REPUBLIC OF THE PHILIPPINES



DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

BUREAU OF DESIGN

BUILDINGS DIVISION

BONIFACIO DRIVE

PORT AREA, MANILA

PROJECT TITLE:

DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN

NA ISTRIBLE

JOSEPHINE P. ISTURIS

CHIEF, BUILDINGS DIVISION, BUREAU OF DESIGN

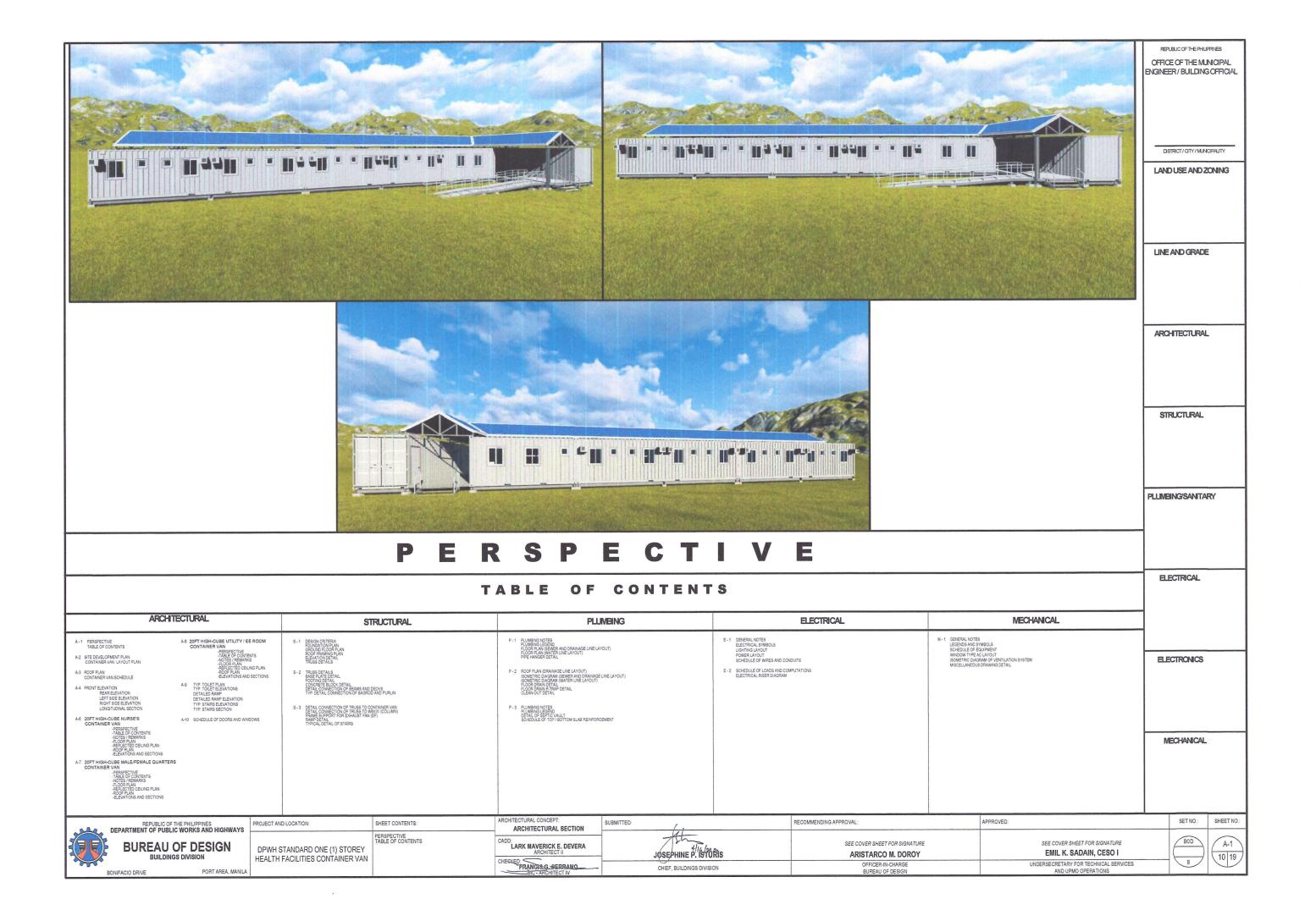
RECOMMENDING APPROVAL

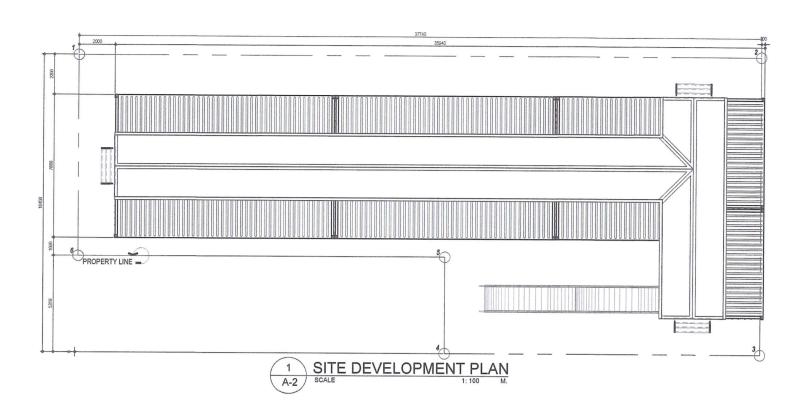
ARISTARCO M. DOROY

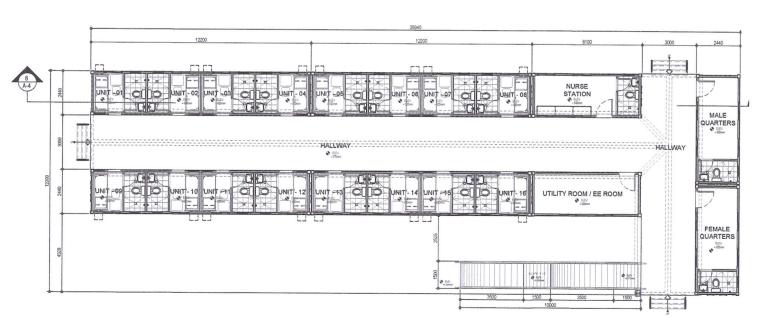
(A)

APPROVED

EMIL K. SADAIN, CESO I







2 CONTAINER VAN LAYOUT PLAN
1: 100 M.

ARCHITECTURAL CONCEPT:
ARCHITECTURAL SECTION

CADD: LARK MAVERICK E. DEVERA ARCHITECT II

	BUREAU (THE PHILIPPINES C WORKS AND HIGHWAYS OF DESIGN IS DIVISION
. 000	BONIFACIO DRIVE	PORT AREA, MANILA

TOOLOT AND LOOK HOW.	SHEET CONTENTS.
DPWH STANDARD ONE (1) STOREY	SITE DEVELOPMENT PLAN
HEALTH FACILITIES CONTAINER VAN	CONTAINER VAN LAYOUT PLAN

TED:	/ ,	
	JOSEPHINE P. ISTURIS	
	CHIEF, BUILDINGS DIVISION	

SEE COVER SHEET FOR SIGNATURE	
ARISTARCO M. DOROY	
OFFICER-IN-CHARGE	
BUREAU OF DESIGN	

APPROVED:

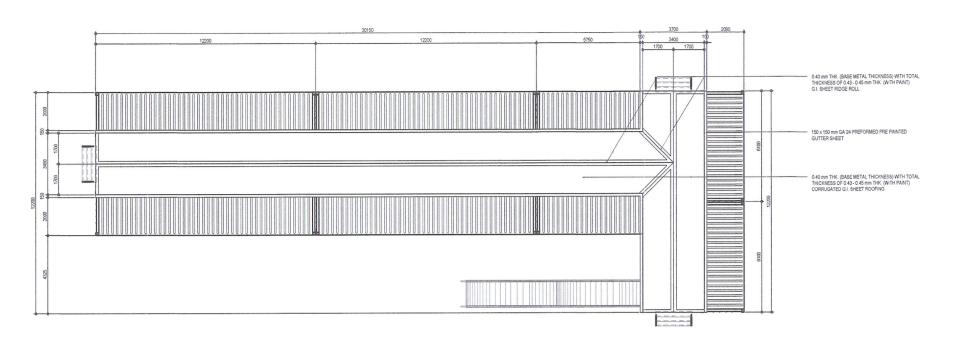
RECOMMENDING APPROVAL:

SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I	BOD
UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS	

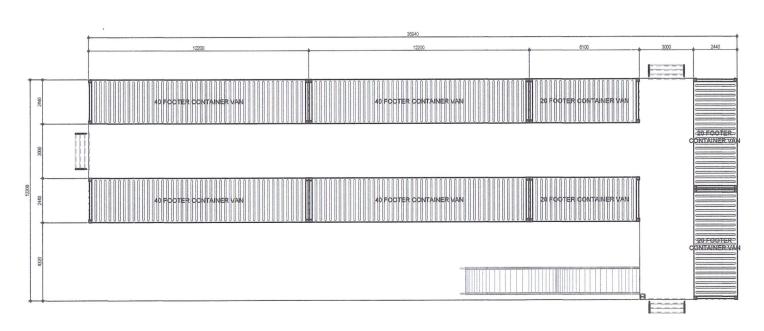
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SET NO.:







2 CONTAINER VAN SCHEDULE A-3 SCALE 1: 100 M.

SUBMITTED:

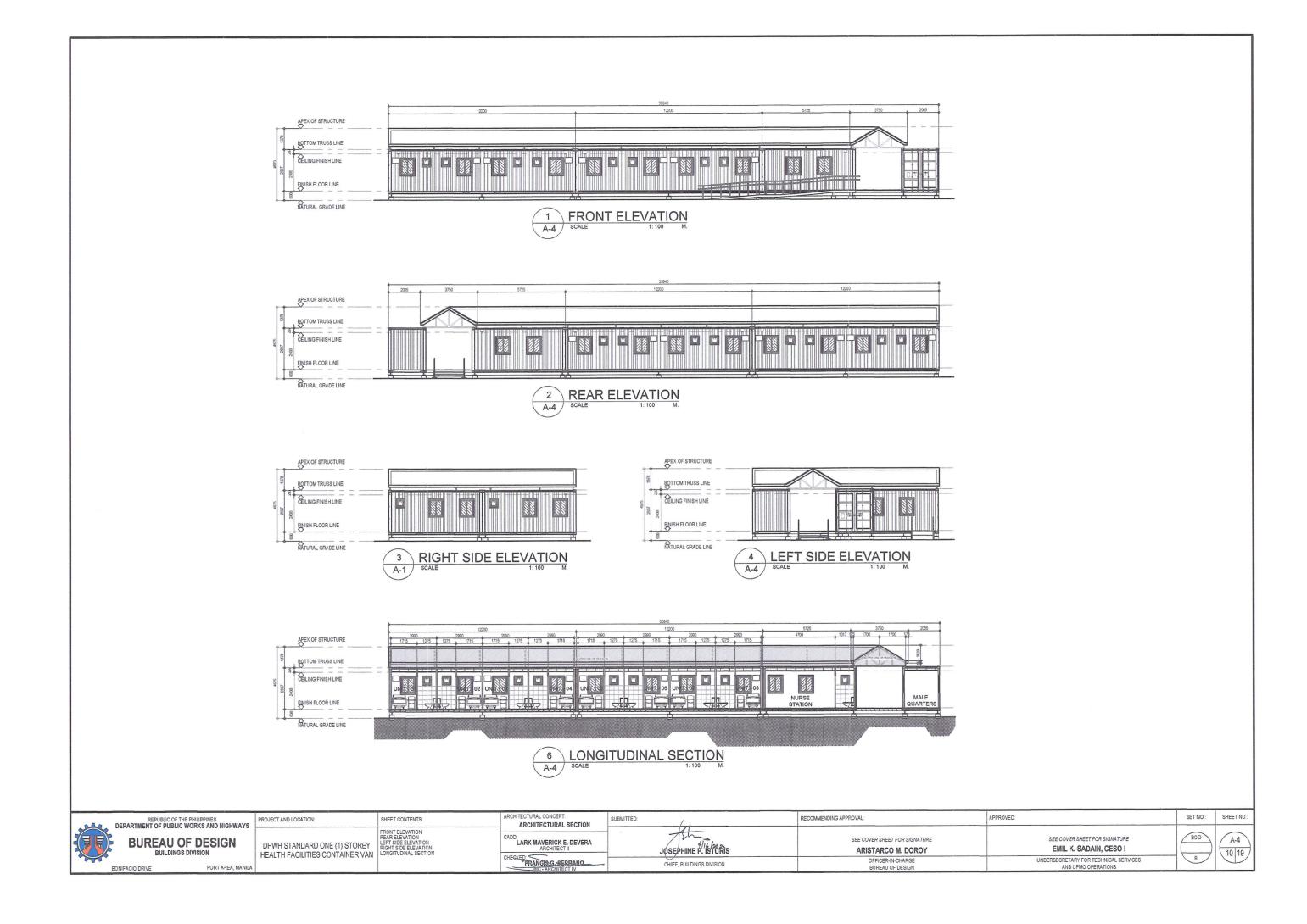


DJECT AND LOCATION:	SHEET CONTENTS:	ARCHITECTURAL CONCEPT: ARCHITECTURAL SECTION	
DPWH STANDARD ONE (1) STOREY	ROOF PLAN CONTAINER VAN SCHEDULE	CADD: LARK MAVERICK E. DEVERA ARCHITECT II	
EALTH FACILITIES CONTAINER VAN		CHECKED: FRANCIS G. SERRANO DIC - ARCHITECT IV	

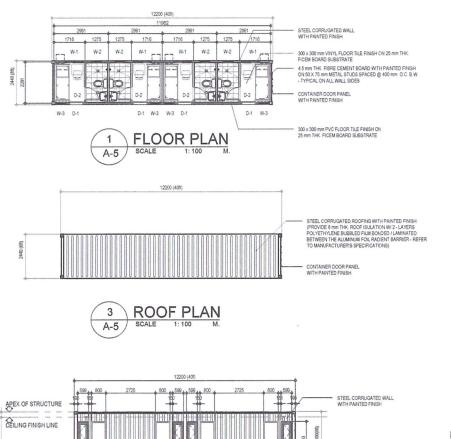
(.	RECOMMENDING APPROVAL:	APPROVED:	SET NO.:	
JØSEPHINE P. ISTURIS	SEE COVER SHEET FOR SIGNATURE ARISTARCO M. DOROY	SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I	BOD	(
CHIEF, BUILDINGS DIVISION	OFFICER-IN-CHARGE BUREAU OF DESIGN	UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS	B /	

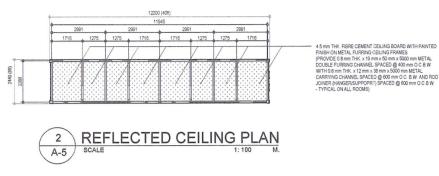
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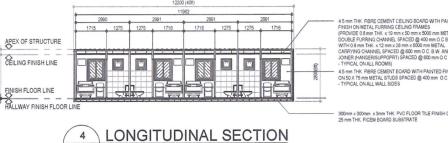
A-3 10 19



40FT HIGH-CUBE FOUR (4) UNIT ISOLATION CONTAINER VAN







CONTAINER VAN:

- USE 40FT HIGH-CUBE CONTAINER VAN (40ft x 8ft x 9ft)
- USE SPRAY INSULATING FOAM/SEALANT FOR GAPS
- USE TROWEL-ON WATERPROOFING MEMBRANE BETWEEN BACKERBOARD AND PVC TILE
- USE SCOTCH WELD ACRYLIC ADHESIVE FOR PVC TILES PROVIDE TWO (2) 25 mm THK. FIBER CEMENT BOARD UNDER D-2

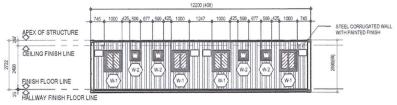
FOR WALL INSULATION:

-PROVIDE 8 mm THK. WALL INSULATION W/ 2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

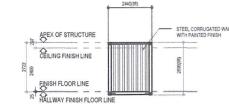
FOR ROOF INSULATION:
-PROVIDE 8 mm THK. ROOF INSULATION W/2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

FOR FLOOR INSULATION:

PROVIDE 8 mm THK. FLOOR INSULATION W/ 2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS



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ECT AND LOCATION:	SHEET CONTENTS:	ARCHITECT ARC	
PWH STANDARD ONE (1) STOREY ALTH FACILITIES CONTAINER VAN	40FT HIGH-CUBE FOUR (4) UNIT ISOLATION CONTAINER VAN PERSPECTIVE -TABLE OF CONTENTS MATTER (PERMARKS	CADD:	
	-NOTES / REMARKS -FLOOR PLAN -REPLECTED CEILING PLAN -ROOF PLAN -ELEVATIONS AND SECTIONS	CHECKED:	



 41-
JOSEPHINE P. ISTURIS
CHIEF. BUILDINGS DIVISION

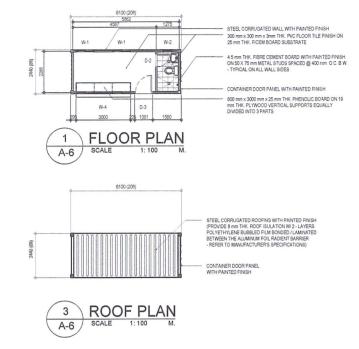
RECOMMENDING APPROVAL:	
SEE COVER SHEET FOR SIGNATURE	
ARISTARCO M. DOROY	
OFFICER-IN-CHARGE BUREAU OF DESIGN	

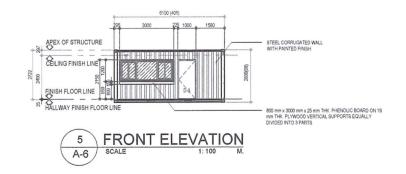
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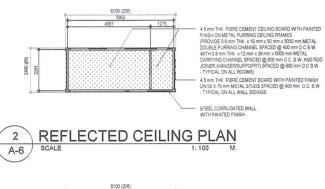
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20FT HIGH-CUBE NURSE'S STATION CONTAINER VAN

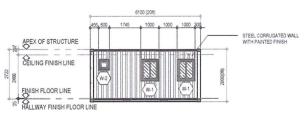




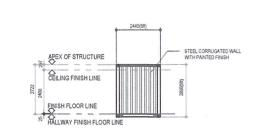




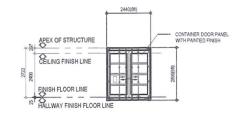












4.5 mm THK. FIBRE CEMENT BOARD WITH PAINTED FINISH ON 50 X 75 mm METAL STUDS SPACED @ 400 mm O C B W - TYPICAL ON ALL WALL SIDES



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		OF DESIGN S DIVISION	
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PROJECT AND LOCATION:	SHEET CONTENTS:
DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN	20FT HIGH-CUBE NURSE'S STATION CONTAINER VAN PERSPECTIVE TABLE OF CONTENTS NOTES / REABARS FLOOR PLAN REFLECTED CEILING PLAN REPLECTED CEILING PLAN ROOF PLAN LEPLATIONS AND SECTIONS

ARCHITECTURAL CONCEPT: ARCHITECTURAL SECTION	SUBMITTED:
CADD: LARK MAVERICK E. DEVERA ARCHITECT II	
CHECKED: FRANCIS G SERRANO ONC. APCHITECT IV	

/ ,	
JOSEPHINE P. ISTURIS	
CHIEF BUILDINGS DIVISION	

RECOMMENDING APPROVAL:	APPROVED:
SEE COVER SHEET FOR SIGNATURE ARISTARCO M. DOROY	SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I
OFFICER-IN-CHARGE BUREAU OF DESIGN	UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS

CONTAINER VAN:

AND PVC TILE

FOR WALL INSULATION:

FOR ROOF INSULATION:

FOR FLOOR INSULATION:

A-6

- USE 20FT HIGH-CUBE CONTAINER VAN (40ft x 8ft x 9ft) - USE SPRAY INSULATING FOAM/SEALANT FOR GAPS

- USE SCOTCH WELD ACRYLIC ADHESIVE FOR PVC TILES

BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

200 505 PART OF NURSE STATION

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REFER TO MANUFACTURER'S SPECIFICATIONS

- USE TROWEL-ON WATERPROOFING MEMBRANE BETWEEN BACKERBOARD

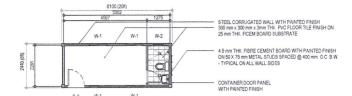
-PROVIDE 8 mm THK. WALL ISULATION W/ 2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT BARRIER -

POR ROUP INSULATION.
-PROVIDE 8 mm THK. ROOF ISULATION W/2 - LAYERS POLYETHYLENE
BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT

PROVIDE 8 mm THK. FLOOR INSULATION W/ 2 - LAYERS POLYETHYLENE
BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT

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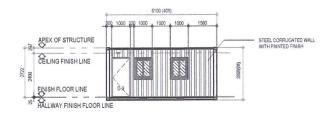
20FT HIGH-CUBE MALE/FEMALE QUARTERS CONTAINER VAN



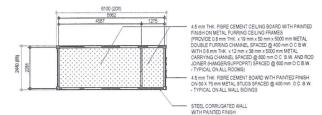




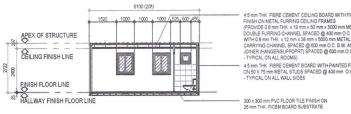




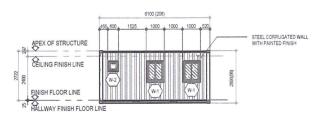




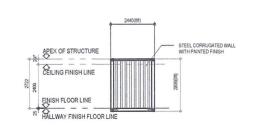




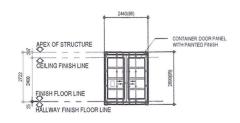














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		OF DESIGN	[H
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ROJECT AND LOCATION:	SHEET CONTENTS:
DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN	20FT HIGH-CUBE MALE/FEMALE QUARTERS CONTAINER VAN -PERSPECTIVE -TABLE OF CONTENTS -NOTES / REMARKS -FLOOR FLAN -ROOF PLAN

ARCHITECTURAL CONCEPT: ARCHITECTURAL SECTION	SUBMITTED:
CADD: LARK MAVERICK E. DEVERA ARCHITECT II	
CHECKED: FRANCIS G SERRANO DIG-ARCHITECT IV	

i:	1,	
	JOSEPHINE P. ISTURAS	
	CHIEF. BUILDINGS DIVISION	Ī

RECOMMENDING APPROVAL:	APPROVED:
SEE COVER SHEET FOR SIGNATURE ARISTARCO M. DOROY	SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I
OFFICER-IN-CHARGE BUREAU OF DESIGN	UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS

CONTAINER VAN:

AND PVC TILE

FOR WALL INSULATION:

FOR ROOF INSULATION:

- USE 20FT HIGH-CUBE CONTAINER VAN (40ft x 8ft x 9ft) - USE SPRAY INSULATING FOAM/SEALANT FOR GAPS

- USE SCOTCH WELD ACRYLIC ADHESIVE FOR PVC TILES

REFER TO MANUFACTURER'S SPECIFICATIONS

- USE TROWEL-ON WATERPROOFING MEMBRANE BETWEEN BACKERBOARD

-PROVIDE 8 mm THK. WALL ISULATION W/ 2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT BARRIER -

-PROVIDE 8 mm THK. ROOF ISULATION W/2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT

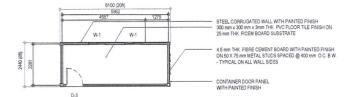
FOR FLOOR INSULATION:
-PROVIDE 8 mm THK. FLOOR INSULATION W/2 - LAYERS POLYETHYLENE

BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT

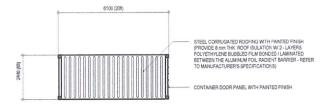
BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

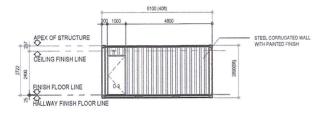
20FT HIGH-CUBE UTILITY/EE ROOM CONTAINER VAN



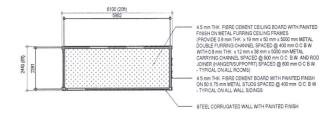




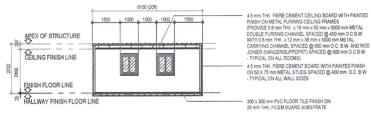


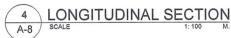


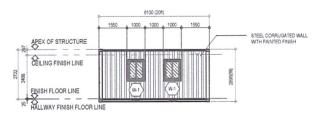




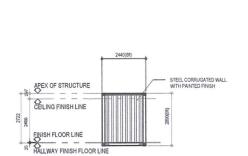




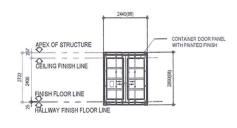














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SET NO .:

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		THE PHILIPPINES IC WORKS AND HIGHWAYS	PR
		OF DESIGN SS DIVISION	Н
440	BONIFACIO DRIVE	PORT AREA, MANILA	

PROJECT AND LOCATION:	SHEET CONTENTS: 20FT HIGH-CUBE UTILITY / EE ROOM	ARCHITECTURAL CONCEPT: ARCHITECTURAL SECTION
DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN	CONTAINER VAN PERSPECTIVE - IABLE OF COMMENTS - HOTES HEBMENS	CADD: LARK MAVERICK E. DEVERA ARCHITECT II
		CHECKED: FRANCIS G. SERRANO

TTED:	/ ,
	JOSEPHINE P. ISTURIS
	CHIEF BUILDINGS DIVISION

RECOMMENDING APPROVAL:	APPROVED:
SEE COVER SHEET FOR SIGNATURE	SEE COVER SHEET FOR SIGNATURE
ARISTARCO M. DOROY	EMIL K. SADAIN, CESO I
OFFICER-IN-CHARGE	UNDERSECRETARY FOR TECHNICAL SERVICES

CONTAINER VAN:

FOR WALL INSULATION:

FOR ROOF INSULATION:

- USE 20FT HIGH-CUBE CONTAINER VAN (40ft x 8ft x 9ft)
- USE SPRAY INSULATING FOAM/SEALANT FOR GAPS

REFER TO MANUFACTURER'S SPECIFICATIONS

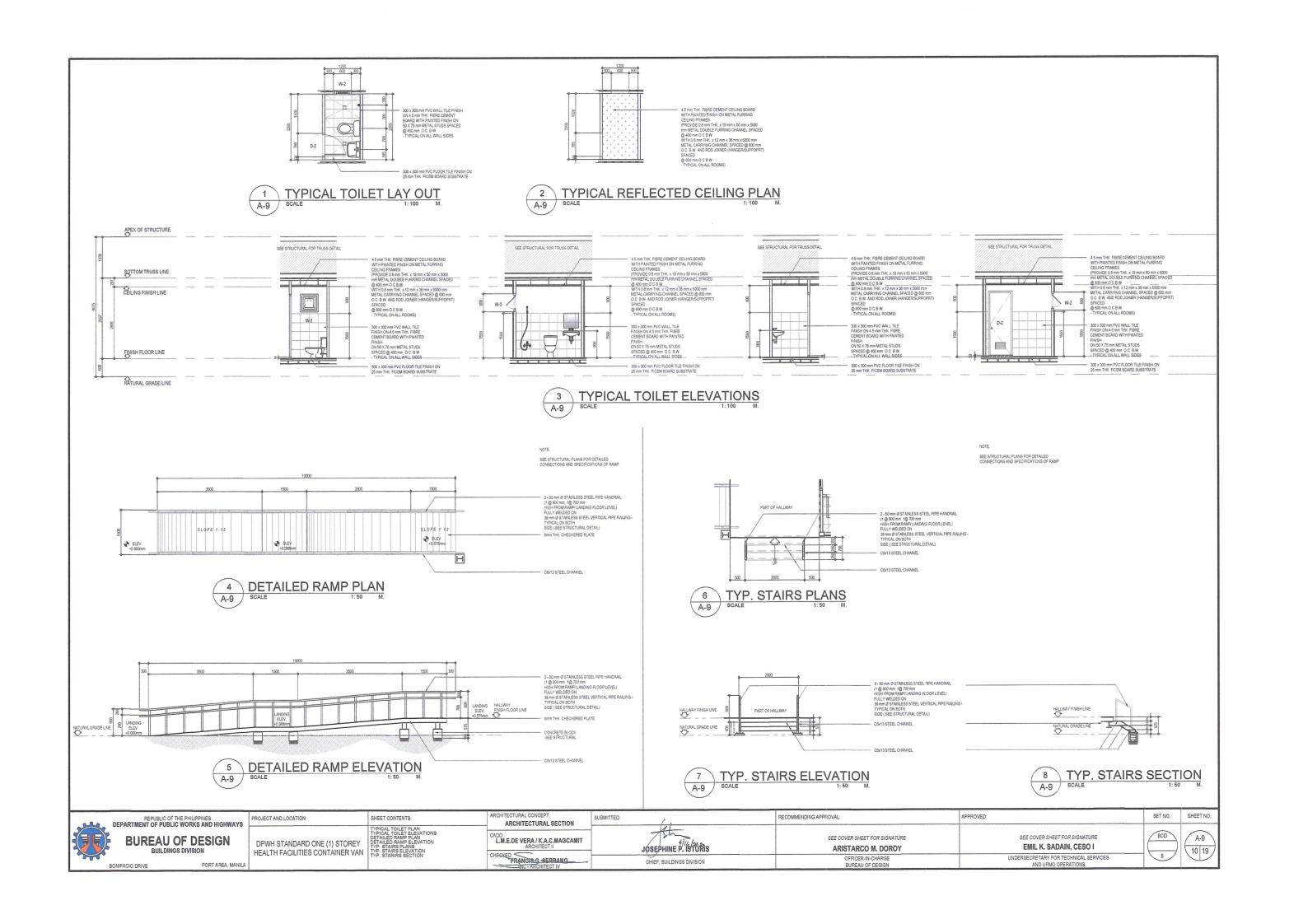
-PROVIDE 8 mm THK. WALL ISULATION W/ 2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT BARRIER -

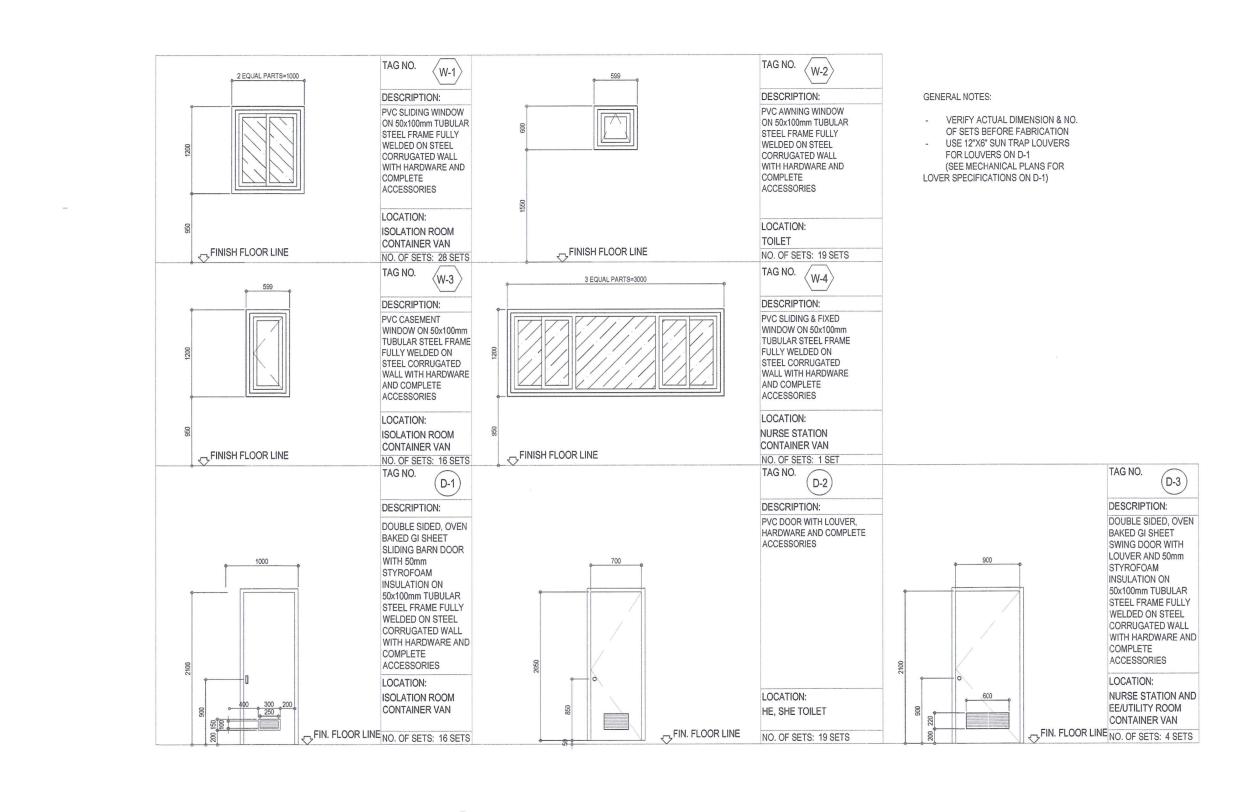
-PROVIDE 8 mm THK. ROOF ISULATION W/2 - LAYERS POLYETHYLENE BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT

FOR FLOOR INSULATION:
-PROVIDE 8 mm THK. FLOOR INSULATION W/ 2 - LAYERS POLYETHYLENE
BUBBLED FILM BONDED / LAMINATED BETWEEN THE ALUMINUM FOIL RADIENT

BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

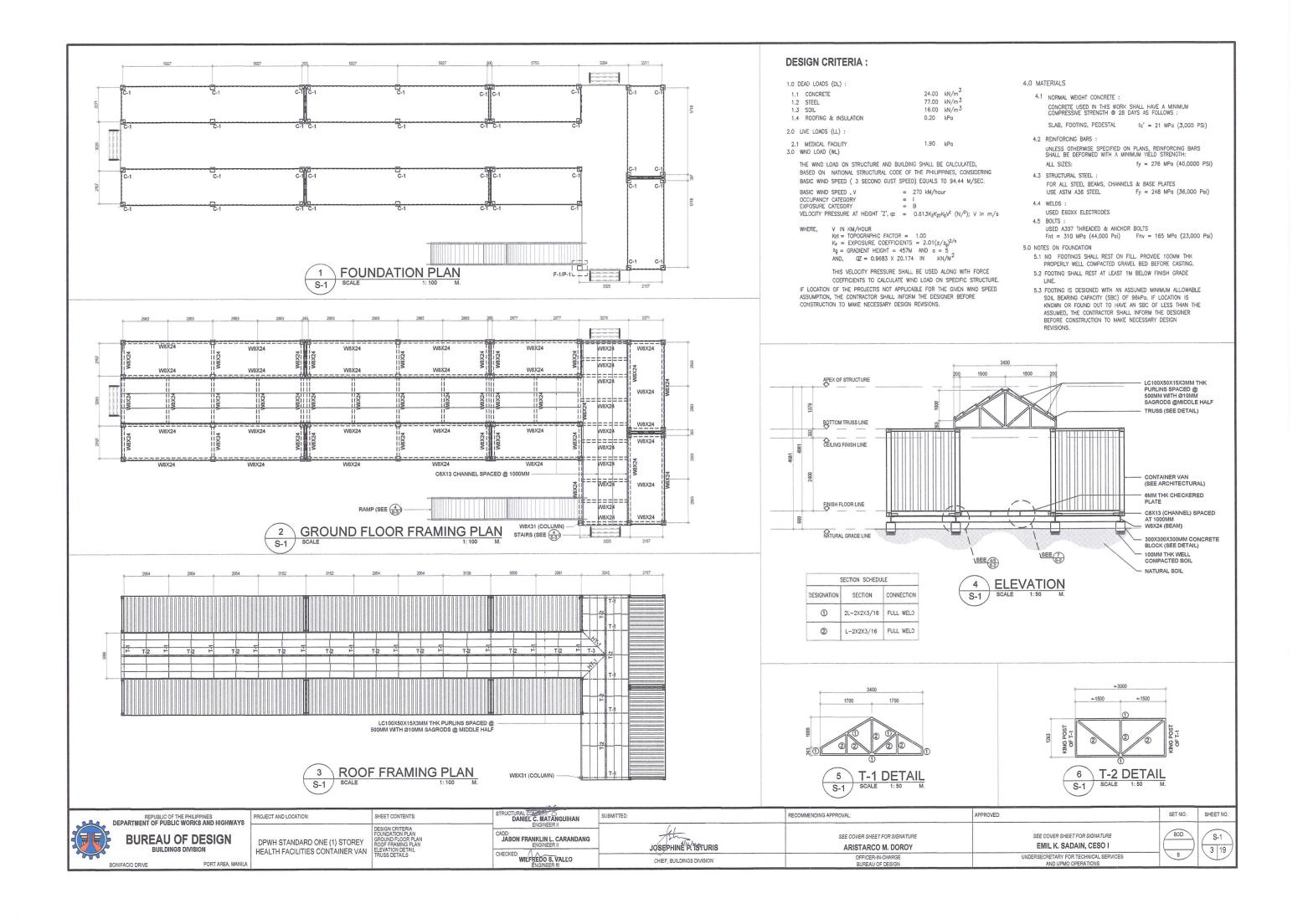
BARRIER - REFER TO MANUFACTURER'S SPECIFICATIONS

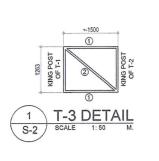


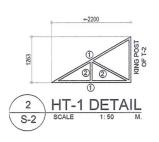


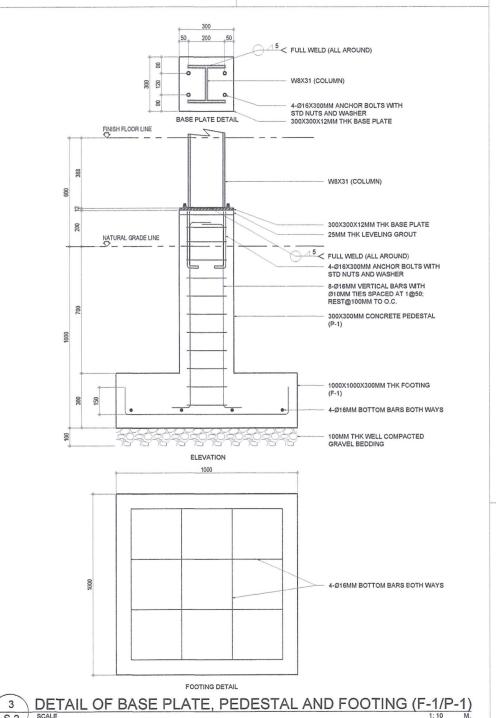
SCHEDULE OF DOORS AND WINDOWS 1: 20 M

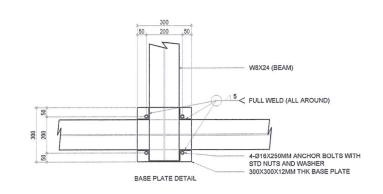


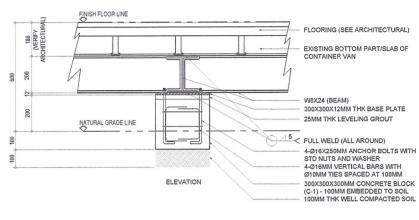


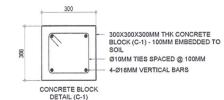




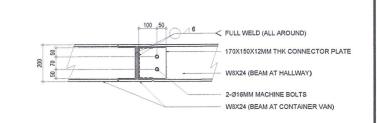




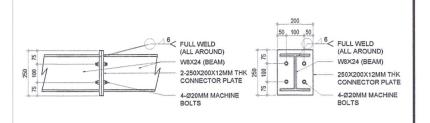




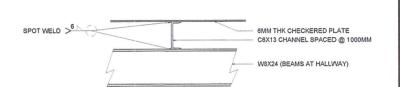
4 DETAIL OF BASE PLATE AND CONCRETE BLOCK (C-1)
1: 10 M.



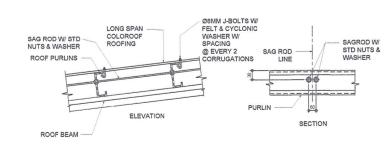
5 DETAIL CONNECTION OF W8X24 (BEAM)
1: 10 M.



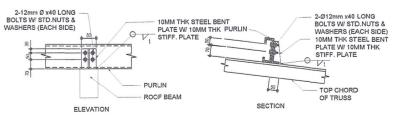
6 DETAIL OF SPLICE FOR W8X24
S-2 SCALE 1: 10 M.



7 DETAIL CONNECTION OF DECK AT HALLWAY 1:10 M.



8 TYP. DETAIL CONNECTION OF SAGROD NT.S.



9 TYP. DETAIL CONNECTION OF PURLIN NT.S.

SHEET NO.:

S-2

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		THE PHILIPPINES
-		OF DESIGN 3S DIVISION
-	BONIFACIO DRIVE	PORT AREA, MANILA

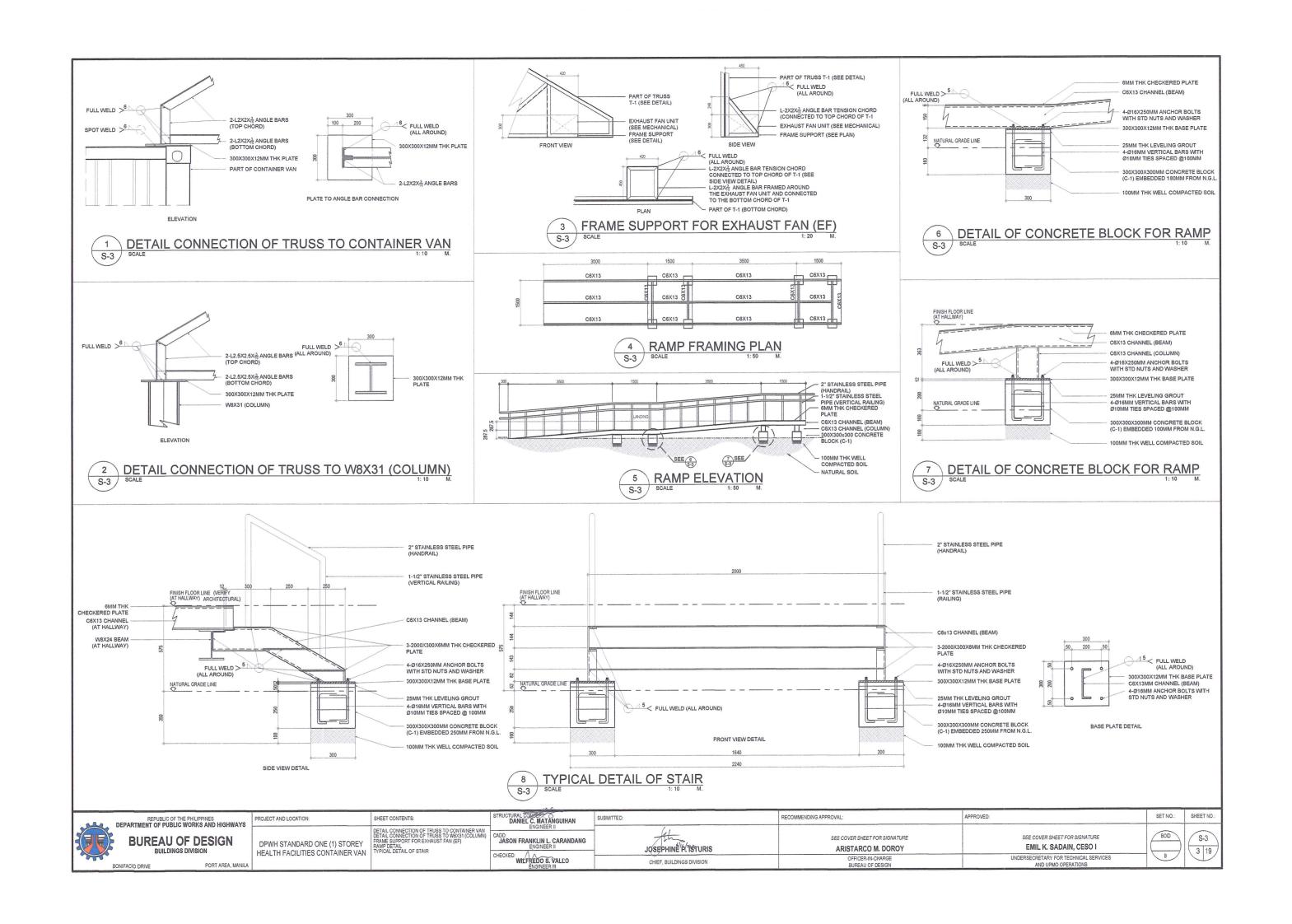
S-2

WORKS AND HIGHWAYS	PROJECT AND LOCATION:	SHEET CONTENTS:
OF DESIGN B DIVISION	DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN	TRUSS DE TAILS BASE PLATE DETAIL PEDESTAL DETAIL FOOTING DETAIL CONCRETE BLOCK DETAIL DETAIL CONNECTION OF BEAMS AND DECKS
PORT AREA, MANILA		TYP. DETAIL CONNECTION OF SAGROD AND PURLIN

	STRUCTURAL COMPENT OF DANIEL C. MATANGUIHAN ENGINEER II	SUBMITTED:
	CADD: JASON FRANKLIN L. CARANDANG ENGINEER II	
.iN	CHECKED: WILFREDO S. VALLO ENGINEER III	

	RECOMMENDING AFFROVAL.
Ah	SEE COVER SHEET FOR SIGNATURE
JOSEPHINE PASTURIS	ARISTARCO M. DOROY
CHIEF, BUILDINGS DIVISION	OFFICER-IN-CHARGE

APPROVED:	SET NO.:
URE SEE COVER SHEET FOR SIGNATURE Y EMIL K. SADAIN, CESO I	BOD
UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS	В

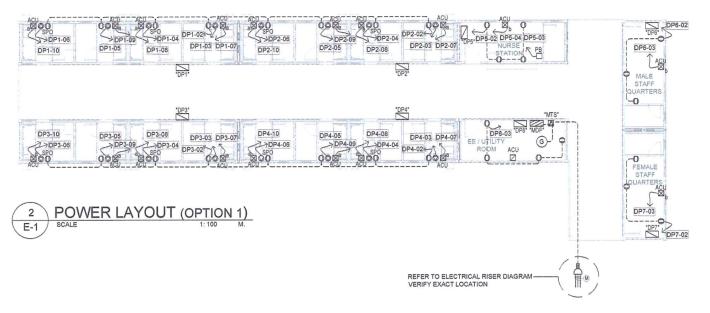


GENERAL NOTES:

- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, EXISTING APPLICABLE ORDINANCES, RULES AND REGULATIONS OF THE LOCAL GOVERNMENT AND WITH THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
- 2. THE TYPE OF SERVICE POWER SUPPLY TO BE USED SHALL BE SINGLE-PHASE, 2-WIRE, 230V, 60 HERTZ, A.C.
- 3. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO THE
- UNLESS OTHERWISE SPECIFIED, THE MINIMUM SIZES OF WIRE AND GALVANIZED RIGID STEEL CONDUIT TO BE USED SHALL BE 3.5mm²,THHN AND 15mm NOMINAL DIAMETER, RESPECTIVELY. LIKEWISE ALL ELECTRICAL WIRES SHALL BE COLOR-CODED.
- 5. ALL LIGHTING CIRCUIT HOMERUNS AND CONVENIENCE OUTLETS SHALL BE WIRED WITH NOT LESS THAN 3.5 mm² IN SIZE.
- WHEREVER REQUIRED AND NECESSARY, PULL OR JUNCTION BOXES SHALL BE INSTALLED AT CONVENIENT AND INCONSPICUOUS LOCATION, ALTHOUGH SUCH BOXES ARE NOT SHOWN ON THE PLAN NOR MENTIONED IN THE SPECIFICATIONS.
- ALL NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE.
- 8. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND OF THE APPROVED TYPE FOR LOCATION AND PURPOSE.
- STANDARD TYPE OF ACCESSORIES, SPLICING DEVICES, TERMINATIONS AND OTHER APPURTENANCES FOR THE ENTIRE ELECTRICAL INSTALLATION SHALL BE USED.
- 10. ALL WALL OUTLETS SHALL BE INSTALLED AT THE FOLLOWING HEIGHTS ABOVE THE FINISHED FLOOR LEVEL. UNLESS NOTED IN THE PLAN.
- a) WALL SWITCHES @ 1300mm b) WALL CONVENIENCE OUTLETS @ 300 mm
- 11. ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER.

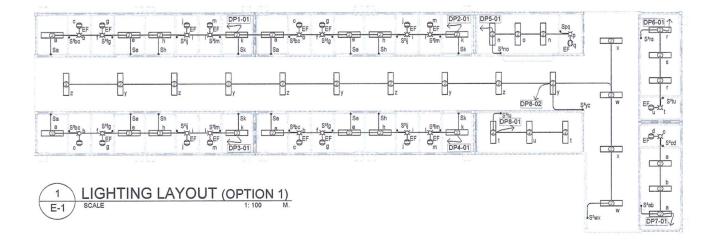
ELECTRICAL SYMBOLS

- 1-18 WATTS COMPACT FLUORESCENT LIGHTING FIXTURE
- 2-28 WATTS FLUORESCENT LIGHTING FIXTURE, BOX TYPE, SURFACED
 - CEILING MOUNTED SINGLE-POLE WALL SWITCHES ON ONE SWITCH PLATE,
- 2 SINGLE-POLE WALL SWITCHES ON ONE SWITCH PLATE,
- DUPLEX CONVENIENCE OUTLET, GROUNDING TYPE
- SPECIAL PURPOSE OUTLET, GROUNDING TYPE
- DISTRIBUTION PANEL
- MDP. DISTRIBUTION PANEL
- **G** GENERATING SET, PORTABLE TYPE
- M SERVICE KWHR METER
- MANUAL TRANSFER SWITCH
- __ _ _ UNDERGROUND OR UNDERFLOOR CONDUIT RUN
 - CONCEALED OR EMBEDDED CONDUIT RUN
- --- CIRCUIT HOMERUN



LEGEND:

- AUTOMATIC CIRCUIT BREAKER 50AF, 2P, 240VOLTS, 20AT IN NEMA 3R ENCLOSURE
- AUTOMATIC CIRCUIT BREAKER 50AF, 2P, 240VOLTS, 30AT IN NEMA 3R ENCLOSURE



SCHEDULE OF WIRE, CONDUIT, AND ROD:

SERVICE WIRE AND CONDUIT:

- 2 8,0mm2 THHN + 1 8,0mm2 THHN (G) in 25mm Ø RSC.
- 2 22mm2 THHN + 1 8.0mm2 THHN (G) in 32mm Ø RSC.
- 2 125mm² THHN + 1 30mm² THHN (G) in 65mm Ø RSC.

GROUNDING WIRE AND CONDUIT:

1 - 8.0 mm2 THHN in 15mm Ø PVC.

GW2 1 - 30 mm² THHN in 25mm Ø PVC,

GROUNDING ROD:

20mm@x 2400mm LENGTH COPPERCLAD GROUNDING 25mmØ x 3000mm LENGTH COPPERCLAD GROUNDING



BONIFACIO DRIVE

DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN

PORT AREA MANII A

PROJECT AND LOCATION

SHEET CONTENTS: ELECTRICAL SYMBOLS LIGHTING LAYOUT POWER LAYOUT SCHEDULE OF WIRES AND CONDUITS DESIGNED BX MARU BRYAN T. ZAPLAN SUBMITTED: MARU BRYANT. ZAPLAN JOSEPHINE P. ISTURIS CHECKED: ERIBERTO B. SIOSON CHIEF. BUILDINGS DIVISION

SEE COVER SHEET FOR SIGNATURE ARISTARCO M. DOROY

RECOMMENDING APPROVAL:

SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I UNDERSECRETARY FOR TECHNICAL SERVICES

APPROVED:

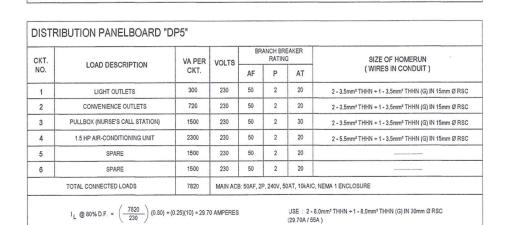
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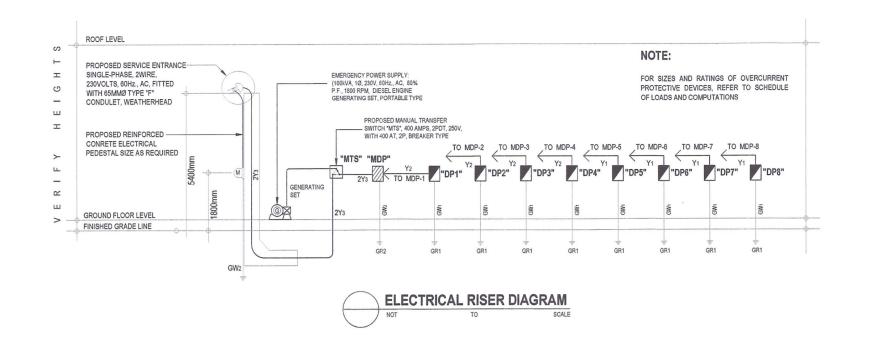


SCHEDULE OF LOADS AND COMPUTATION: (OPTION 1)

CKT.	LOAD DECORIDATION	LOAD DESCRIPTION VA PER		BRANCH BREAKER RATING			SIZE OF HOMERUN	
NO.	LOAD DESCRIPTION	CKT.	VOLTS	AF	Р	AT	(WIRES IN CONDUIT)	
1	"DP1"	14548	230	100	2	80	2 - 22mm² THHN + 1 - 8.0mm² THHN (G) IN 32mm Ø RSC	
2	*DP2*	14548	230	100	2	80	2 - 22mm² THHN + 1 - 8.0mm² THHN (G) IN 32mm Ø RSC	
3	"DP3"	14548	230	100	2	80	2 - 22mm² THHN + 1 - 8.0mm² THHN (G) IN 32mm Ø RSC	
4	"DP4"	14348	230	100	2	80	2 - 22mm² THHN + 1 - 8.0mm² THHN (G) IN 32mm Ø RS0	
5	"DP5"	7820	230	100	2	50	2 - 8.0mm² THHN + 1 - 8.0mm² THHN (G) IN 15mm Ø RS	
6	"DP6"	4640	230	100	2	40	2 - 8.0mm² THHN + 1 - 8.0mm² THHN (G) IN 15mm Ø RS	
7	*DP7*	4640	230	100	2	40	2 - 8.0mm² THHN + 1 - 8.0mm² THHN (G) IN 15mm Ø RS	
8	*DP8*	7020	230	100	2	50	2 - 8.0mm² THHN + 1 - 8.0mm² THHN (G) IN 15mm Ø RS	
9	SPARE	15000	230	100	2	80		
10	SPARE	15000	230	100	2	80		
	TOTAL CONNECTED LOADS	112312	MAIN ACB: 600AF, 2P, 240V, 600AT, 42kA				IC, NEMA 1 ENCLOSURE	

CKT.	LOAD DESCRIPTION	VA PER	VOLTS	BR	ANCH BR RATIN		SIZE OF HOMERUN
NO.	EOAD BEGORIE HOW	CKT.		AF	P AT (WIRES IN CONDUIT)	(WIRES IN CONDUIT)	
1	LIGHT OUTLETS	500	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
2	CONVENIENCE OUTLETS	540	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
3	SPECIAL PURPOSE OUTLET	1500	230	50	2	20	2 - 3,5mm² THHN + 1 - 3,5mm² THHN (G) IN 15mm Ø RSC
4	SPECIAL PURPOSE OUTLET	1500	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
5	SPECIAL PURPOSE OUTLET	1500	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
6	SPECIAL PURPOSE OUTLET	1500	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
7	0.5 HP AIR-CONDITIONING UNIT	1127	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
8	0.5 HP AIR-CONDITIONING UNIT	1127	230	50	2	20	2 - 3,5mm² THHN + 1 - 3,5mm² THHN (G) IN 15mm Ø RSC
9	0.5 HP AIR-CONDITIONING UNIT	1127	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
10	0.5 HP AIR-CONDITIONING UNIT	1127	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
11	SPARE	1500	230	50	2	20	
12	SPARE	1500	230	50	2	20	
	TOTAL CONNECTED LOADS	14548	MAIN ACE	B: 100AF, :	2P, 240V,	80AT, 10kAIC	C, NEMA 3R ENCLOSURE





CKT.	LOAD DECODIDION	VA PER	- 100210	BR			SIZE OF HOMERUN
NO.	LOAD DESCRIPTION	N OVT		AT	(WIRES IN CONDUIT)		
1	LIGHT OUTLETS	300	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
2	CONVENIENCE OUTLETS	540	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
3	1.5 HP AIR-CONDITIONING UNIT	2300	230	230 50 2 30 2-5		30	2 - 5.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
4	SPARE	1500	230	30 50 2 20		20	
	TOTAL CONNECTED LOADS	4640	MAIN ACB	: 50AF, 2F	, 240V, 40	AT, 10kAIC,	NEMA 1 ENCLOSURE

CKT.	LOAD DECODIFICAL	VA PER VOLTS BRANCH BREA		PER VOLTS BRANCH BREAKER RATING			SIZE OF HOMERUN
NO.	LOAD DESCRIPTION	CKT.			AT	(WIRES IN CONDUIT)	
1	LIGHT OUTLETS	300	230	50	2	20	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
2	LIGHT OUTLETS	700	230	50	2	20	2 - 3.5mm² THHN +1 - 3.5mm² THHN (G) IN 15mm Ø RSC
3	CONVENIENCE OUTLETS	720	230	50	2	30	2 - 3.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
4	1.5 HP AIR-CONDITIONING UNIT	2300	230	50	2	20	2 - 5.5mm² THHN + 1 - 3.5mm² THHN (G) IN 15mm Ø RSC
5	SPARE	1500	230	50	2	20	
6	SPARE	1500	230	50	2	20	
TOTAL CONNECTED LOADS 7020			MAIN ACE	3: 50AF, 2	P, 240V, 5	DAT, 10kAIC,	NEMA 1 ENCLOSURE

REQUIRED CAPACITY OF TRANSFORMER BANK:

TOTAL VA = 112312

I = (VA) = (112312) 230 230 I = 488.31 AMPS

 $KVA = \frac{EI(D.F)}{1000 (DIV.F.)}$ KVA = (230)(488.31)(0.85) 1000 (1.10)

= 86.79 kVA

USE: ONE(1) - 100 kVA, 34.5KV/230V, 1Ø, 60Hz., A.C. OISC, POLE MOUNTED DISTRIBUTION TRANSFORMERS

@ DIVERSITY FACTOR = 1.10 DEMAND FACTOR = 85%

REQUIRED CAPACITY OF GENERATING SET: (PROVISION)

I = (VA) = (112312) 230 230 I = 488.31 AMPS

KVA = __EI__

@ DIV. FACTOR = 1.10

KVA = (230) (488.31) (0.90) 1000 (1.10) = 91.89 kVA

USE: ONE(1) - 100 kVA, 230V, 3Ø, 80% P.F., 1800 RPM, 60Hz., A.C. PAD MOUNTED DIESEL ENGINE GENERATING SET

0.00	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	PROJECT AND LOCATION:
	BUREAU OF DESIGN BUILDINGS DIVISION	DPWH STANDARD HEALTH FACILITIES

REAU OF	DESIGN	DPWH STANDARD ONE (1) STO HEALTH FACILITIES CONTAINE
VE	PORT AREA, MANILA	

TOREY IER VAN

SHEET CONTENTS: SCHEDULE OF LOADS AND COMPUTATIONS ELECTRICAL RISER DIAGRAM

SUBMITTED: MARU BRYAN T. ZAPLAN ENGINEER II MARU BRYAN T. ZAPLAN ERIBERTO B. SIOSON

 JOSEPHINE P. STURIS	
CHIEF, BUILDINGS DIVISION	_

ARISTARCO M. DOROY OFFICER-IN-CHARGE

RECOMMENDING APPROVAL:

SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I UNDERSECRETARY FOR TECHNICAL SERVICES



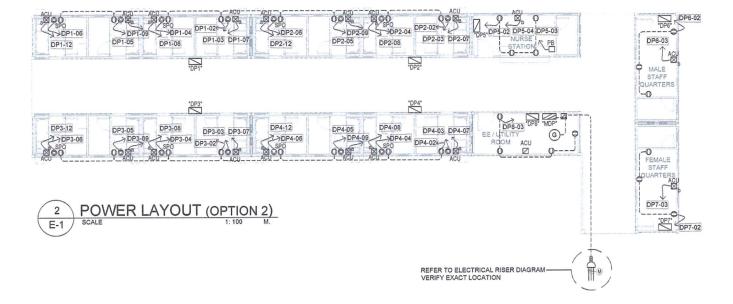


GENERAL NOTES:

- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE
 ELECTRICAL CODE, EXISTING APPLICABLE ORDINANCES, RULES AND REGULATIONS OF THE LOCAL GOVERNMENT AND WITH
 THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
- 2. THE TYPE OF SERVICE POWER SUPPLY TO BE USED SHALL BE THREE-PHASE, 3-WIRE, 230V, 60 HERTZ, A.C.
- THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO THE POWER COMPANY SERVICE POINT.
- UNLESS OTHERWISE SPECIFIED, THE MINIMUM SIZES OF WIRE AND GALVANIZED RIGID STEEL CONDUIT TO BE USED SHALL BE 3.5mm*, THHN AND 15mm NOMINAL DIAMETER, RESPECTIVELY, LIKEWISE ALL ELECTRICAL WIRES SHALL BE COLOR-CODED.
- 5. ALL LIGHTING CIRCUIT HOMERUNS AND CONVENIENCE OUTLETS SHALL BE WIRED WITH NOT LESS THAN 3.5 mm² IN SIZE.
- ALL NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE.
- 8. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND OF THE APPROVED TYPE FOR LOCATION AND PURPOSE.
- STANDARD TYPE OF ACCESSORIES, SPLICING DEVICES, TERMINATIONS AND OTHER APPURTENANCES FOR THE ENTIRE ELECTRICAL INSTALLATION SHALL BE USED.
- 10. ALL WALL OUTLETS SHALL BE INSTALLED AT THE FOLLOWING HEIGHTS ABOVE THE FINISHED FLOOR LEVEL. UNLESS NOTED IN THE PLAN.
- a) WALL SWITCHES @ 1300mm b) WALL CONVENIENCE OUTLETS @ 300 mm
- 11. ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER.

ELECTRICAL SYMBOLS

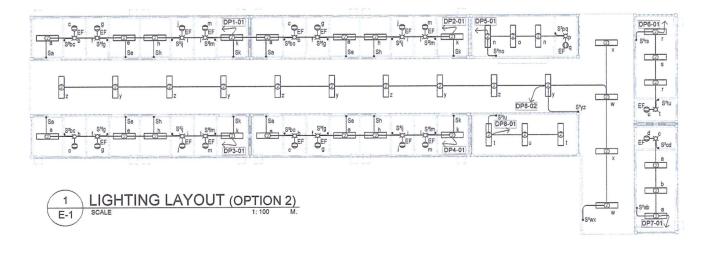
- 1-18 WATTS COMPACT FLUORESCENT LIGHTING FIXTURE
- 2-28 WATTS FLUORESCENT LIGHTING FIXTURE, BOX TYPE, SURFACED
- SINGLE-POLE WALL SWITCHES ON ONE SWITCH PLATE,
- 2 SINGLE-POLE WALL SWITCHES ON ONE SWITCH PLATE,
- DUPLEX CONVENIENCE OUTLET, GROUNDING TYPE
- SPECIAL PURPOSE OUTLET, GROUNDING TYPE
- 'DP' DISTRIBUTION PANEL
- MDP. DISTRIBUTION PANEL
- G GENERATING SET, PORTABLE TYPE
- SERVICE KWHR METER M
- MANUAL TRANSFER SWITCH
- __ _ _ UNDERGROUND OR UNDERFLOOR CONDUIT RUN
- CONCEALED OR EMBEDDED CONDUIT RUN
- --> CIRCUIT HOMERUN



LEGEND:

 \square_{a} AUTOMATIC CIRCUIT BREAKER 50AF, 2P, 240VOLTS, 20AT

> AUTOMATIC CIRCUIT BREAKER 50AF, 2P, 240VOLTS, 30AT IN NEMA 3R ENCLOSURE



SCHEDULE OF WIRE, CONDUIT, AND ROD:

SERVICE WIRE AND CONDUIT:

3 - 8.0mm² THHN + 1 - 8.0mm² THHN (G) in 25mm Ø RSC.

3 - 14mm² THHN + 1 - 8.0mm² THHN (G) in 25mm Ø RSC.

3 - 150mm² THHN + 1 - 30mm² THHN (G) in 80mm Ø RSC.

GROUNDING WIRE AND CONDUIT:

1 - 8,0 mm2 THHN in 15mm Ø PVC

GW2 1 - 22 mm² THHN in 20mm Ø PVC.

GROUNDING ROD:

20mmØ x 2400mm LENGTH COPPERCLAD GROUNDING ROD

25mm@ x 3000mm LENGTH COPPERCLAD GROUNDING ROD

-	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
	BUREAU OF DESIGN BUILDINGS DIVISION

AU OF DESIGN	DPWH STANDARD ONE (1) STO
BUILDINGS DIVISION	HEALTH FACILITIES CONTAINER
PORT AREA. MANILA	

PROJECT AND LOCATION:

	SHEET CONTENTS:
EY VAN	GENERAL NOTES ELECTRICAL SYMBOLS LIGHTING LAYOUT POWER LAYOUT SCHEDULE OF WIRES AND CONDUITS

DESIGNED BY: MARU BRYAN T. ZAPLAN ENGINEER II
CADD: MARU BRYAN T. ZAPLAN
CHECKED: ERIBERTO B. SIOSON

SUBMITTED:	
	JOSEPHINE P. ISTURIS
	AUSS DUU DINGS DIVISION

RECOMMENDING APPROVAL:
SEE COVER SHEET FOR SIGNATURE
ARISTARCO M. DOROY
OFFICED IN CHARGE

BUREAU OF DESIGN

SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I	
UNDERSECRETARY FOR TECHNICAL SERVICES	

APPROVED:



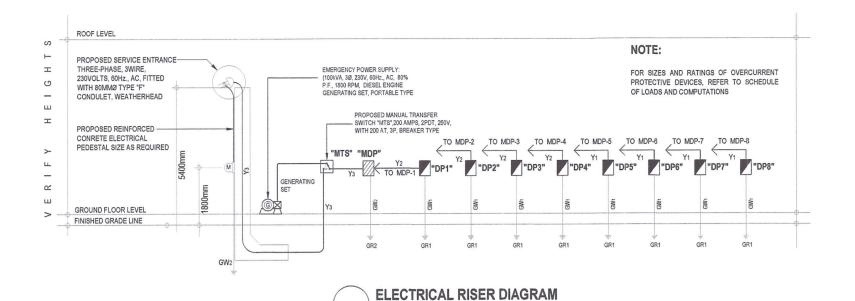


SCHEDULE OF LOADS AND COMPUTATION: (OPTION 2)

CKT.	LOAD DESCRIPTION	VA PER	VA PER PHASE			VOLTS	BRANCH BREAKER RATING			SIZES OF HOMERUN
NO.	LOAD DESCRIPTION	CKT	AB	BC	CA	VOLIO	AF	Р	AT	(WIRES AND CONDUIT)
1	"DP1"	14548	4627	5254	4667	230	100	3	60	3 - 14mm² THHN + 1- 8.0mm² THHN(G) in 25mmØ C.
2	*DP2*	14548	4627	5254	4667	230	100	3	60	3 - 14mm² THHN + 1- 8.0mm² THHN(G) in 25mmØ C.
3	*DP3*	14548	4627	5254	4667	230	100	3	60	3 - 14mm² THHN + 1- 8.0mm² THHN(G) in 25mmØ C.
4	"DP4"	14548	4627	5254	4667	230	100	3	60	3 - 14mm² THHN + 1- 8.0mm² THHN(G) in 25mmØ C.
5	"DP5"	7820	2600	3000	2220	230	100	3	40	3 - 8,0mm² THHN + 1- 8.0mm² THHN(G) in 25mmØ C.
6	"DP6"	4640	1800	540	2300	230	100	3	40	3 - 8,0mm² THHN + 1- 8,0mm² THHN(G) in 25mmØ C.
7	*DP7*	4640	1800	540	2300	230	100	3	40	3 - 8.0mm² THHN + 1- 8.0mm² THHN(G) in 25mmØ C.
8	*DP8*	7020	2600	2220	2200	230	100	3	40	3 - 8,0mm² THHN + 1- 8,0mm² THHN(G) in 25mmØ C.
9	SPARE	15000	5000	5000	5000	230	100	3	60	
10	SPARE	15000	5000	5000	5000	230	100	3	60	
	TOTAL CONNECTED LOADS	112312	37308	37316	37688	MAIN A	ACB: 40	00AF,30	00AT, 3P	, 240 V, 25kAIC

CKT. LOAD DESCRIPTION		VA PER	VA PER PHASE			VOLTS	BRANCH BREAKER RATING			SIZES OF HOMERUN
NO.	LOAD DESCRIPTION	CKT	AB	BC	CA	VOLIS	AF	Р	AT	(WIRES AND CONDUIT)
1	LIGHT OUTLETS	500	500			230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5inm² THHN(G) in 15mmØ C
2	CONVENIENCE OUTLETS	540			540	230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5inm² THHN(G) in 15mmØ C
3	SPECIAL PURPOSE OUTLETS	1500		1500		230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5/nm² THHN(G) in 15mmØ C
4	SPECIAL PURPOSE OUTLETS	1500	1500			230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5/mm² THHN(G) in 15mmØ C
5	SPECIAL PURPOSE OUTLETS	1500			1500	230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5 mm² THHN(G) in 15mmØ C
6	SPECIAL PURPOSE OUTLETS	1500		1500		230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5inm² THHN(G) in 15mmØ C
7	0.5 HP AIR-CONDITIONING UNIT	1127	1127			230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5lmm² THHN(G) in 15mmØ C
8	0.5 HP AIR-CONDITIONING UNIT	1127			1127	230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5/mm² THHN(G) in 15mmØ C
9	0.5 HP AIR-CONDITIONING UNIT	1127		1127		230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
10	SPARE	1500	1500			230	50	2	20	
11	SPARE	1500			1500	230	50	2	20	
12	0.5 HP AIR-CONDITIONING UNIT	1227		1127		230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
	TOTAL CONNECTED LOADS	14548	4627	5254	4667	MAIN A	ACB: 10	00AF, 6	0AT, 3P,	240 V, 10kAlC

CKT. LOAD DESCRIPTION NO.	LOAD DECORPTION	VA PER	VA PER PHASE			VOLTS	BRANCH BREAKER RATING			SIZES OF HOMERUN
	CKT	AB	BC	CA	VULIS	AF	Р	AT	(WIRES AND CONDUIT)	
1	LIGHT OUTLETS	300	300			230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C.
2	CONVENIENCE OUTLETS	720			720	230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C.
3	PULLBOX (NURSE'S CALL STATION)	1500		1500		230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C.
4	1.5 HP AIR-CONDITIONING UNIT	2300	2300			230	50	2	20	2 - 5.5 mm² THHN + 1- 5.5mm² THHN(G) in 15mmØ C.
5	SPARE	1500			1500	230	50	2	20	
6	SPARE	1500		1500		230	50	2	20	
	TOTAL CONNECTED LOADS	7820	2600	3000	2220	MAIN A	ACB: 50	AF, 40	AT, 3P,	240 V, 10kAlC



CKT.	LOAD DECODIDION	VA PER	VA	PER PH	ASE	VOLTS		ICH BRE RATING		SIZES OF HOMERUN
NO.	LOAD DESCRIPTION	CKT	AB	BC	CA	VOLIS	AF	Р	AT	(WIRES AND CONDUIT)
1	LIGHT OUTLETS	300	300			230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
2	CONVENIENCE OUTLETS	700		540		230	50	2	20	2 - 3.5 min² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
3	1.5 HP AIR-CONDITIONING UNIT	2300			2300	230	50	2	30	2 - 5.5 m/n² THHN + 1- 3.5mm² THHN(G) in 20mmØ C
4	SPARE	1500	1500			230	50	2	20	2 - 3.5 min² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
	TOTAL CONNECTED LOADS	5440	1800	540	2300	MAIN	ACB: 50	OAF, 40	AT, 3P,	240 V, 10kAIC

CKT.	KT. LOAD PERCEPITATION VA PER VA PER PHASE VOLT		VOLTO	BRANCH BREAKER RATING			SIZES OF HOMERUN			
NO.	LOAD DESCRIPTION	CKT	AB	BC	CA	VOLTS	AF	Р	AT	(WIRES AND CONDUIT)
1	LIGHT OUTLETS	300	300			230	50	2	20	2 - 3.5 mm² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
2	LIGHT OUTLETS	700			700	230	50	2	20	2 - 3.5 min² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
3	CONVENIENCE OUTLETS	720		720		230	50	2	20	2 - 3.5 min² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
4	1.5 HP AIR-CONDITIONING UNIT	2300	2300			230	50	2	30	2 - 5.5 min² THHN + 1- 3.5mm² THHN(G) in 15mmØ C
5	SPARE	1500			1500	230	50	2	20	
6	SPARE	1500		1500		230	50	2	20	
	TOTAL CONNECTED LOADS	7020	2600	2220	2200	MAIN A	ACB: 50	OAF, 40	AT, 3P, 2	240 V, 10kAIC

REQUIRED CAPACITY OF TRANSFORMER BANK:

TOTAL VA = 37688

 $I = \frac{\sqrt{3} \text{ (VA)}}{230} = \frac{\sqrt{3} \text{ (37688)}}{230}$ I = 283.82 AMPS

 $KVA = \frac{\sqrt{3} \text{ EI(D.F)}}{1000 \text{ (DIV.F.)}}$ @ DIVERSITY FACTOR = 1.10 DEMAND FACTOR = 85%

KVA = $\frac{\sqrt{3} (230)(283.82)(0.85)}{1000(1.10)}$ = 87.37 kVA

USE: ONE(1)- 100 kVA, 34.5KV/230V, 3Ø, 60Hz., A.C. OISC, POLE MOUNTED DISTRIBUTION TRANSFORMERS

REQUIRED CAPACITY OF GENERATING SET:(PROVISION)

 $I = \frac{\sqrt{3} \text{ (VA)}}{230} = \frac{\sqrt{3} \text{ (30688)}}{230}$

I = 283.82 AMPS

 $KVA = \frac{\sqrt{3} EI}{1000}$

@ DIV. FACTOR = 1.10 DEMAND FACTOR = 90%

KVA = $\frac{\sqrt{3} (230)(283.82)(0.90)}{1000 (1.10)}$ = 92.51 kVA

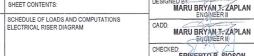
USE: ONE(1) - 100 kVA, 230V, 3Ø, 80% P.F., 1800 RPM, 60Hz., A.C. PAD MOUNTED DIESEL ENGINE GENERATING SET

1			
. مله		F THE PHILIPPINES LIC WORKS AND HIGHWAYS	PROJECT AND LOCATION:
		OF DESIGN	DPWH STANDARD HEALTH FACILITIES
	ONIEACIO DDIVE	PORT AREA MANUA	

DELIC WORKS AND HIGHWATS	
U OF DESIGN DINGS DIVISION	DPWH STANDARD ONE (1) STOF HEALTH FACILITIES CONTAINER

DREY VAN

SHEET CONTENTS:



ERIBERTO B. SIOSON

SUBMITTED:
JOSEPHINE P. STURIS
CHIEF, BUILDINGS DIVISION

SEE COVER SHEET FOR SIGNATURE
ARISTARCO M. DOROY
OFFICER-IN-CHARGE

SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I
UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS



PLUMBING NOTES:

- GRADES OF HORIZONTAL PIPING RUN ALL HORIZONTAL PIPINGS IN PERFECT ALIGNMENT AND AT A FORM GRADE OF NOT LESS THAN TWO PERCENT (2%).
- CHANGE IN DIRECTION CHANGE IN DIRECTION
 ALL CHANGE IN DIRECTION SHALL BE MADE BY APPROPRIATE USE OF
 FORTY FIVE DEGREES (45") WYES, LONGSWEEP QUARTER BEND, SIX-EIGHT
 OR SKITERITH BENDS. WHEN THE CHANGE OF FLOW IS FROM HORIZONTAL
 TO VERTICAL, 1/8 BEND COMBINATION MAYBE USED ON VERTICAL STACKS
 AND SHORT QUARTER BENDS MAYBE USED ON WASTE LINE. TEE AND
 CROSSES MAYBE USED IN VENT PIPES.
- PROHIBITED FITTINGS

 NO DOUBLE HUB OR TEE BRANCH SHALL BE USED ON HORIZONTAL WASTE LINES. THE DRILLINGS AND TAPPINGS OF HOUSE DRAIN, WASTE OR VENT PIPES AND USE OF SADDLE HUB AND BEND ARE PROHIBITED.
- SLEEVES
 PROVIDE PIPE SLEEVES AT WALLS, COLUMNS OR SLABS ONE SIZE BIGGER
 THAN THE ACTUAL SIZE PASSING THROUGH THE WALLS, COLUMNS OR UNDER
 SLAB TO PROTECT PIPE FROM BREAKAGE.
- PIPE CLEAN-OUTS
 PIPE CLEAN-OUTS ARE REQUIRED UNDER THE FOLLOWING CONDITIONS:
 a. EVERY CHANGE IN HORIZONTAL DIRECTIONS EXCEEDING TWENTY-TWO AND ONE-HALF DEGREES (22 1/2").
 b. ONE AND ONE-HALF METERS (1.50 m) INSIDE THE PROPERTY LINE BEFORE THE HOUSE DRAINAGE CONNECTION.
 c. EVERY FIFTEEN METERS (150 m) IN HORIZONTAL RUN OF PIPES.
 d. AT THE END OF ANY HORIZONTAL PIPE LINES.
- 6. THE DIGESTION CHAMBER OF SEPTIC VAULT MUST BE WATERPROOFED.
- NOT LESS THAN 300 mm OF AIR SPACE MUST BE LEFT BETWEEN THE TOP OF THE SEWAGE AND THE UNDER PART OF THE VAULT ROOF SLAB.
- 8 NO SEPTIC VAULT MUST BE CONSTRUCTED UNDER THE BUILDING
- ALL PLUMRING WORKS SHALL RE DONE BY A LICENSED MASTER PLUMRER

PLUMBING LEGEND:

со	CLEAN OUT	SD	SHOWER DRAIN
FD	FLOOR DRAIN	SH	SHOWER HEAD
FAU	FAUCET	WC	WATER CLOSET
GV	GATE VALVE		

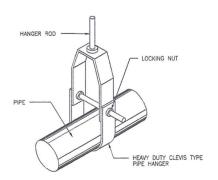
MANHOLE PPRC CWI POLYPROPYLENE RANDOM COPOLYMER COLD WATER LINE

TYPE 3, PN 20 (EN ISO 15874 / JOINTED BY FUSION WELDING PPRC CWD POLYPROPYLENE RANDOM COPOLYMER COLD DOWNEED TYPE 3, PN 20 (EN ISO 15874 / JOINTED BY FUSION WELDING

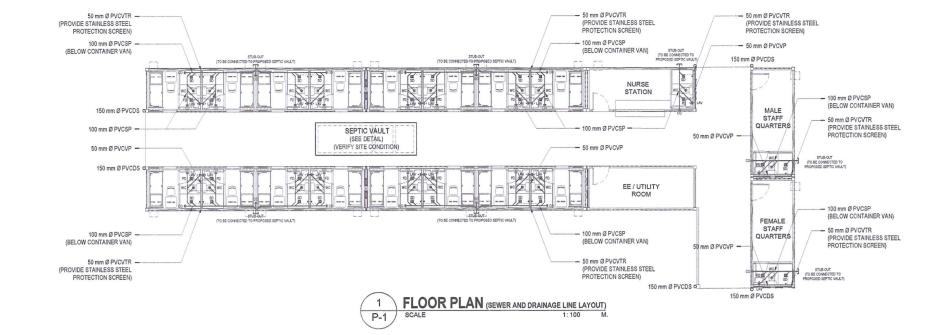
PVCSP POLYVINYL CHLORIDE SOIL PIPE (SERIES 1000) (ASTM D2729 / ASTM D3311, ISO 4435 / ASTM D2564)

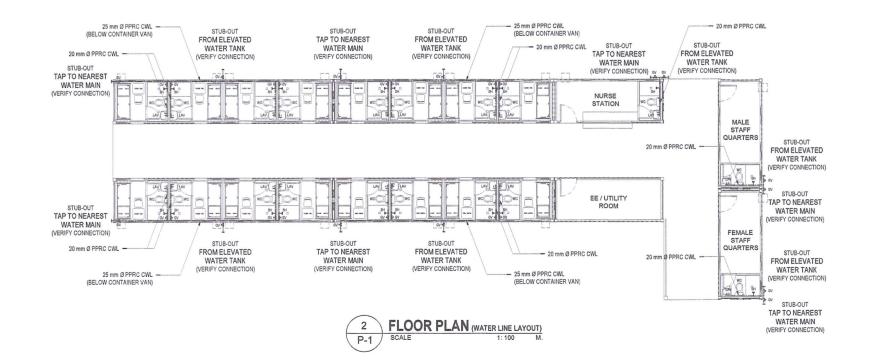
PVCVP POLYVINYL CHLORIDE VENT PIPE (SERIES 600) (ASTM D2729 / ASTM D3311, ISO 4435 / ASTM D2564)

PVCVTR POLYVINYL CHLORIDE VENT THROUGH ROOF (SERIES 600)











PROJECT AND LOCATION: SHEET CONTENTS: LUMBING NOTES
LUMBING LEGEND
LUMBING LEGEND
LOOR PLAN (WATER LINE LAYOUT)
PLOOR PLAN (WATER LINE LAYOUT)
PIPE HANGER DETAIL DPWH STANDARD FOUR (4) UNITS HEALTH FACILITY CONTAINER VAN

DESIGNED BY:
REUBENIA: RAMOS

FRANCIS SERRANG

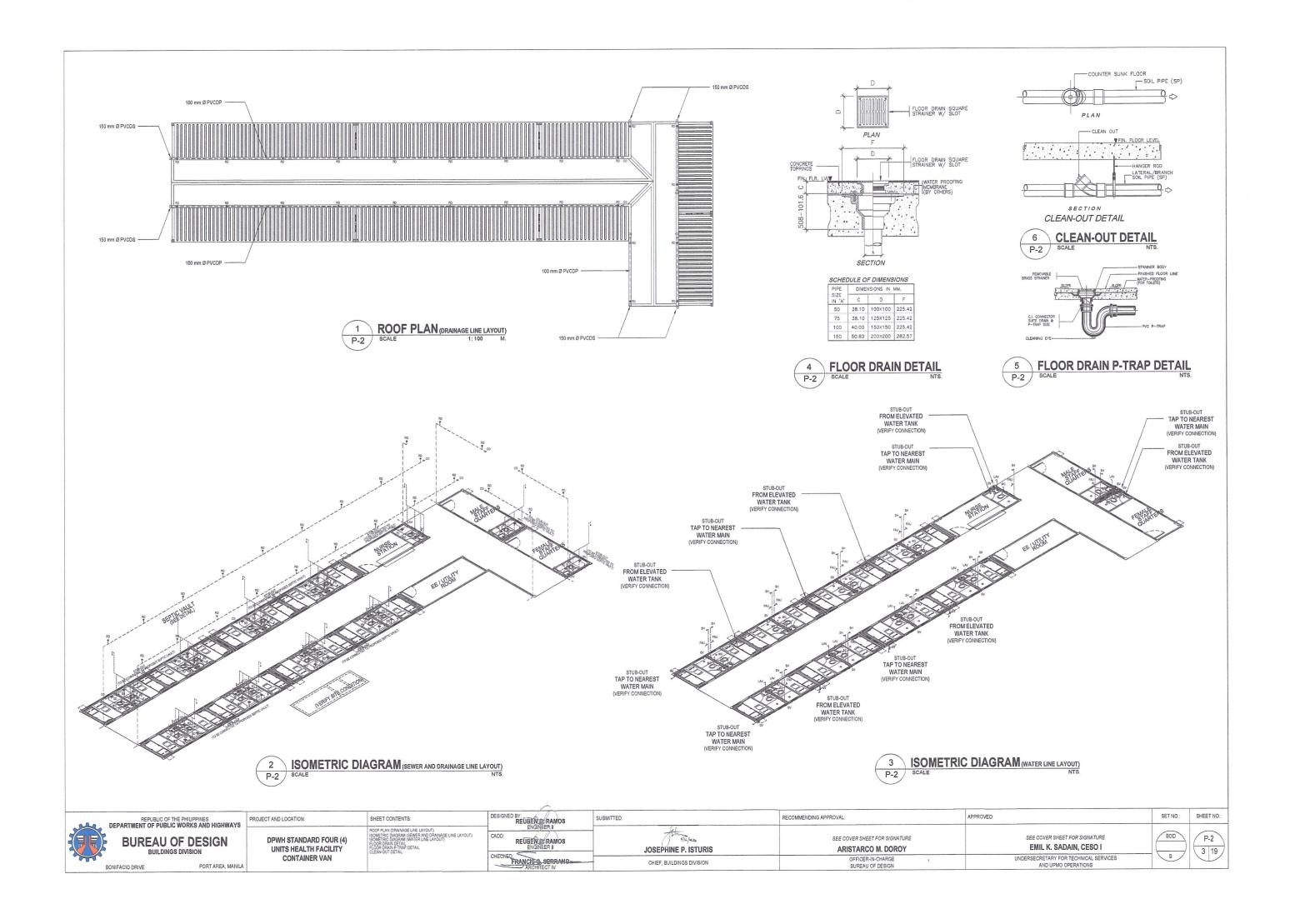
REUBEN PERAMOS

APPROVED: SET NO.: SUBMITTED: RECOMMENDING APPROVAL: 1/10/00 20 BOD SEE COVER SHEET FOR SIGNATURE SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I JOSEPHINE P. ISTURIS ARISTARCO M. DOROY UNDERSECRETARY FOR TECHNICAL SERVICES CHIEF, BUILDINGS DIVISION

SHEET NO.:

P-1

3 19



PLUMBING NOTES:

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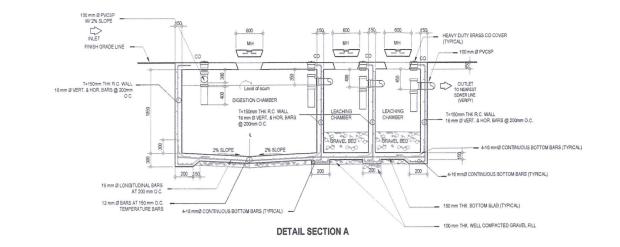
 b. ONE AND ONE-HALF METERS (15 0m) INSIDE THE PROPERTY LINE BEFORE THE HOUSE DRAINAGE CONNECTION.

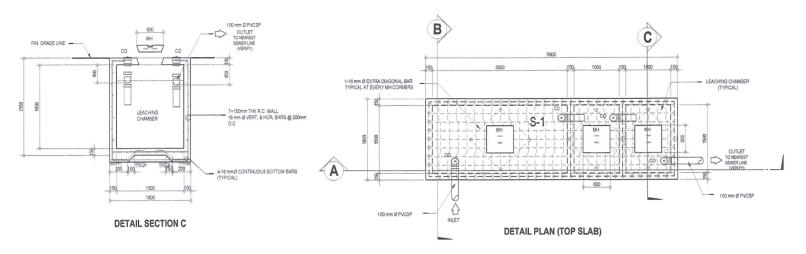
 c. EVERY FIFTEEN METERS (15 00 m) IN HORIZONTAL RUN OF PIPES.

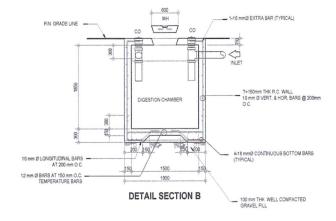
 d. AT THE END OF ANY HORIZONTAL PIPE LINES.
- 6. THE DIGESTION CHAMBER OF SEPTIC VAULT MUST BE WATERPROOFED.
- 8. NO SEPTIC VAULT MUST BE CONSTRUCTED UNDER THE BUILDING.
- ALL PLUMBING WORKS SHALL BE DONE BY A LICENSED MASTER PLUMBER AND A LICENSED PLUMBING CONTRACTOR.

PLUMBING LEGEND:









	SCH	EDULE OF TOP/BOTTOM SLAB REI	NFORCEMENT			
MARK	THICKNESS	TOP SLAB				
MMUN	INIONIVEGO	PARALLEL TO SHORT SPAN	PARALLEL TO LONG SPAN			
S-1	125+TOPPING	12 mm Ø BARS @ 250 mm O, C, BENT-UP 2 OUT OF 3 @ L/4 FROM FACE OF SUPPORT AND 12mmØ BARS @ 180mmO,C ADDITIONAL TOP BARS CUT-OFF@ L/4 OF SUPPORT.	12 mm Ø BARS @ 200 mm O. C. TEMPERATURE BARS			
MARK	THICKNESS	BOTTOM SLAB				
WALL	THICKNESS	SHORT DIRECTION	PARALLEL TO LONG SPAN			
SEE DETAIL SECTION A	150+TOPPING +WP	16 mm Ø BARS @ 200 mm O. C. BOTTOM BARS	16 mm Ø BARS @ 200 mm O. C. BOTTOM BARS			

DETAIL OF SEPTIC VAULT (with REINFORCING BARS) P-3



ING NOTES ING LEGEN) OF SEPTIC VAULT ULE OF TOP / BOTTOM SLAB REINFORCEMENT ULE OF TOP / BOTTOM SLAB REINFORCEMENT
0

SHEET CONTENTS:

DESIGNED BY: REUBEN C. RAMOS	SUBMITTED:
CADD: REUBEN C. RAMOS ENGINEER II	
CHECKED: FRANCIS G. SERRANO	

/	RECOMMENDING APPROVAL:	APPROVED:
JOSEPHINE P. ISTURIS	SEE COVER SHEET FOR SIGNATURE ARISTARCO M. DOROY	SEE COVER SHEET FOR SIGNATURE EMIL K. SADAIN, CESO I
CHIEF, BUILDINGS DIVISION	OFFICER-IN-CHARGE BUREAU OF DESIGN	UNDERSECRETARY FOR TECHNICAL SERVICES AND UPMO OPERATIONS

SET NO.:	SHEET NO.:
BOD	P-3 3 19





- CONTRACTOR IS ADVISED TO VISIT AND SURVEY THE PLACE OF INSTALLATION HE SHALL BE RESPONSIBLE TO COORDINATE CLOSELY HIS WORK WITH ALL OTHER TRADES AND ALL INSTALLATION WORKS SHALL BE DONE IN A NEXT AND WORK-LIKE MANNER.
- ALL NECESSARY GOVERNMENT PERMITS SHALL BE SECURED AND FOR ACCOUNT OF THE CONTRACTOR AND HE SHALL PROVIDE AS-BUILT PLANS TO THE OWNER AFTER THE COMPLETION OF HIS WORKS
- ALL AIR CONDITIONING UNITS TO BE SUPPLIED SHALL BE BRAND NEW, NON-INVERTER AND APPROVED PRODUCTS OF REPUTABLE MANUFACTUREDS, ALL AIR CONDITIONING EQUIPMENT SHALL BE MANUFACTURED BY "TIOSHIBA", "HITACH!" OR APPROVED EQUAL.
- ALL WINDOW TYPE AC SHALL BE INSTALLED 900-1000MM FROM FINISH FLOOR LINE AND SHALL BE PROVIDED WITH 38MM X 38MM X 6MM ANGULAR BAR ARRANGED BRACKET FOR INSTALLATION AND SHALL BE PROVIDED WITH DRAIN PIPES
- ALL IN LINE CABINET TYPE FAN TO BE SUPPLIED SHALL BE BRAND NEW LOW NOISE TYPE FROM APPROVED PRODUCTS OF REPUTABLE MANUFACTURER, IT SHALL BE PROVIDED WITH 38MM X 38MM X 6MM ANGULAR BAR ARRANGED BRACKET FOR INSTALLATION.

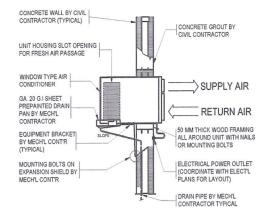
SCHEDULE OF EQUIPMENT

WINDOW-TYPE AIR CONDITIONER

					INDOOR	UNIT						REMARKS
DESIGNATION	QTY.	COOLING C	APACITY	TYPE	DIMENSION		ELECTRI	CAL DATA		REFRIGERANT TYPE	LOCATION	
DESIGNATION	QII.	kJ / Hr	HP	IIFE	(W x H x D)	KW	VOLTS	PHASE	HERTZ		LOUATION	
WT-0.50	16	5 700	0.50		406 x 306 x 390	0.53					ISOLATION ROOMS	ALL UNITS SHALL BE BRAND NEW & MANUAL TYPE
WT-1.0	2	9 500	1.0	WINDOW NON-INVERTER	450 x 350 x 550	0.90	230	SINGLE	60	R410A	MALE AND FEMALE QUARTERS	PROVIDED WITH DRAIN PIPE READY FOR SERVICE.
WT-1.50	2	13 200	1.50		560 × 400 × 650	1.2					NURSE STATION AND UTILITY ROOM	

	JST	

DESIGNATION	OTV	CAPA	CITY	TYPE	STATIC	RPM	WATTS	MO	TOR RAT	ING	LOCATION	REMARKS
DESIGNATION	QIT.	CMH	CFM	ITPE	PRESSURE	ICP III	WAIIS	VOLTS	PHASE	HERTZ	LOURTION	REMARKS
EF1	5	760	447	IN-LINE FAN	3.80mm H ₂ O	1245	120	220	SINGLE	60	ISOLATION ROOM and STAFF QUARTERS	ALL UNITS SHALL BE BRAND NEW, LOW
EF2	1	385	227	IN-LINE PAN	3.80(III) N ₂ O	1245	75	220	SINGLE	- 00	NURSE STATION	NOISE TYPE CABINET FAN



WINDOW TYPE AC INSTALLATION DETAIL
SCALE
NTS

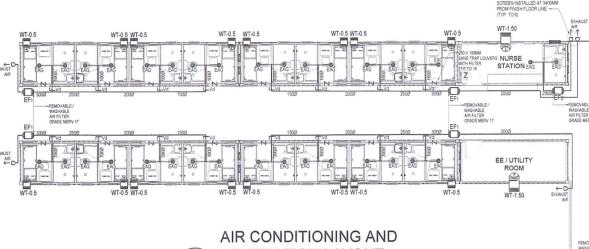
LEGENDS & SYMBOLS:



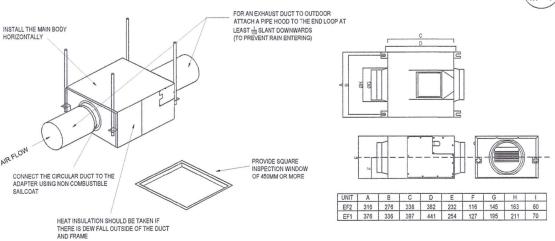
EAG - EXHAUST AIR GRILLE 200Ø

Vd - VOLUME DAMPER

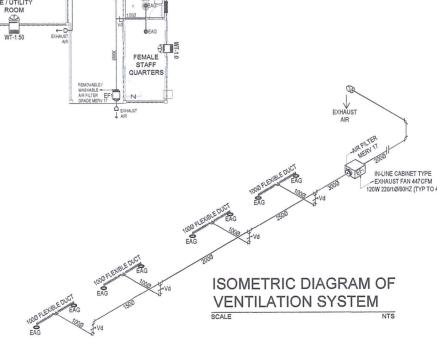
AIR FILTER MERV 17



VENTILATION LAYOUT SCALE



PVC TYPE EXHAUST CIRCULAR DUCT



APPROVED:

MALE

IN-LINE CABINET FAN DRAWING DETAILS



BONIFACIO DRIVE

ESIGN	DPWH STANDARD ONE (1) STOREY HEALTH FACILITIES CONTAINER VAN
PORT AREA, MANILA	

PROJECT AND LOCATION:

	SHEET CONTENTS:	DESIGNED BY: BENJAMIN R. GALMAK ENGINEER II
Į	GENERAL NOTES LEGENDS AND SYMBOLS SCHEDULE OF EQUIPMENT WINDOW TYPE AC LAYOUT ISOMETRIC DIAGRAM OF VENTILATION SYSTEM MISCELLANEOUS DRAWING DETAIL	CADD BR GALMAK CJA SAGUISAG ENGINER IJ ENGINER II CHECKED CORNELIO T. EVANGELISTA JR. 4 ENGINER III

ED:	
	JOSEPHINE P. 187 URIS
	CHIEF/BUILDINGS DIVISION

SEE COVER SHEET FOR SIGNATURE
ARISTARCO M. DOROY
OFFICER-IN-CHARGE

RECOMMENDING APPROVAL:

SEE COVER SHEET FOR SIGNATURE
EMIL K. SADAIN, CESO I
UNDERSECRETARY FOR TECHNICAL SERVICES
AND UPMO OPERATIONS

