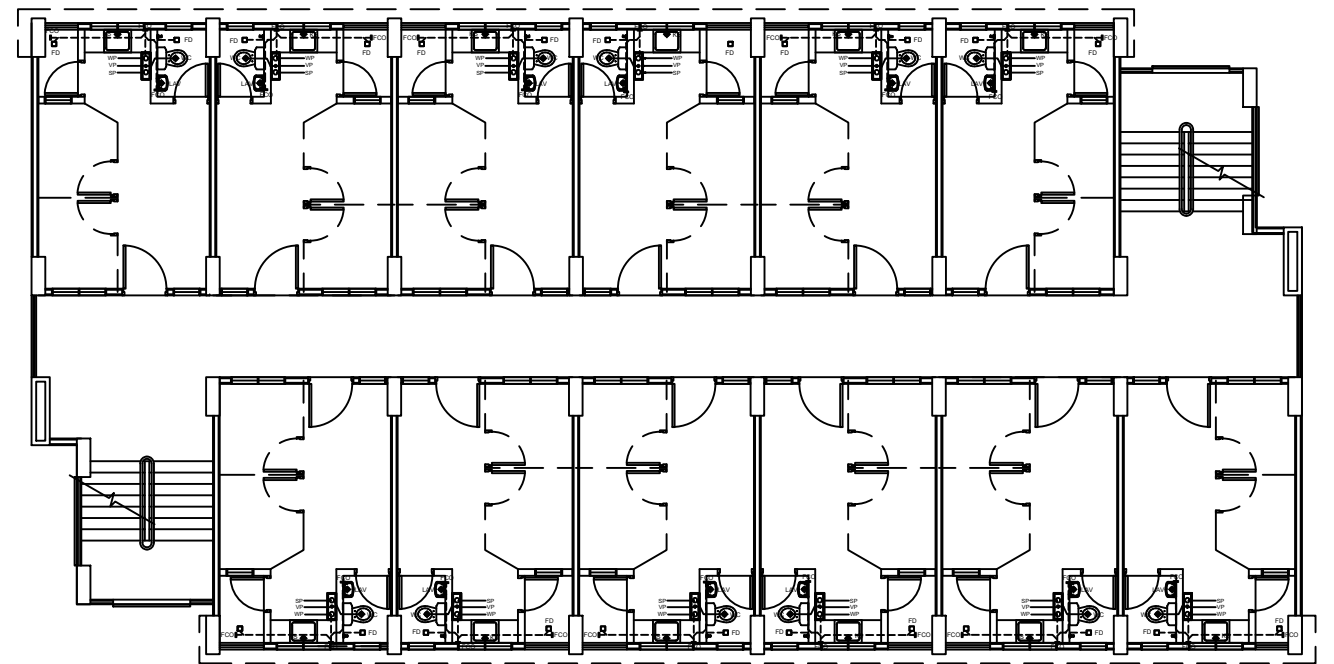
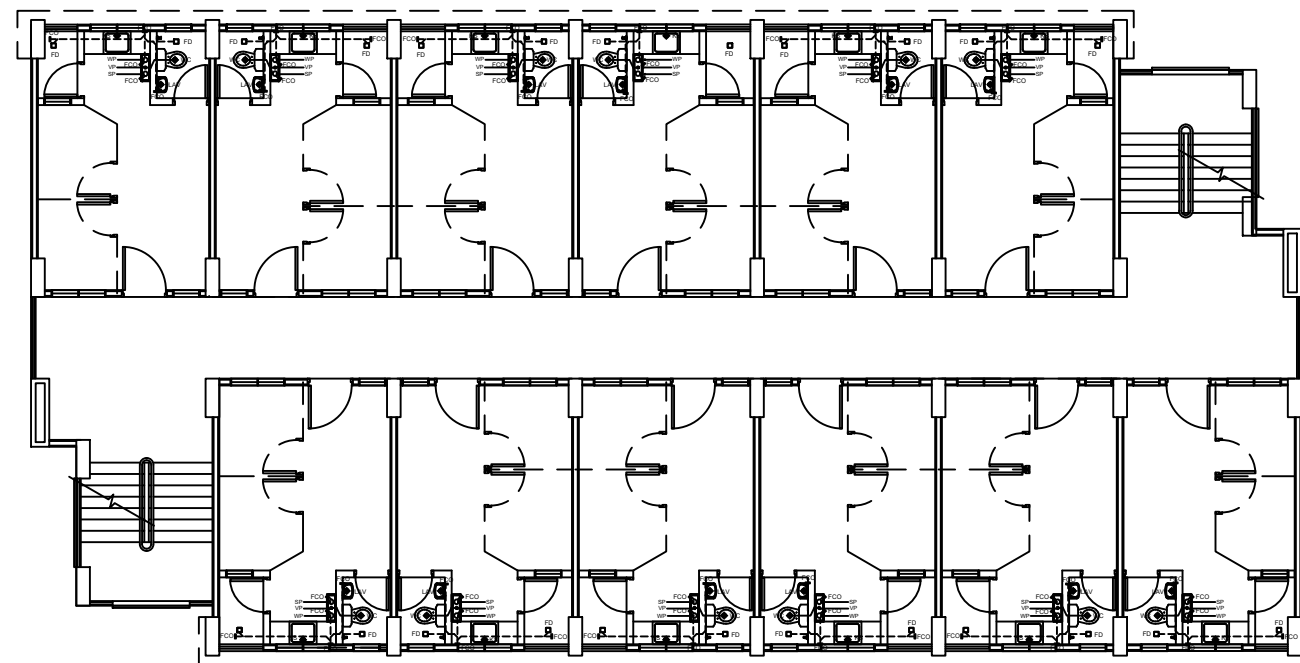



1
P 01
SCALE 1:100
GROUND FLOOR
SEWER AND DRAINAGE LAYOUT

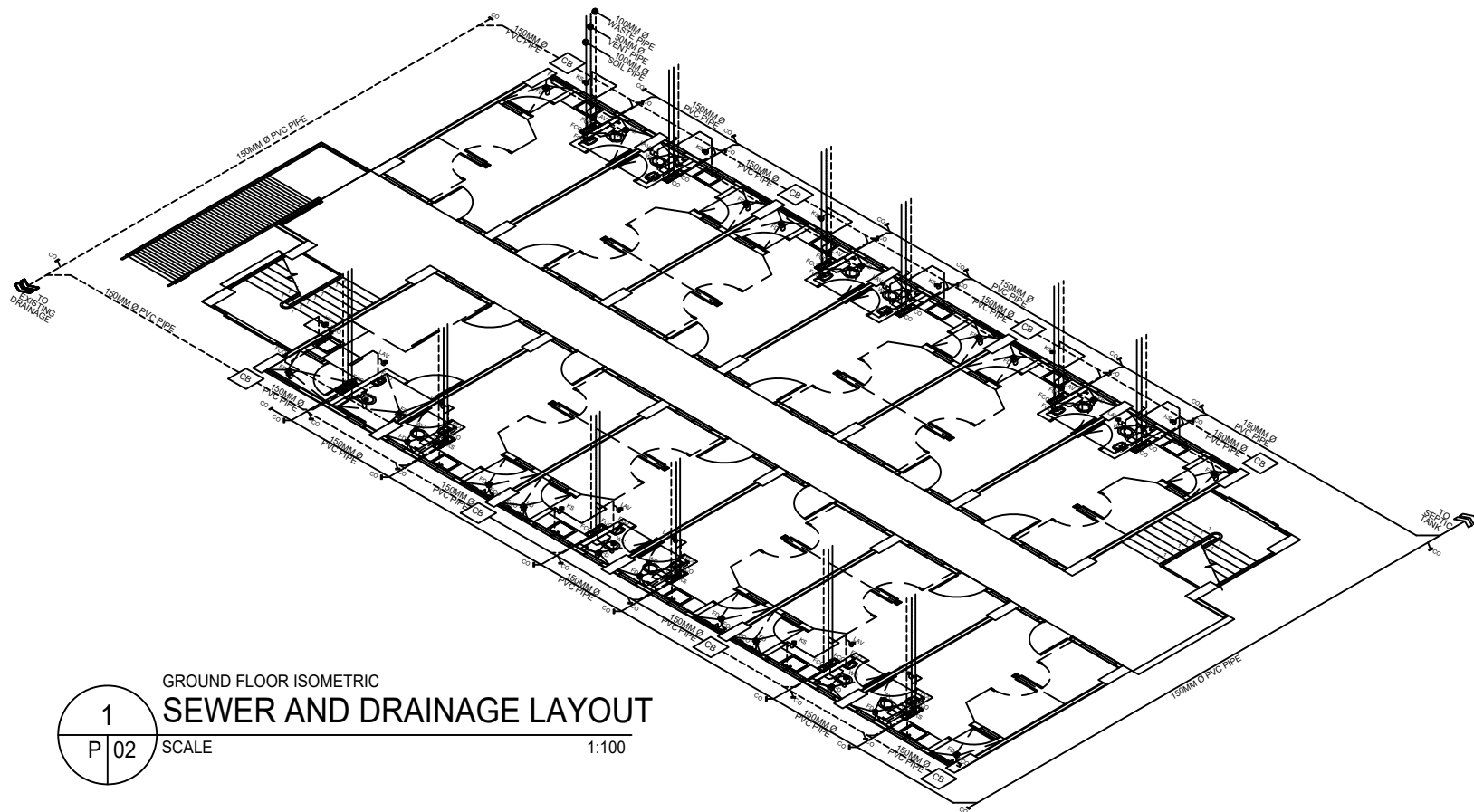


2
P 01
SCALE 1:100
SECOND AND FOURTH FLOOR
SEWER AND DRAINAGE LAYOUT

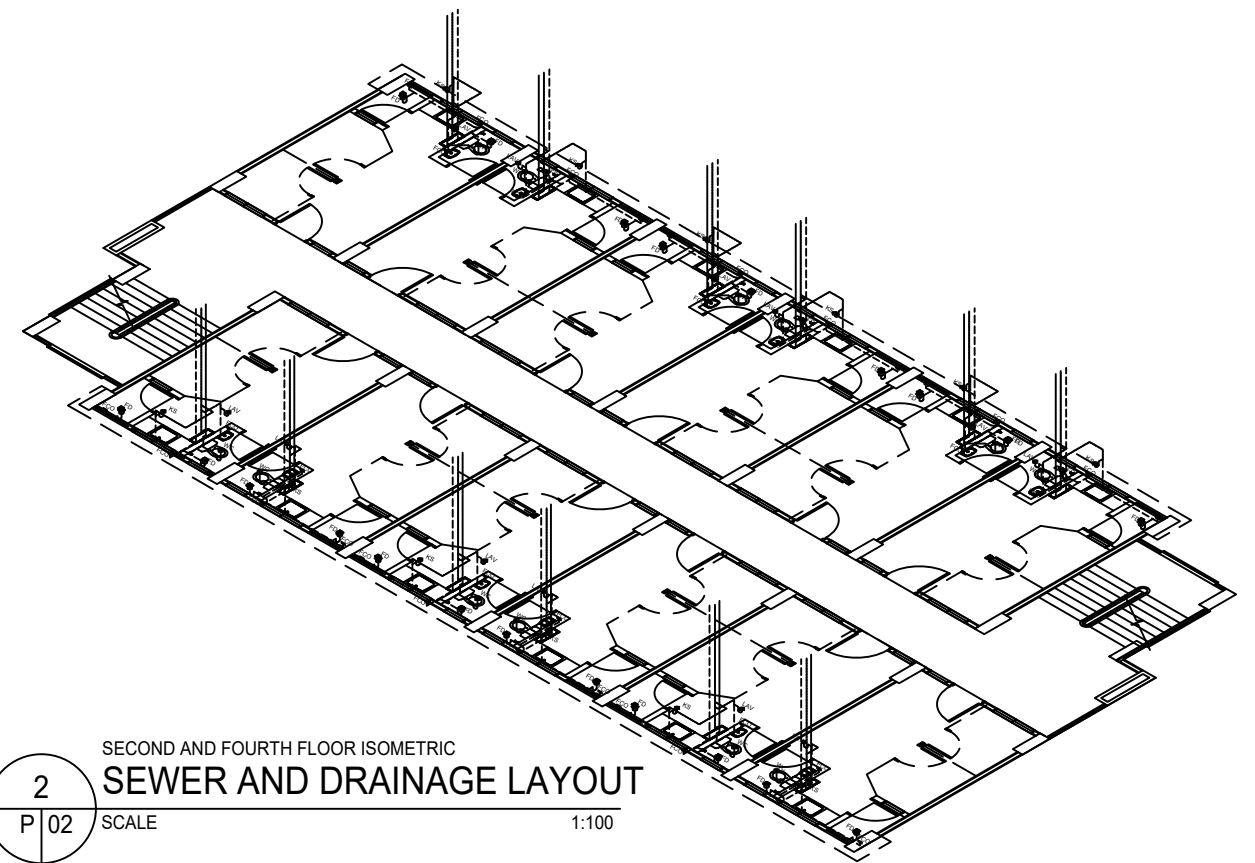


3
P 01
SCALE 1:100
THIRD AND FIFTH FLOOR
SEWER AND DRAINAGE LAYOUT

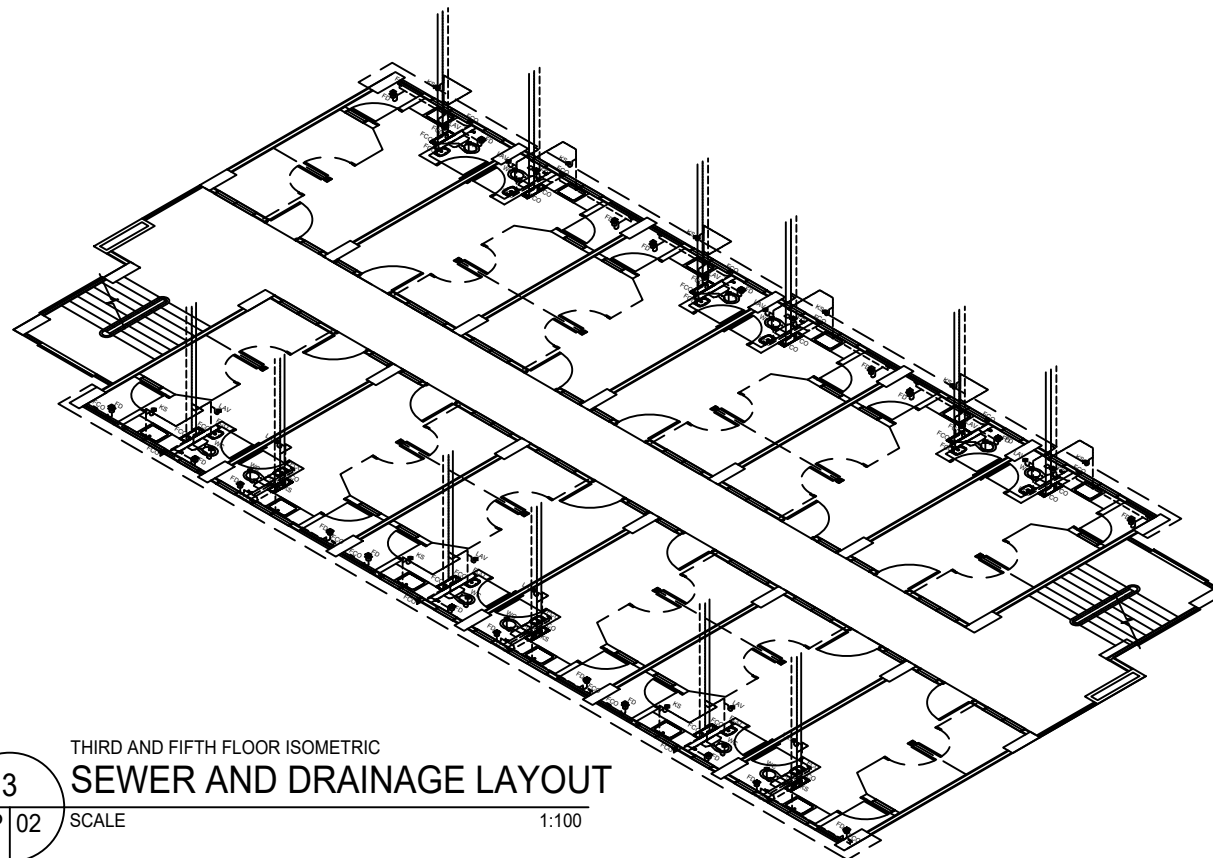
 <p>Office of the President NATIONAL HOUSING AUTHORITY Elliptical Road, Diliman, Quezon City</p> <p>PROJECT TITLE: PROPOSED STANDARD 5-STORY LOW-RISE BUILDING & LAND DEVELOPMENT</p> <p>LOCATION:</p>	ENGINEER:	DESIGNED BY:	CHECKED BY:	STANDARD DESIGNED PREPARED BY:	APPROVED BY:	SHEET NO. P 01 08		
	REG No.:	DRAWN BY:	DATE:	HOUSING TECHNOLOGY DEVELOPMENT OFFICE				
	DATE:	SHEET CONTENT:	DATE:	SUBMITTED BY:	RECOMMENDING APPROVAL:			
PTR No.:	PLACE:	REVISIONS:	DATE:	JUANCHO M. CORPUZ DISTRICT MANAGER MANAVA DISTRICT OFFICE	MAURA D. AGGARAO PROGRAM MANAGER PROGRAM OFFICE, NORTH SECTOR	MARIA TERESA P. OBLIPIAS REGIONAL MANAGER NORTH SECTOR	MA. BENITA O. REGALA GROUP MANAGER, HSSG	MARCELINO P. ESCALADA, JR. GENERAL MANAGER




1
P 02
GROUND FLOOR ISOMETRIC
SEWER AND DRAINAGE LAYOUT
SCALE 1:100

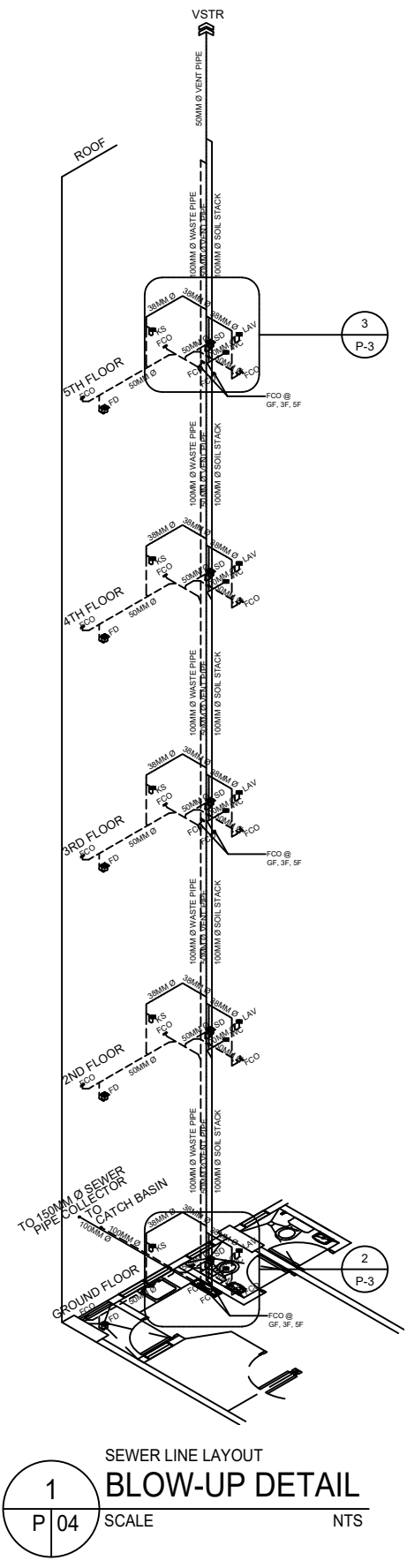


2
P 02
SECOND AND FOURTH FLOOR ISOMETRIC
SEWER AND DRAINAGE LAYOUT
SCALE 1:100

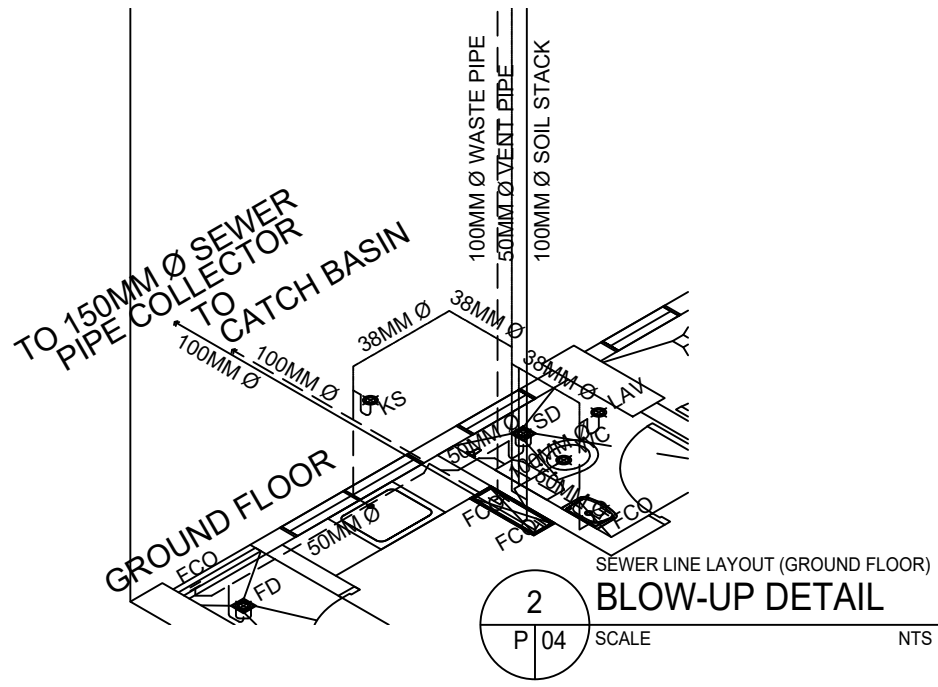


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P 02
THIRD AND FIFTH FLOOR ISOMETRIC
SEWER AND DRAINAGE LAYOUT
SCALE 1:100

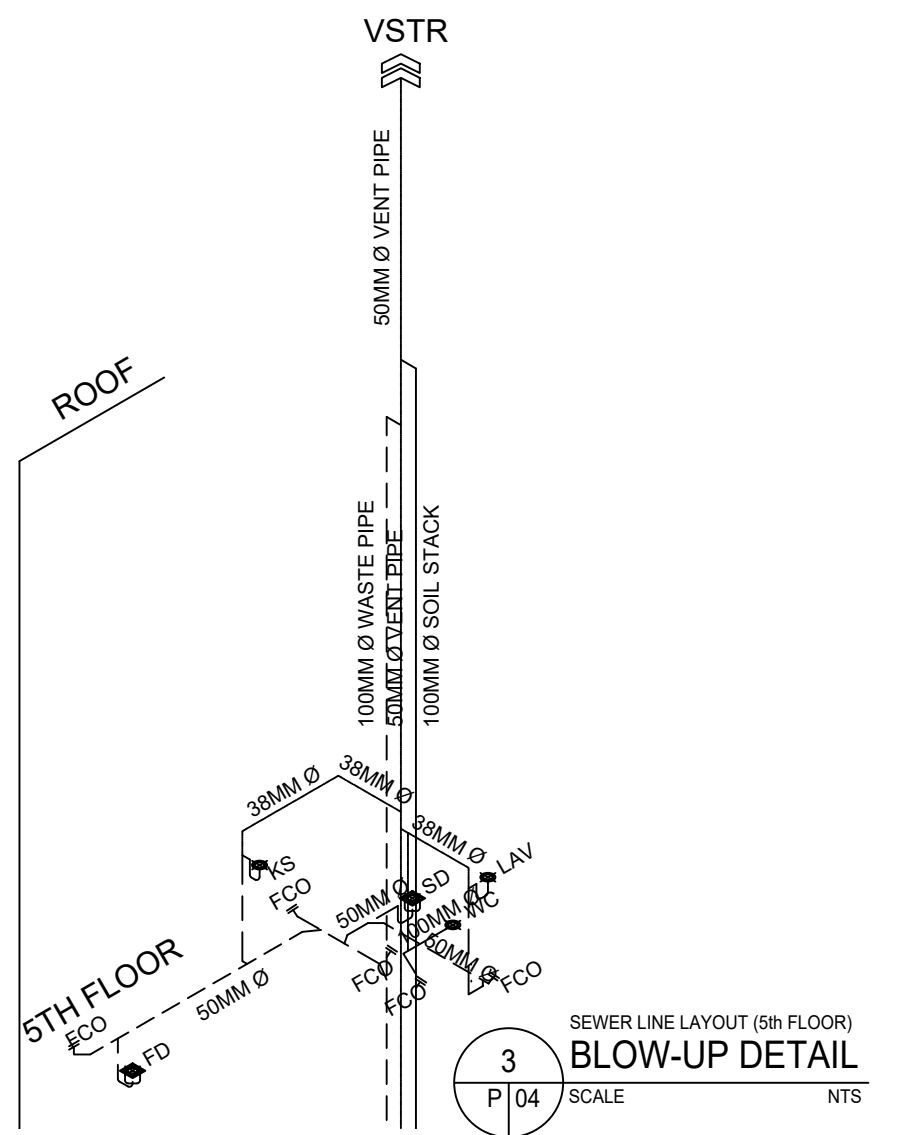
 <p>Office of the President NATIONAL HOUSING AUTHORITY Elliptical Road, Diliman, Quezon City</p>	<p>ENGINEER:</p>	<p>DESIGNED BY:</p>	<p>CHECKED BY:</p>	<p>STANDARD DESIGNED PREPARED BY:</p>			<p>APPROVED BY:</p>	<p>SHEET NO.</p>	
	<p>PROJECT TITLE:</p> <p>PROPOSED STANDARD 5-STOREY LOW-RISE BUILDING & LAND DEVELOPMENT</p> <p>LOCATION:</p>	<p>DRAWN BY:</p> <p>SHEET CONTENT:</p> <p>SEWER AND DRAINAGE ISOMETRIC VIEW</p> <p>REVISIONS:</p> <p>DATE:</p>	<p>DATE:</p>	<p>HOUSING TECHNOLOGY DEVELOPMENT OFFICE</p> <p>SUBMITTED BY:</p>	<p>REVIEWED BY:</p>	<p>RECOMMENDING APPROVAL:</p>	<p>MARIA TERESA P. OBLIPIAS REGIONAL MANAGER NORTH SECTOR</p>	<p>MARCELINO P. ESCALADA, JR. GENERAL MANAGER</p>	<p>P 02 08</p>
	<p>REG No.:</p> <p>PTR No.:</p>	<p>DATE:</p> <p>PLACE:</p>	<p>JUANCHO M. CORPUZ DISTRICT MANAGER MANAVA DISTRICT OFFICE</p>	<p>MAURA D. AGGARAO PROGRAM MANAGER PROGRAM OFFICE, NORTH SECTOR</p>	<p>MA. BENITA O. REGALA GROUP MANAGER, HSSG</p>				



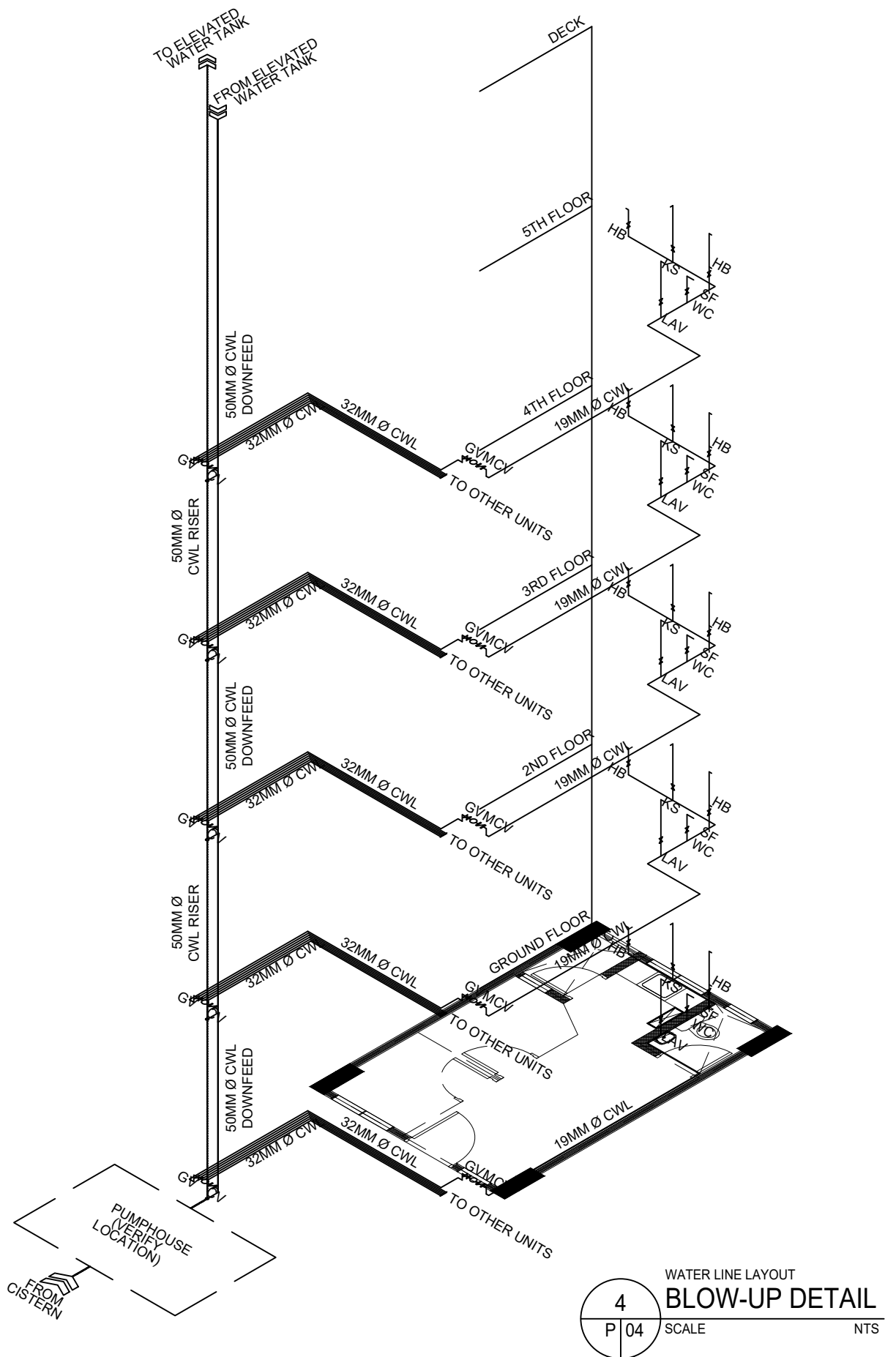
1
P 04 SCALE NTS
SEWER LINE LAYOUT
BLOW-UP DETAIL



2
P 04 SCALE NTS
SEWER LINE LAYOUT (GROUND FLOOR)
BLOW-UP DETAIL



3
P 04 SCALE NTS
SEWER LINE LAYOUT (5th FLOOR)
BLOW-UP DETAIL



4
P 04 SCALE NTS
WATER LINE LAYOUT
BLOW-UP DETAIL



Office of the President
NATIONAL HOUSING AUTHORITY
Elliptical Road, Diliman, Quezon City
PROJECT TITLE:
**PROPOSED STANDARD 5-STOREY
LOW-RISE BUILDING & LAND DEVELOPMENT**
LOCATION:

ENGINEER:
DESIGNED BY:
DRAWN BY:
SHEET CONTENT:
BLOW-UP DETAILS OF SEWER AND
WATER LINE LAYOUT
REVISIONS: DATE:
REG No.: DATE:
PTR No.: PLACE:

CHECKED BY:
DATE:
STANDARD DESIGNED PREPARED BY:
HOUSING TECHNOLOGY DEVELOPMENT OFFICE
SUBMITTED BY:
REVIEWED BY:
RECOMMENDING APPROVAL:
JUANCHO M. CORPUZ
DISTRICT MANAGER
MANAVA DISTRICT OFFICE
MAURA D. AGGARAO
PROGRAM MANAGER
PROGRAM OFFICE, NORTH SECTOR

MARIA TERESA P. OBLIPIAS
REGIONAL MANAGER
NORTH SECTOR
MA. BENITA O. REGALA
GROUP MANAGER, HSSG

APPROVED BY:
MARCELINO P. ESCALADA, JR.
GENERAL MANAGER

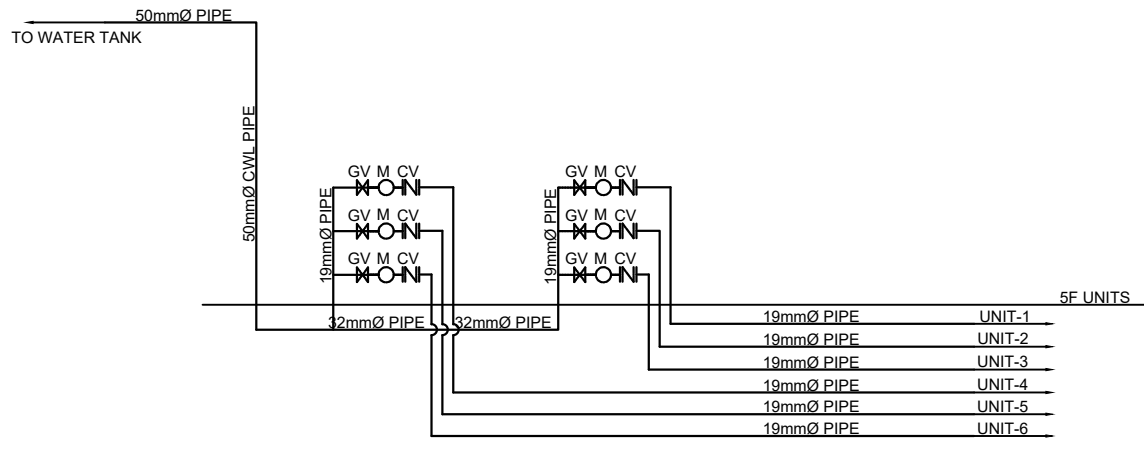
SHEET NO.
P
04
08

FIXTURE SCHEDULE:						
SYMBOL	FIXTURE	PIPE SIZES IN MILLIMETER				REMARKS
		CW	WASTE	VENT	TRAPS	
WC	WATER CLOSET	19 Ø	100 Ø	38 Ø	INTEGRAL	TANK TYPE
KS	KITCHEN SINK	19 Ø	50 Ø	38 Ø	P-TRAP	SINGLE COMPARTMENT
SH	SHOWER	19 Ø	50 Ø	38 Ø	P-TRAP	
FD	FLOOR DRAIN		50 Ø		P-TRAP	

MATERIAL SPECIFICATIONS:	
1. COLD WATER LINES	PPR PIPES
2. SEWER / WASTE / DOWNSPOUT	PVC PIPES SERIES 1000
3. VENT LINES	PVC PIPES SERIES 600
4. DRAINAGE LINES	CONCRETE DRAINAGE PIPE
5. GATE VALVES	CRANE BRAND OR APPROVED EQUAL

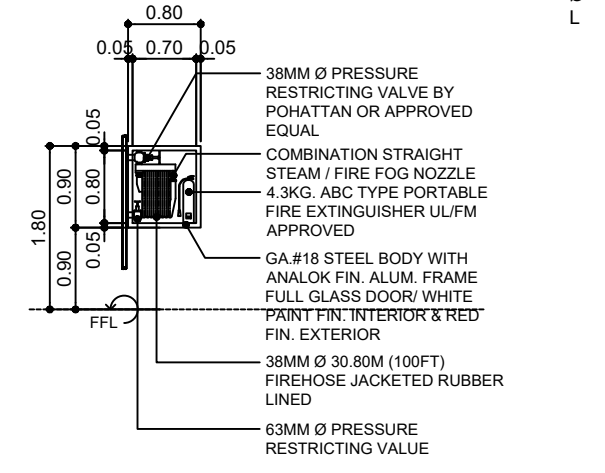
LEGEND & ABBREVIATIONS:

—	CWL	COLD WATER LINES
—	WP	WASTE PIPES
—	DP	DRAINAGE PIPE
—	VP	VENT PIPE
—	WC	WATER CLOSET
—	LAV	LAVATORY
—	GV	GATE VALVE
—	SD	SHOWER DRAIN
—	KS	KITCHEN SINK
—	FD	FLOOR DRAIN
—	FCO	FLOOR CLEAN OUT
—	CO	CLEAN OUT
—	HB	HOSE BIBB
—	CB	CATCH BASIN
—	DS	DOWNSPOUT
—	RD	ROOF DRAIN
—	VS	VENT STACK
—	VTR	VENT THRU ROOF
—	SF	SHOWER FAUCET
—	CV	CHECK VALVE
—	ST	STRAINER
—	TYP	TYPICAL
—	Ø	DIAMETER
—	L	LENGTH



1 GROUND FLOOR WATER LINE RISER DIAGRAM
SCALE: P 05 NTS

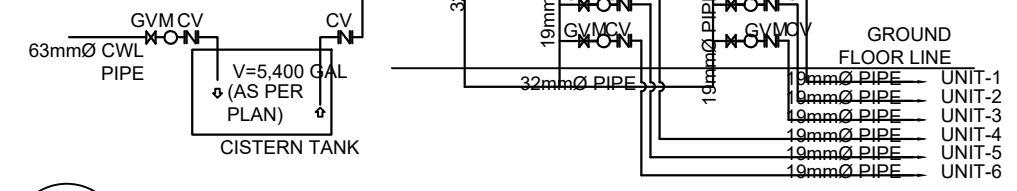
- GENERAL NOTES:**
- ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE PROVISIONS OF THE PHILIPPINE PLUMBING CODE, THE NATIONAL BUILDING CODE, AND THE RULES AND REGULATIONS OF THE CITY/MUNICIPALITIES.
 - COORDINATE THE DRAWINGS WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN PRIOR TO INSTALLATION.
 - ALL PIPES AND FIXTURES SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS. ANY RELOCATIONS REQUIRED FOR PROPER EXECUTION OF OTHER TRADES SHALL BE WITH PRIOR APPROVAL OF ARCHITECT OR ENGINEER.
 - ALL 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 PIPES SHALL MAINTAIN 1% UNLESS OTHERWISE SPECIFIED.
 - ALL PIPE SIZES ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



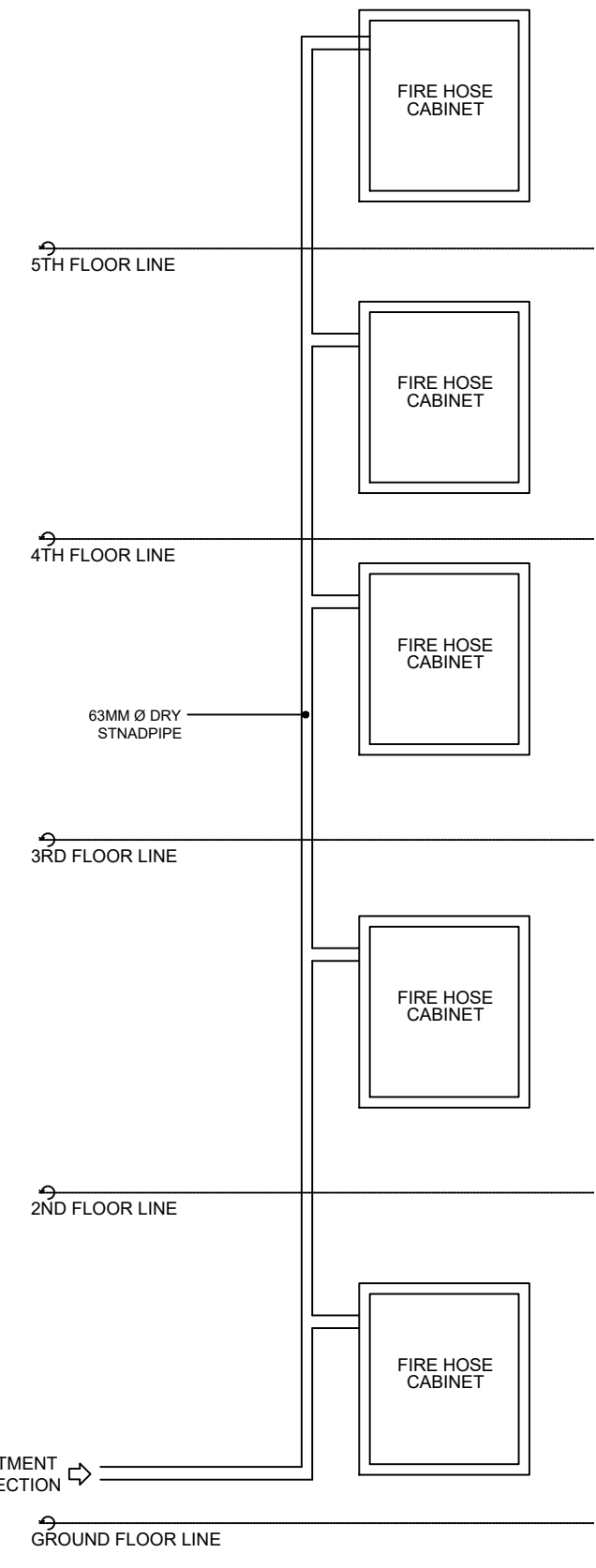
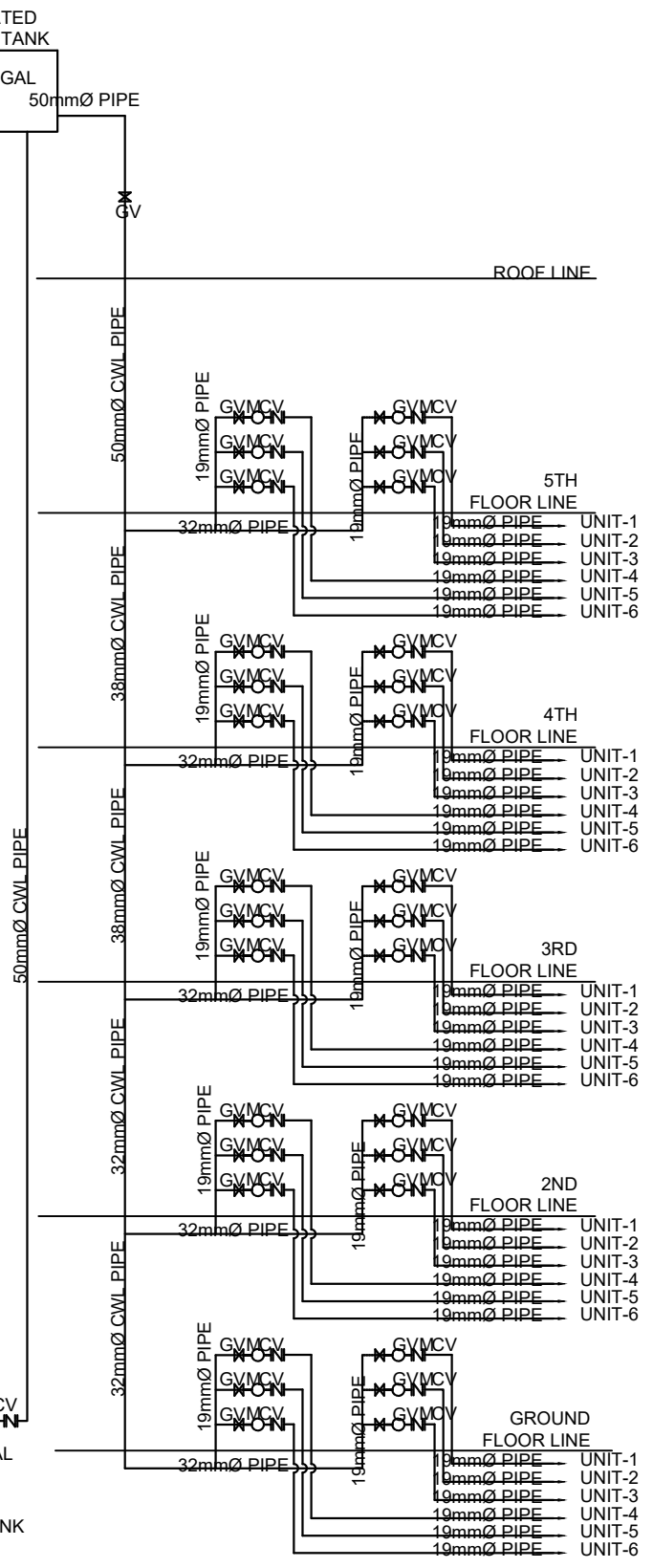
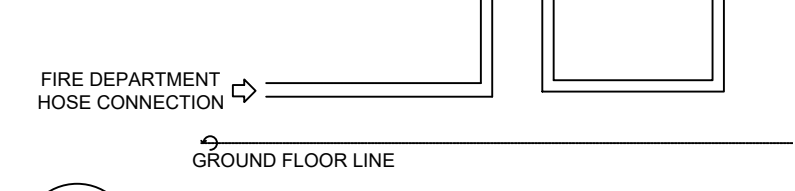
2 FIRE HOSE CABINET DETAIL
SCALE: P 05 1:50

- NOTE:**
- ALL DRY STAND PIPE SHALL BE LOCATED AT THE RIGHT SIDE OF THE CABINET.
 - ALL CABINETS SHALL BE CONSTRUCTED FLUSHED WITH THE PLASTERED SURFACE OF THE WALL.

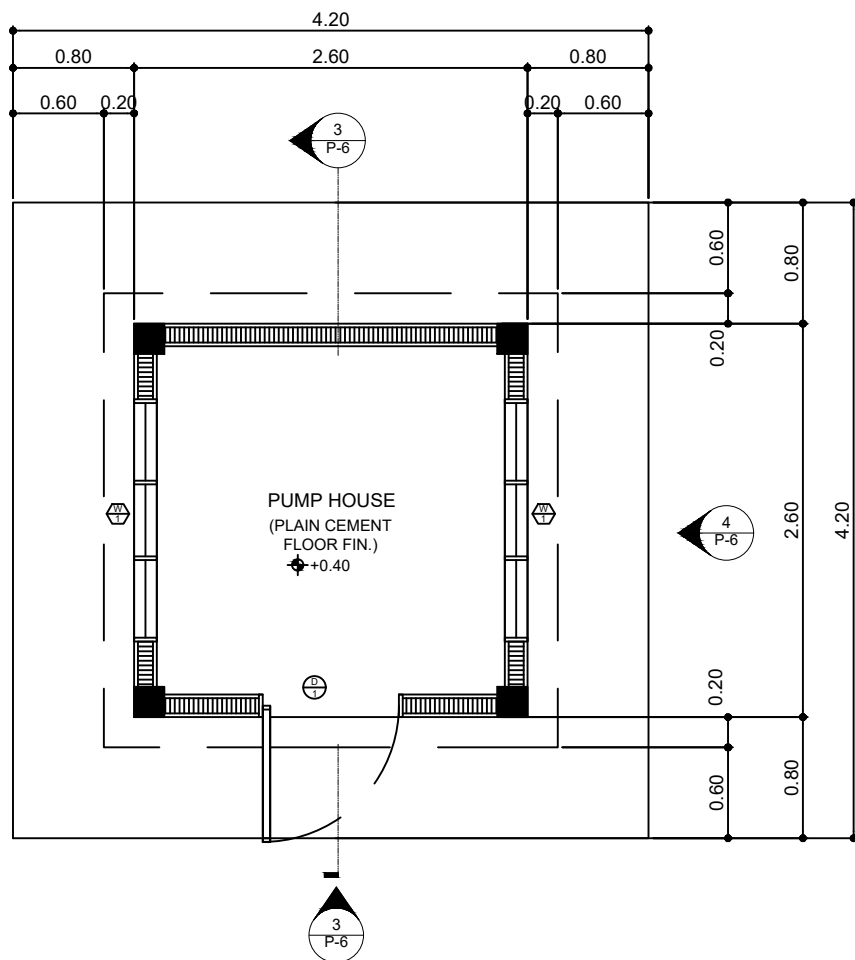
3 WATER LINE RISER DIAGRAM
SCALE: P 05 NTS



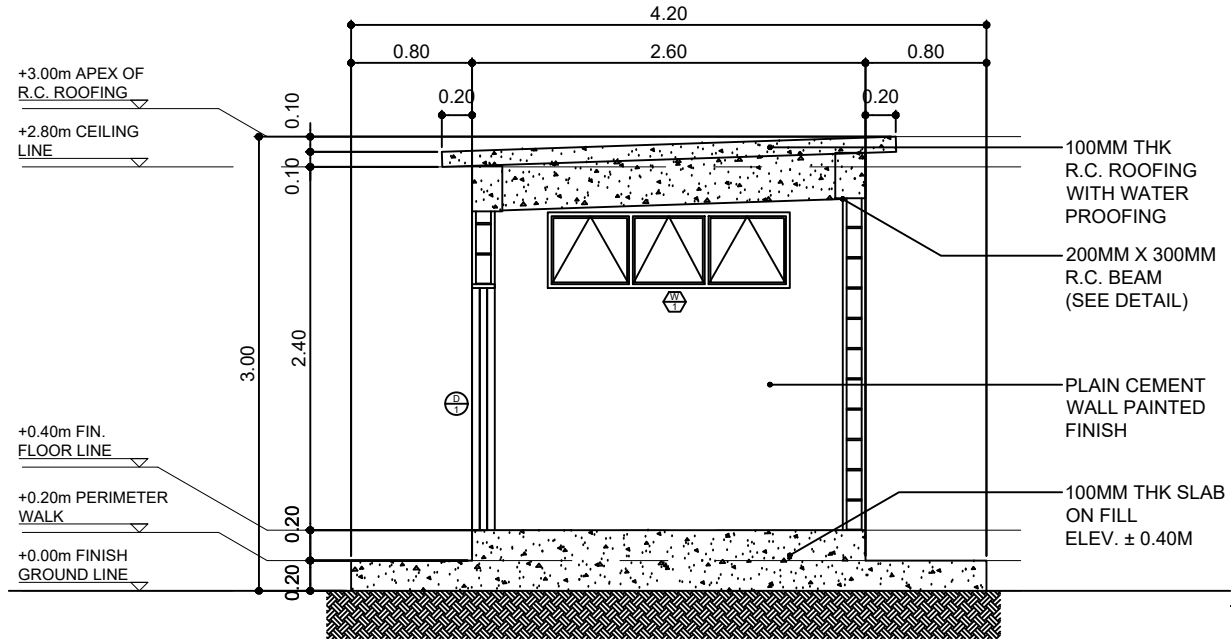
4 DRY STAND PIPE RISER DIAGRAM
SCALE: P 05 NTS



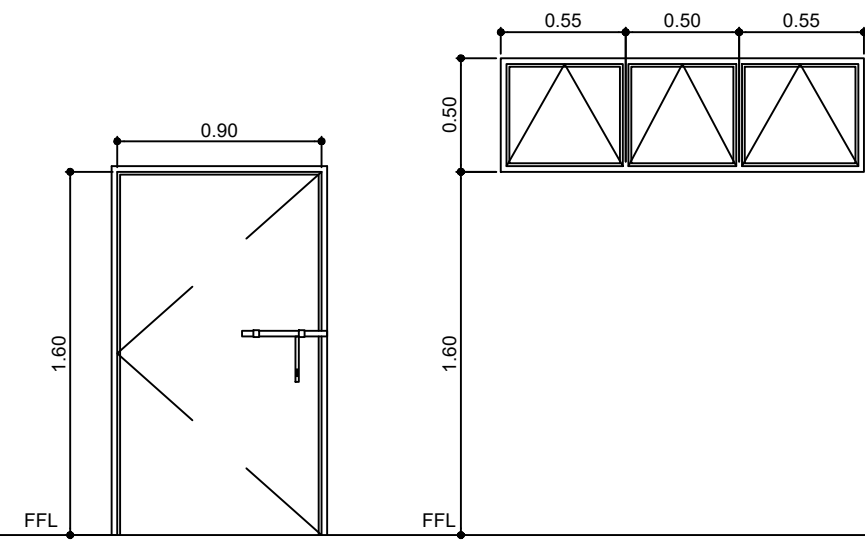
<p>Office of the President NATIONAL HOUSING AUTHORITY Elliptical Road, Diliman, Quezon City</p> <p>PROJECT TITLE: PROPOSED STANDARD 5-STOREY LOW-RISE BUILDING & LAND DEVELOPMENT</p> <p>LOCATION:</p>	<p>ENGINEER:</p>	<p>DESIGNED BY:</p>	<p>CHECKED BY:</p>	<p>STANDARD DESIGNED PREPARED BY:</p>	<p>APPROVED BY:</p>	<p>SHEET NO.</p>
	<p>REG No.:</p> <p>DATE:</p> <p>PTR No.:</p> <p>PLACE:</p>	<p>SHEET CONTENT:</p> <p>WATER LINE RISER DIAGRAM, FIRE CABINET DETAIL, WATER LINE RISER DIAGRAM, DRY STAND PIPE RISER DIAGRAM</p> <p>REVISIONS:</p>	<p>HOUSING TECHNOLOGY DEVELOPMENT OFFICE</p> <p>SUBMITTED BY:</p> <p>REVIEWED BY:</p>	<p>RECOMMENDING APPROVAL:</p>	<p>JUANCHO M. CORPUZ DISTRICT MANAGER MANAVA DISTRICT OFFICE</p> <p>MAURA D. AGGARAO PROGRAM MANAGER PROGRAM OFFICE, NORTH SECTOR</p> <p>MARIA TERESA P. OBLIPIAS REGIONAL MANAGER NORTH SECTOR</p> <p>MA. BENITA O. REGALA GROUP MANAGER, HSSG</p> <p>MARCELINO P. ESCALADA, JR. GENERAL MANAGER</p>	<p>P</p> <p>05</p> <p>08</p>



1
PUMP HOUSE DETAIL
PLAN
SCALE 1:30

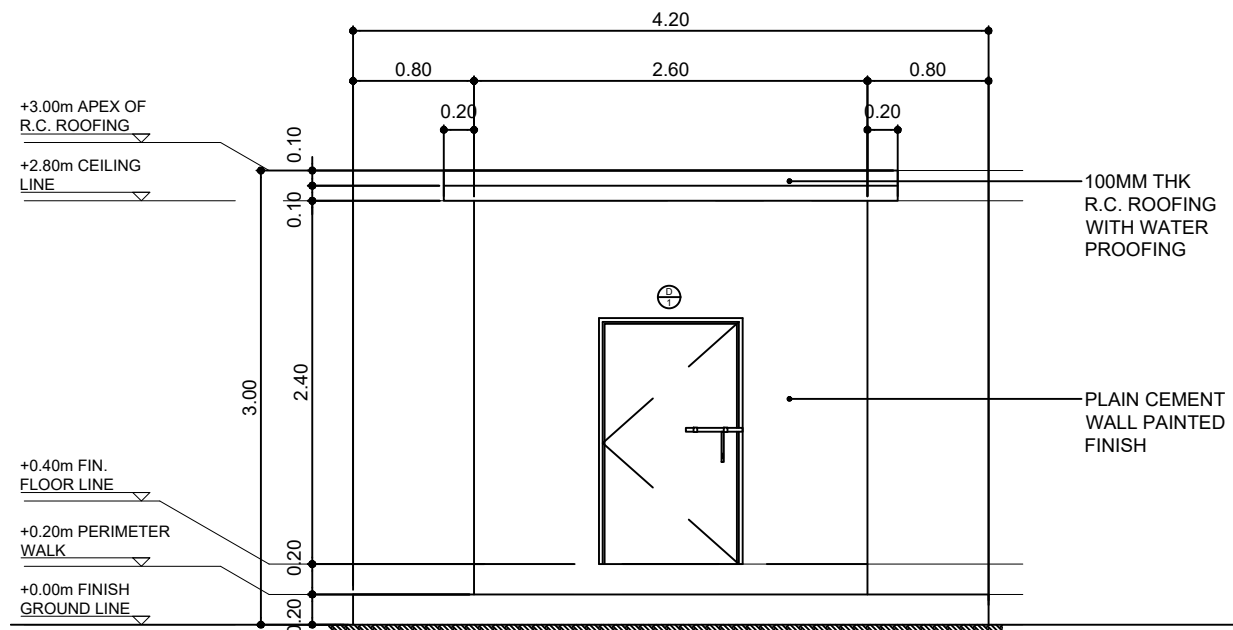


2
PUMP HOUSE DETAIL
SECTION
SCALE 1:30

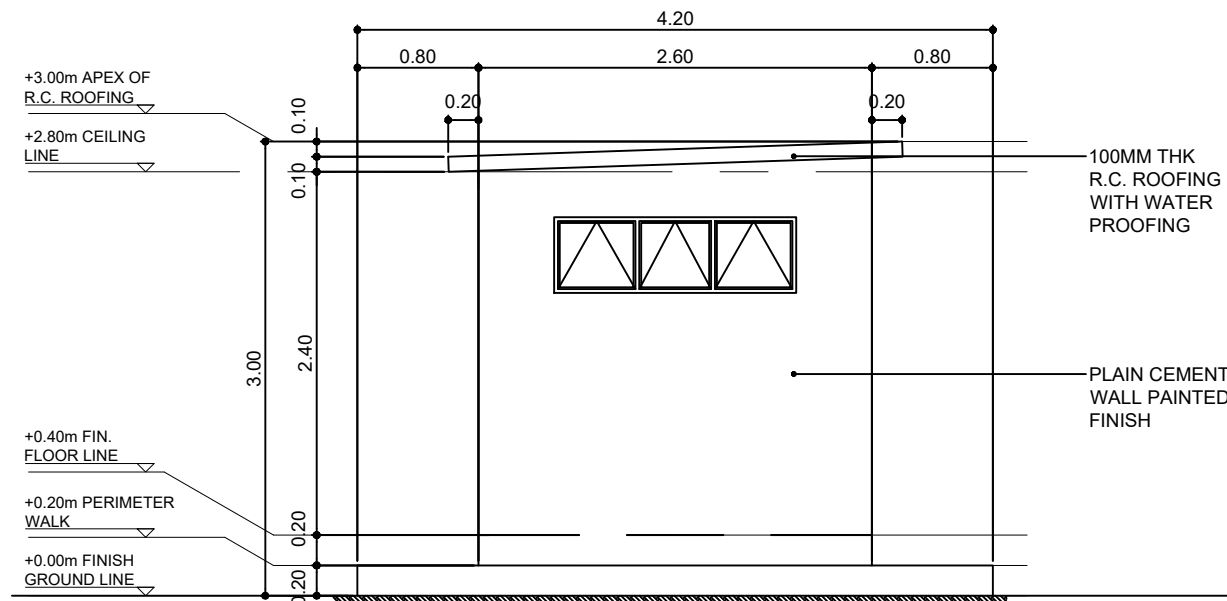


1
SCHEDULE OF DOORS AND WINDOWS
SCALE 1:20

1
SCHEDULE OF DOORS AND WINDOWS
SCALE 1:20

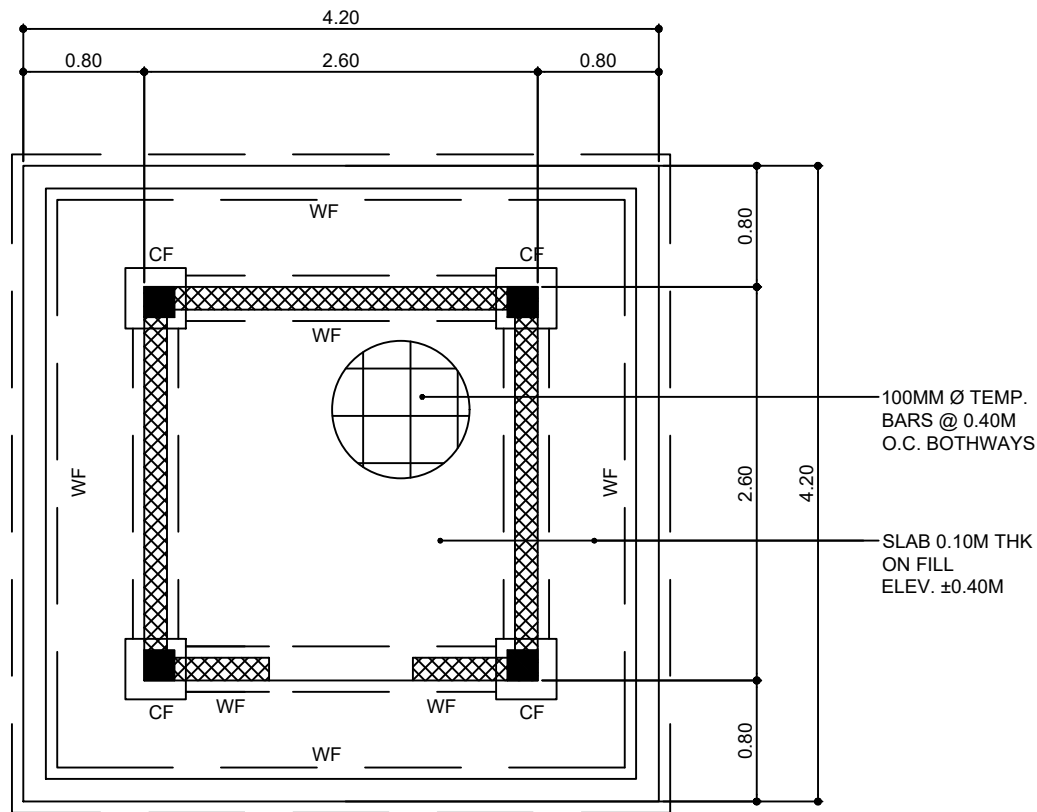


3
PUMP HOUSE DETAIL
FRONT ELEVATION
SCALE 1:30

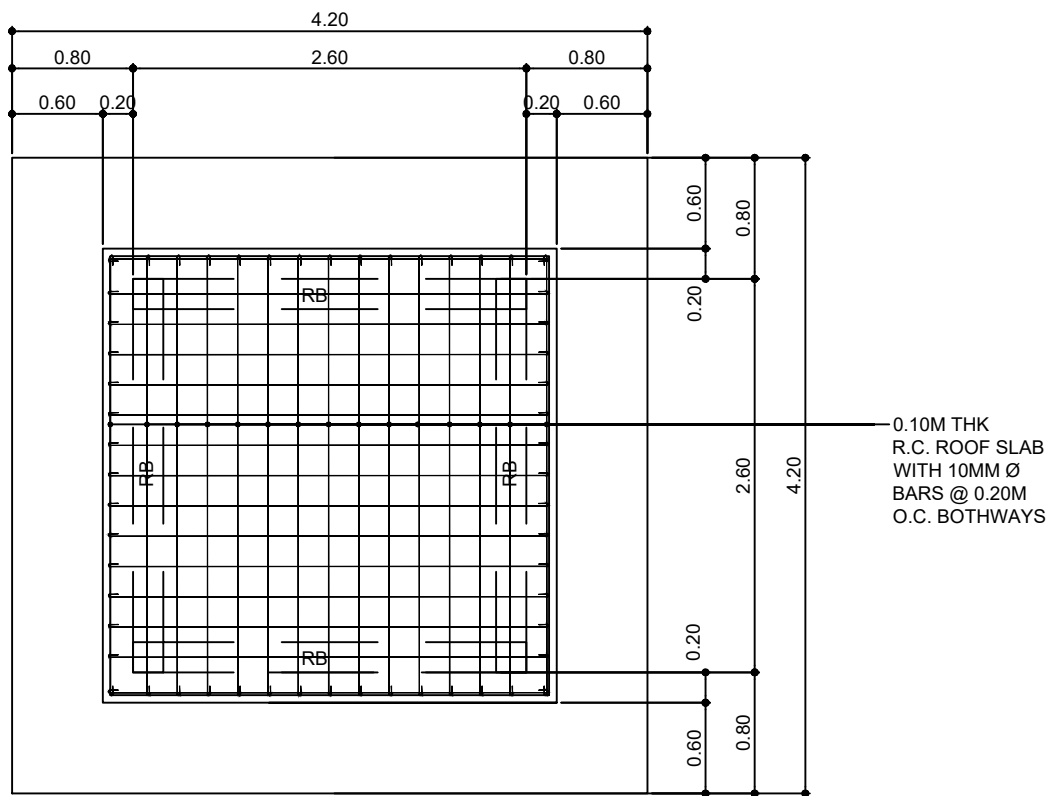


4
PUMP HOUSE DETAIL
TYPICAL SIDE ELEVATION
SCALE 1:30

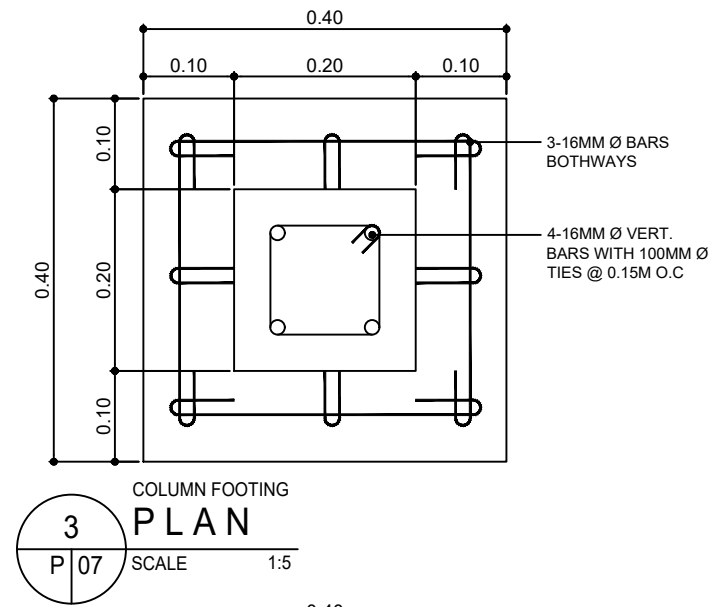
	Office of the President NATIONAL HOUSING AUTHORITY Elliptical Road, Diliman, Quezon City	ENGINEER:	DESIGNED BY:	CHECKED BY:	STANDARD DESIGNED PREPARED BY:	APPROVED BY:	SHEET NO.		
	PROJECT TITLE: PROPOSED STANDARD 5-STOREY LOW-RISE BUILDING & LAND DEVELOPMENT LOCATION:	REG No.:	DATE:	DRAWN BY:	DATE:	HOUSING TECHNOLOGY DEVELOPMENT OFFICE		P 06 08	
		PTR No.:	PLACE:	SHEET CONTENT:	DATE:	SUBMITTED BY:			RECOMMENDING APPROVAL:
		PUMP HOUSE DETAIL		REVISIONS:	DATE:	JUANCHO M. CORPUZ DISTRICT MANAGER MANAVA DISTRICT OFFICE			MAURA D. AGGARAO PROGRAM MANAGER PROGRAM OFFICE, NORTH SECTOR
						MARCELINO P. ESCALADA, JR. GENERAL MANAGER			



1 FOUNDATION PLAN
P 07 SCALE 1:30



2 ROOF FRAMING PLAN
P 07 SCALE 1:30



3 COLUMN FOOTING PLAN
P 07 SCALE 1:5

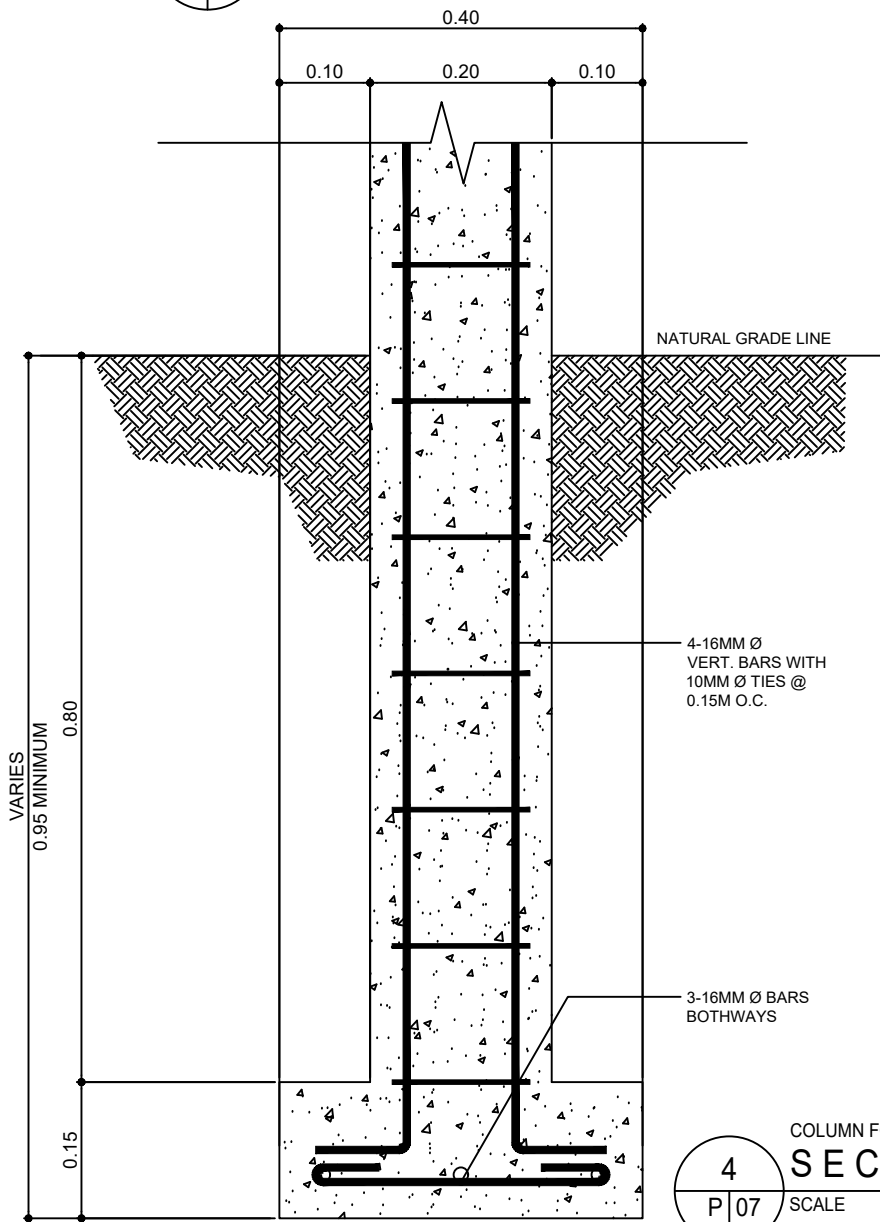
BEAM DIMENSION & REBARS

MARKED	SIZE	MID-SPAN		SUPPORT/END	
		BOTTOM BARS	TOP BARS	BOTTOM BARS	TOP BARS
RB	8" x 12"	3-12MM ϕ	2-12MM ϕ	2-12MM ϕ	3-12MM ϕ

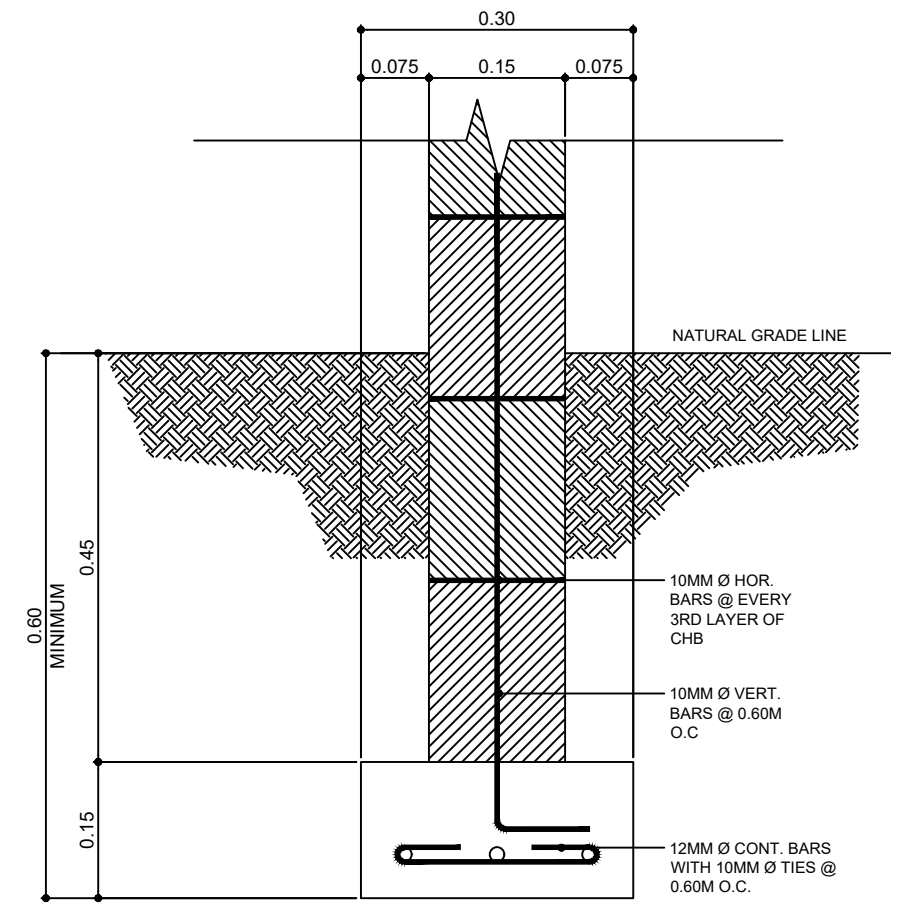
NOTE: PROVIDE NO.3 STIRRUPS SPACED 3 @ 0.15 METERS O.C.

SCHEDULE OF BEAM

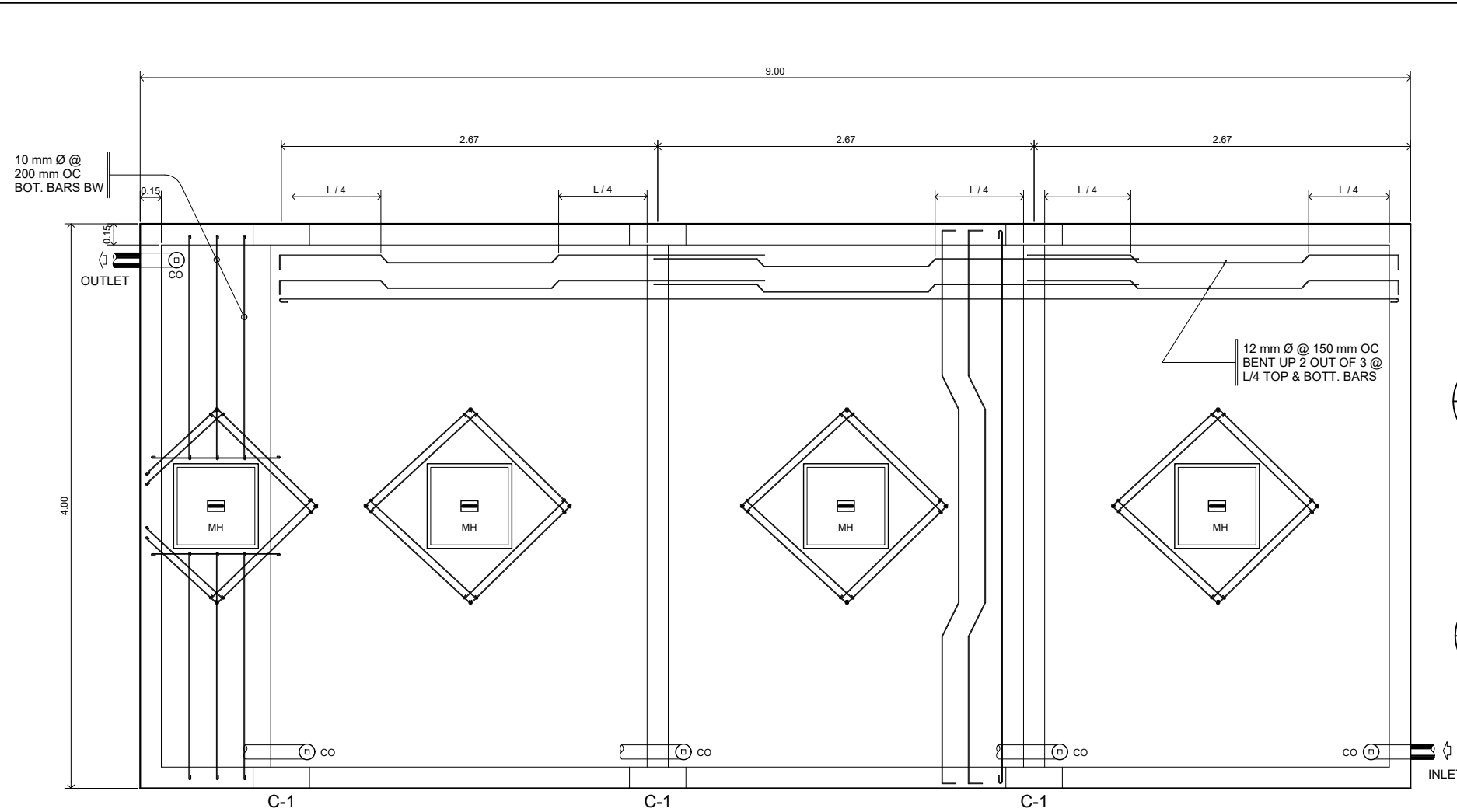
MID-SPAN	SUPPORT
RB	RB



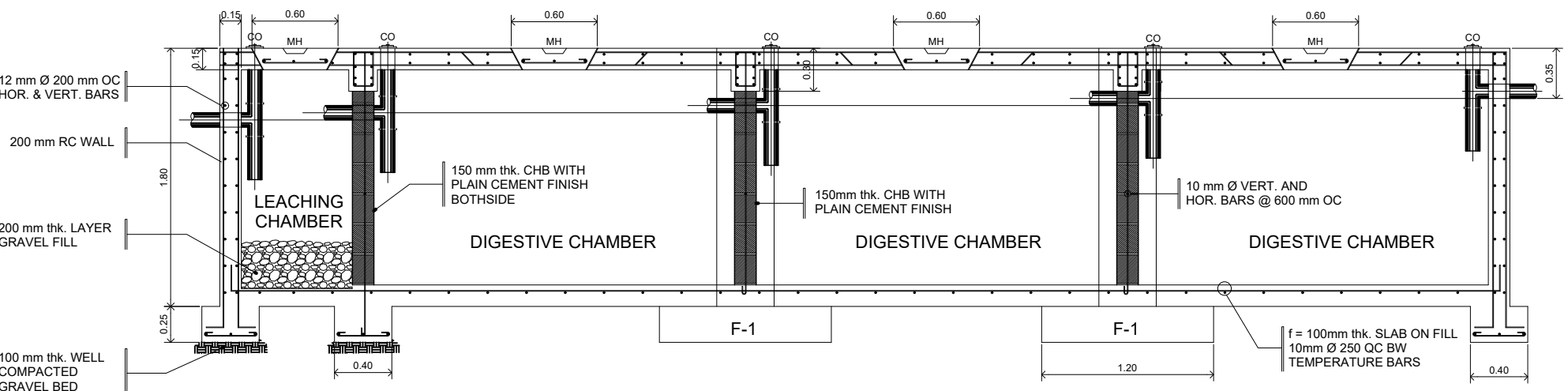
4 COLUMN FOOTING SECTION
P 07 SCALE 1:5



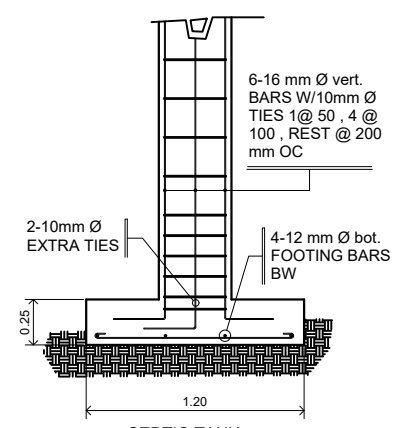
5 WALL FOOTING SECTION
P 07 SCALE 1:5



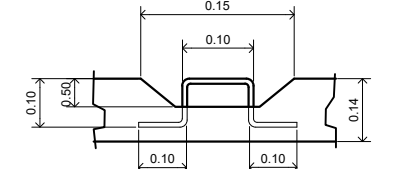
1 SEPTIC TANK PLAN
 P 08 SCALE 1:25



2 SEPTIC TANK SECTION
 P 08 SCALE 1:25



3 SEPTIC TANK F-1 DETAIL
 P 08 SCALE 1:25



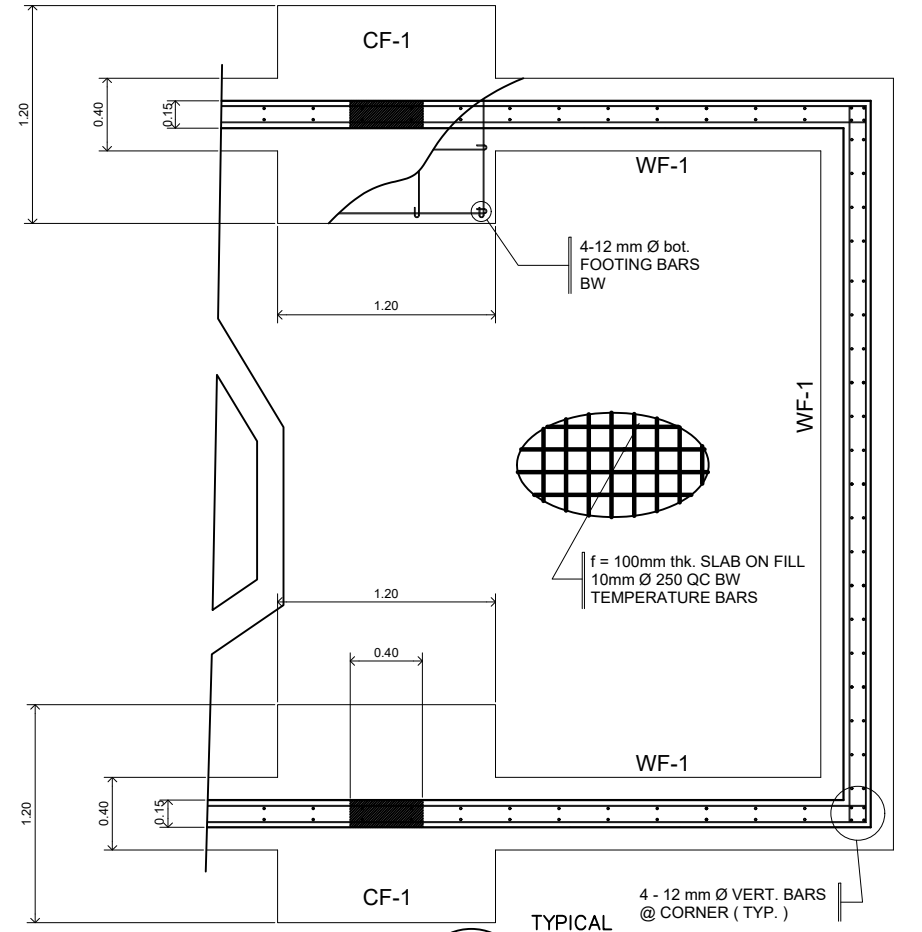
5 ISOMETRIC MANHOLE COVER
 A 08 SCALE NTS

DESIGN CRITERIA

- LOADING : ASSUMED H10 - 44 ASSHTO LOADING PASSING THRU ON THE TOP OF SEPTIC TANK AS SURCHARGE (USE 50 % OF H10 - 44 LOADING)
- FOR CONCRETE : USE $f_c = 20.70 \text{ MPa @ 28 DAYS}$
- FOR REINFORCING STEEL BARS INTERMEDIATE GRADE 40 DEFORMED BARS USE : $f_y = 275 \text{ MPa}$
- ALLOWABLE SOIL BEARING CAPACITY = 95.76 KPA

NOTE ON SEPTIC TANK

- NO SEPTIC TANK SHALL BE INSTALLED WITHIN OR UNDER THE BUILDING
- TANKS MUST BE BUILT WATER TIGHT OF REINFORCED CONCRETE
- BOTH COMPARTMENTS ARE PROVIDED WITH MANHOLES AND TIGHT COVERS FOR CLEANING AND NECESSARY REPAIRS.
- INLETS AND OUTLETS ARE SUBMERGED AND ARRANGED IN SUCH A WAY THAT NEITHER SLUDGE NOR SCUM BE UNDULY DISTURBED.
- INLETS AND OUTLETS ARE ARRANGED SO AS TO DELIVER THE SEWER TO THE MIDDLE THIRD OF THE TANK DEPTH.
- THE VAULT IS VENTED THRU THE SANITARY TEES IN THE INLET AND OUTLETS HAVING TOP ENDS OPEN SCREENED TO MAKE TANK MOSQUITO - PROOF
- THE BOTTOM OF THE TANK SHOULD SLOPE (1 : 10 MINIMUM) TOWARDS THE MANHOLE IN THE CENTER TO FACILITATE CLEANING .
- MINIMUM 500 mm OF AIR SPACE SHOULD BE LEFT BETWEEN THE TOP OF THE SEWAGE AND THE UNDER PART OF THE TANK COVER .



5 TYPICAL FOUNDATION PLAN
 P 08 SCALE NTS

Office of the President
NATIONAL HOUSING AUTHORITY
 Elliptical Road, Diliman, Quezon City

PROJECT TITLE:
PROPOSED STANDARD 5-STOREY LOW-RISE BUILDING & LAND DEVELOPMENT

LOCATION:
PHASE 2, BARANGAY PANGHULO, MALABON CITY

ENGINEER:	DESIGNED BY:	CHECKED BY:	STANDARD DESIGNED PREPARED BY:	APPROVED BY:
	DRAWN BY:	DATE:	HOUSING TECHNOLOGY DEVELOPMENT OFFICE	
	SHEET CONTENT:		SUBMITTED BY:	REVIEWED BY:
	REVISIONS:	DATE:		
REG No.:	DATE:	JUANCHO M. CORPUZ	MAURA D. AGGARAO	MARIA TERESA P. OBLIPIAS
PTR No.:	PLACE:	DISTRICT MANAGER	PROGRAM MANAGER	REGIONAL MANAGER
		MANAVA DISTRICT OFFICE	PROGRAM OFFICE, NORTH SECTOR	NORTH SECTOR
				MA. BENITA O. REGALA
				GROUP MANAGER, HSSG
				MARCELINO P. ESCALADA, JR.
				GENERAL MANAGER

SHEET NO.
 P
 08
 08