Republic of the Philippines
OFFICE OF THE SECRETARY
Elliptical Road, Diliman
1100 Quezon City

MEMORANDUM ORDER
No. 15
Series of 2022

SUBJECT: GUIDELINES ON THE IMPLEMENTATION OF BIOSECURE SWINE HOUSING FACILITY UNDER THE INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

DA Memorandum Circular No. 1, series of 2022 provides the amended guidelines on the implementation of community-based swine production, repopulation, and expansion through farm clustering and consolidation as enunciated in the Integrated National Swine Production Initiatives for Recovery and Expansion (INSPIRE) Program. Under this guidelines, the DA shall provide Five Million and Five Hundred Thousand Pesos (P5,500,000.00) to each project recipient particularly Farmer Cooperatives and Associations (FCAs), for the establishment of biosecure facility (inclusive of perimeter fence, climate-controlled animal house, waste management, basic farm equipment, office, shower area, feeds/biologics support, and piglets) in a minimum land area of 2,000 square meters.

The Bureau of Agricultural and Fisheries Engineering (BAFE), in consultation with the Regional Agricultural Engineering Divisions (RAEDs) of the DA-RFOs, and the DA-National Livestock Program (NLP) prepared the attached modular design for a biosecure 300-head capacity grower-finisher building. The RAEDs in coordination with the Regional Livestock Coordinators shall provide copies of this modular design to be adopted by the FCA project beneficiaries.

In order to ensure the proper implementation of the biosecure swine housing project of the INSPIRE program particularly at the FCA level, the BAFE and RAEDs shall undertake the following activities:

1) Conduct briefings and orientation on the modular design for the FCAs with the DA Regional Livestock Coordinators;

2) Capacitate the RAEDs staff on the design and construction of the biosecure facility;

3) Subject to prior consultation with concerned LGUs, mobilize and capacitate the LGUs Agricultural and Biosystems Engineering Groups and licensed Agricultural and Biosystems Engineers on the design and construction of the biosecure facility as DA's partner in project implementation;

4) Conduct monitoring and inspections of the implementation of the INSPIRE biosecure facility at the FCA level; and

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5) Partner with the Philippine Society of Agricultural and Biosystems Engineers to assist in the implementation of the program.

The expenses to be incurred for the conduct of activities such as briefings, trainings, and other capacity development activities related to the implementation of the INSPIRE biosecure facility shall be charged to the funds allocated to the DA NLP, subject to and in accordance with the existing government accounting and auditing rules and regulations.

This Memorandum Order shall take effect immediately upon signing and shall be valid unless revoked and superseded by future issuances.

Done this 23rd day of February 2022.

WILLIAM D. DAR, Ph.D.
Secretary

REPUBLIC OF THE PHILIPPINES

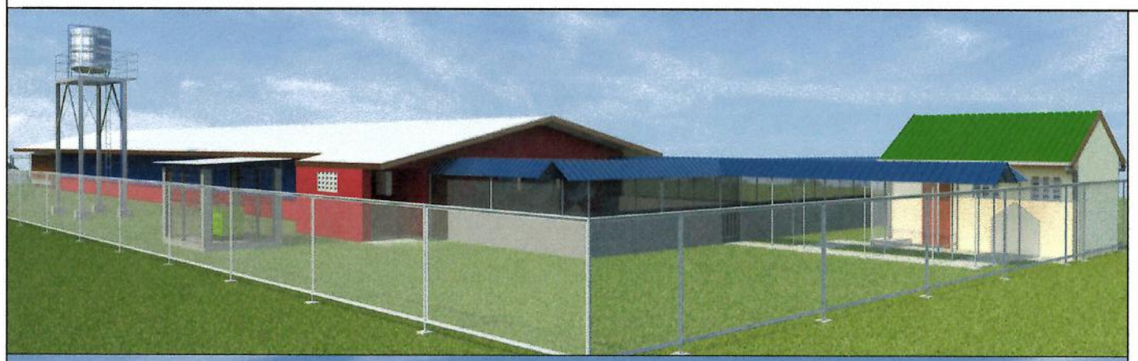
DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

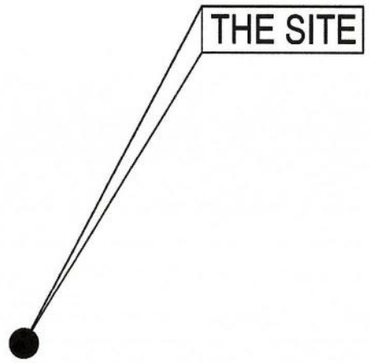
SUGAR CENTER, ANNEX II BUILDING EXTENSION, NORTH AVENUE, DILIMAN, QUEZON CITY

PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PERSPECTIVE
SCALE NTS



PERSPECTIVE
SCALE NTS



VICINITY MAP
SCALE NTS

OFFICE OF THE BUILDING OFFICIALS

CITY DISTRICT MUNICIPALITY

LAND USE & ZONING

LINE & GRADE

BIOSYSTEMS PLAN

STRUCTURAL

SANITARY/PLUMBING

FARM ELECTRIFICATION PLAN

MACHINERY & EQUIPMENT PLAN

TABLE OF CONTENTS

	BIOSYSTEMS PLAN	
A-1	PERSPECTIVE	
	VICINITY MAP	
	FARMSTEAD PLAN	
	GENERAL NOTES	
A-2	FLOOR PLAN	
	EQUIPMENT LAYOUT PLAN	
	REFLECTED CEILING PLAN	
	FINISHES PLAN	
	ELEVATIONS	
	SECTIONS	
	SCHEDULE OF DOORS & WINDOWS	
	STRUCTURAL	
S-1	GENERAL NOTES	
	FOOTING DETAILS	
	C1;F1 DETAILS	
S-2	FOUNDATION PLAN	
	SUMP PIT DETAIL	
S-3	GROUND FLOOR FRAMING PLAN	
S-4	ROOF PLAN	
S-5	SCHEDULE OF BEAMS	
	SCHEDULE OF COLUMNS	
	SCHEDULE OF LINTEL BEAMS	
	GRADE BEAM DETAIL	
S-6	TRUSS DETAILS	
	SCHEDULE OF STEEL MEMBER	
S-7	WASTE WATER TREATMENT PLANT DETAIL	
S-8	CYCLONE WIRE DETAIL	
	FENCE FOOTING DETAIL	
	SEPTIC TANK DETAIL	
S-9	PATH WALK DETAILS	
	SANITARY/PLUMBING	
P-1	PLUMBING GENERAL NOTES	
	SEPTIC TANK DETAIL	
	LINE CANAL DETAIL	
P-2	SITE DEVELOPMENT PLAN PLUMBING LAYOUT	
P-3	ELEVATED WATER TANK DETAIL	
	WATER METER DETAIL	
	CATCH BASIN DETAIL	
P-4	WATER LINE LAYOUT FINISHER BUILDING	
P-5	DRAINAGE LAYOUT FINISHER BUILDING	
P-6	PLUMBING LAYOUT DISINFECTION AREA AND FEED STORAGE ROOM	
P-7	PLUMBING LAYOUT ISOMETRIC DRAWING FINISHER BUILDING	
	FARM ELECTRIFICATION PLAN	
PS-1	POWER SUPPLY PLAN	
PS-2	LIGHTING AND POWER LAYOUT	
PS-3	LIGHTING LAYOUT: DISINFECTION AREA, FEED STORAGE ROOM, AND FINISHER BUILDING	
PS-4	GENERAL NOTES	
	SINGLE LINE DIAGRAM	
	LOAD SCHEDULE	
	RISER DIAGRAM	
	MACHINERY & EQUIPMENT PLAN	
MEP-1	MACHINERY & EQUIPMENT PLAN	
MEP-2	EXHAUST PLAN	
MEP-3	GENERATOR SETS	
	AUXILIARY	
AU-1	FOOT BATH DETAILS	
	MAIN FARM GATE DETAILS	
	PATH WALK GATE DETAILS	
	SIDE CURTAIN SIDE ELEVATIONS	
	SIDE CURTAIN SYSTEM DETAILS	
	WALL-MOUNTED COOLING PAD	
	SYSTEM DETAILS	

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE
PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PREPARED BY: ENGR. ROMEL A. CABALLERO, ENGINEER I, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION

REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO, ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION

RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D, DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR

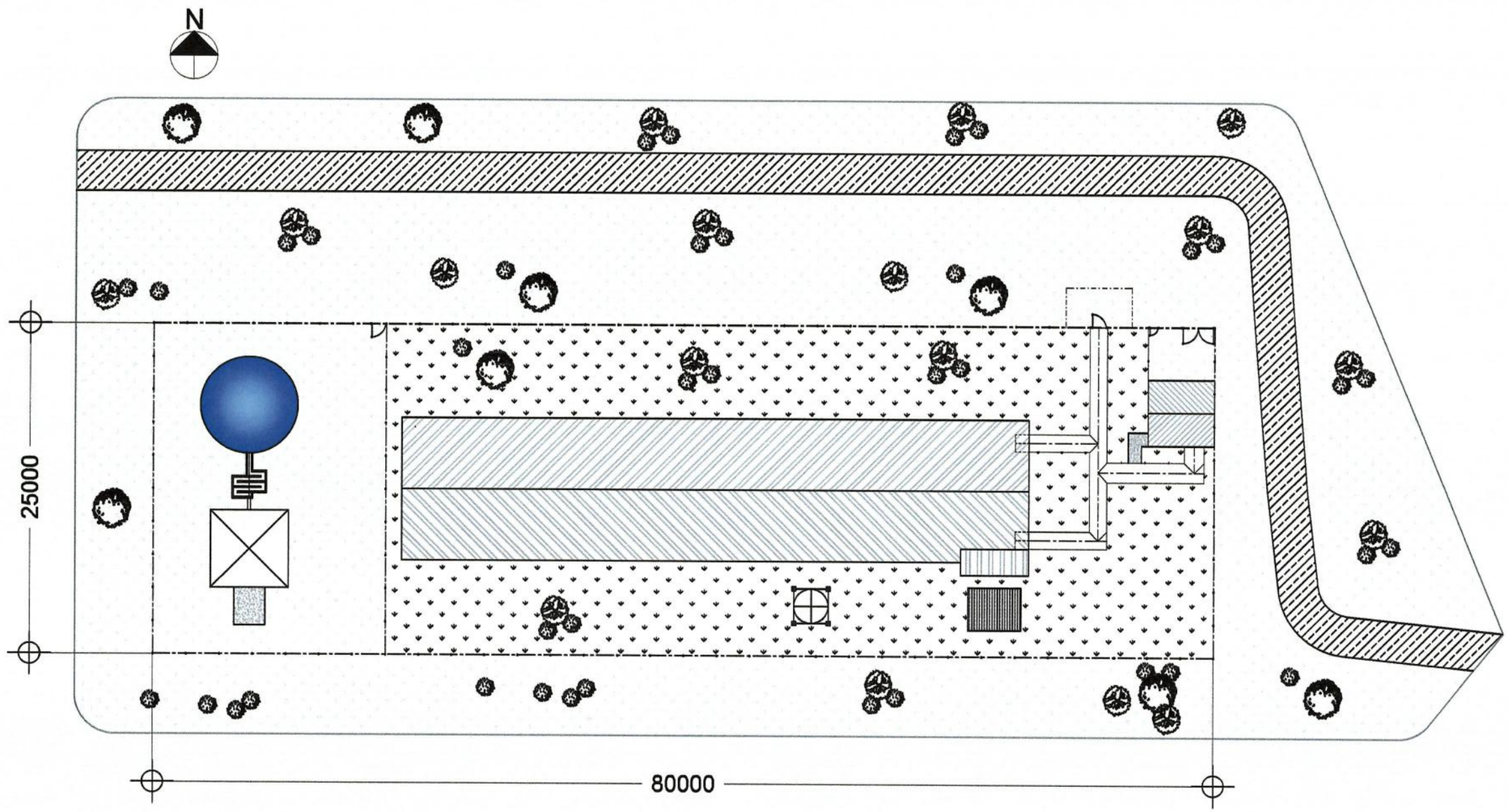
APPROVED BY: ENGR. ARIODEAR C. RICO, DIRECTOR IV, OFFICE OF THE DIRECTOR

CONCURRED BY: DR. RUTH S. MICLAT-SONACO, DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT: PERSPECTIVE, VICINITY MAP

DATE: 31/05

SHEET NO.: A-1



LEGENDS

REPRESENTATION	DESCRIPTION
N	NORTH
	DIRTY AREA
	CLEAN AREA
	EXISTING ROAD
	CONCRETE PATHWAY
	TREES
	FEED STORAGE ROOM AND SHOWER ROOM
	FINISHER BUILDING
	COVERED PATH WALK
	ELEVATED WATER TANK
	GENERATOR SET ROOM
	BIOGAS FACILITY
	LAGOON
	PERIMETER FENCE
	GATE
	MARKET AREA
	PROPERTY LINE

A 1-2

FARMSTEAD PLAN

SCALE: 1:350

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

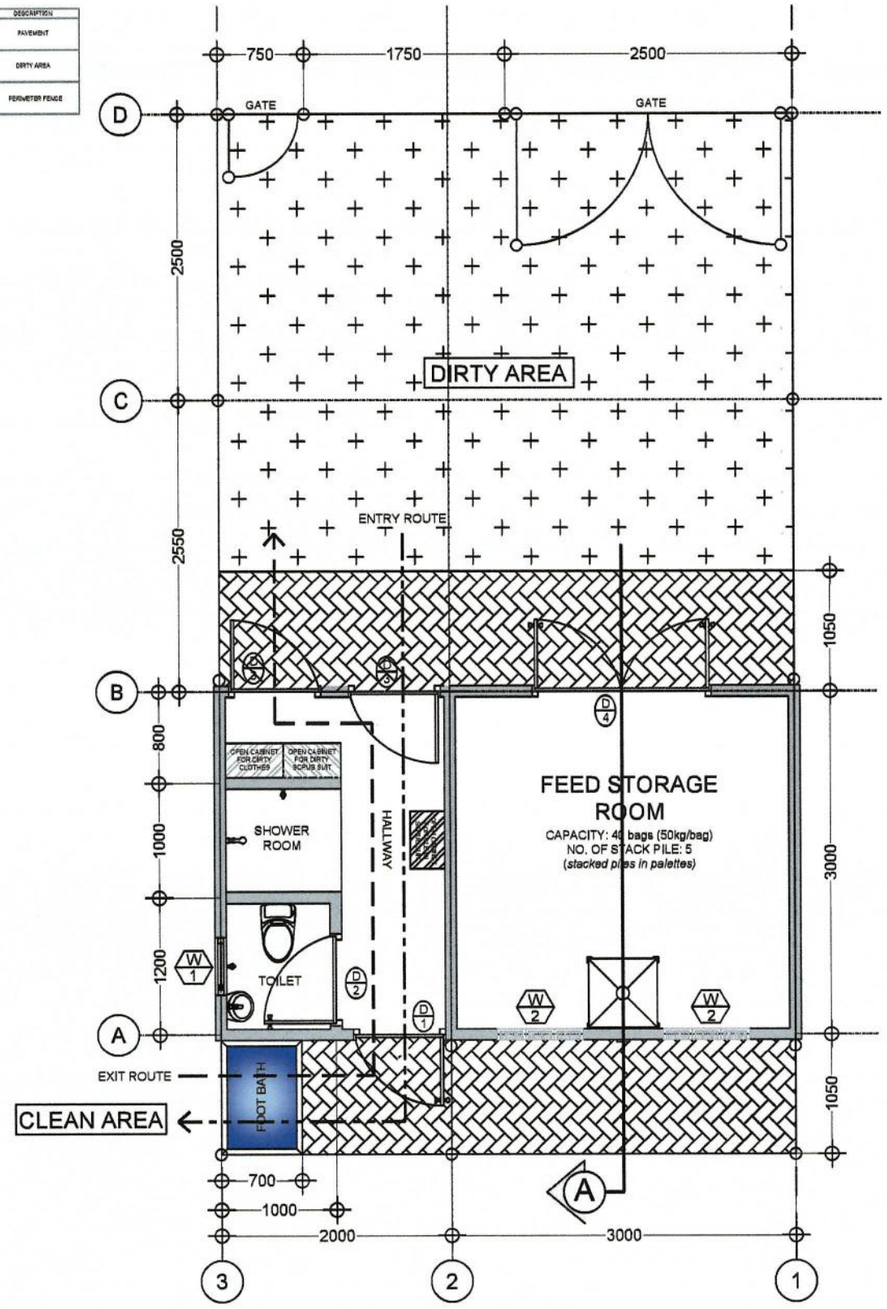
GENERAL NOTES:

- BASED ON THE DA MEMORANDUM CIRCULAR NO. 1 SERIES OF 2022 SECTION 6.1, THE MINIMUM LAND AREA FOR THE IDENTIFIED SITE IS 2,000 SQUARE METERS.
- THE IDENTIFIED SITE MUST HAVE AVAILABLE ELECTRICITY AND WATER SUPPLY.
- THE SITE SHOULD BE RELATIVELY FLAT TERRAIN OR WITH MINIMAL SLOPING TERRAIN TO MINIMIZE THE EMBANKMENT THAT CAUSE INCREASE IN THE TOTAL PROJECT COST AND UNDERMINES THE TOTAL ALLOCATED BUDGET FOR THE PROJECT.
- THE IDENTIFIED SITE SHOULD NOT BE SITUATED IN A FLOOD PRONE AREA.
- THE DESIGNER MUST TAKE ADVANTAGE THE TOPOGRAPHY OF IDENTIFIED SITE RELATIVE TO THE POSITIONING OF STRUCTURES/BUILDINGS WITHIN THE PROPERTY LINE.
- THE ORIENTATION OF LONGER DIMENSION FOR THE FINISHER BUILDING MUST BE PARALLEL TO EAST-WEST DIRECTION.
- OPTIONAL PROVISION FOR GENERATOR SET AS BACK UP POWER FOR THE WHOLE OPERATION.
- THE MATERIAL COSTING AND LABOR RATES OF PROGRAM OF WORKS (POW) FOR THIS MODULAR DESIGN IS BASED ON THE DPWH - NCR CONSTRUCTION MATERIALS PRICE DATA (CMPD) 4TH QUARTER F.Y. 2021.

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. ROMEL A. CABALLERO, ENGINEER I, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMIL L. CARPIO, ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D, DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO, DIRECTOR IV, OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MISLAT-SONACO, DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT: SITE DEVELOPMENT PLAN DATE	SHEET NO.: A-1 2 of 2

LEGENDS

REPRESENTATION	DESCRIPTION
	PAVEMENT
	DIRTY AREA
	PERIMETER FENCE

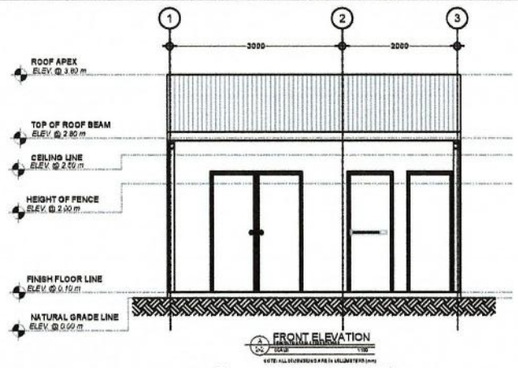


FLOOR PLAN

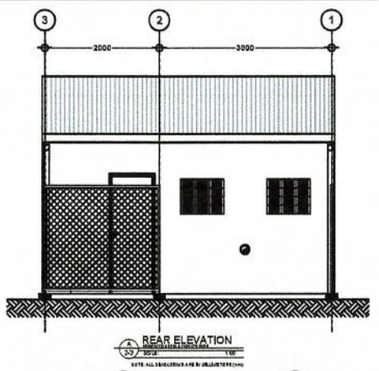
A 2-1 DISINFECTION AREA & FEED STORAGE

SCALE: 1:50

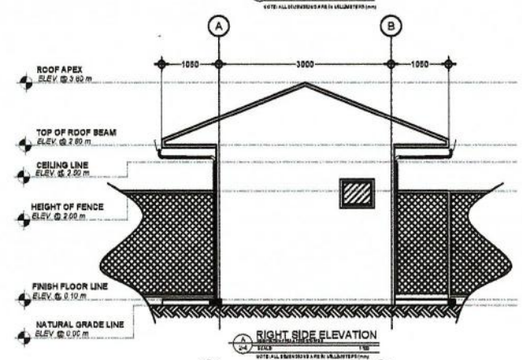
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)



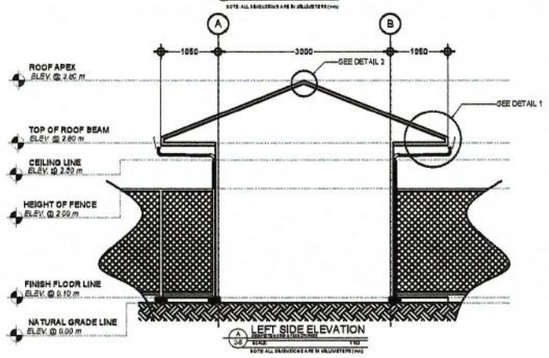
FRONT ELEVATION



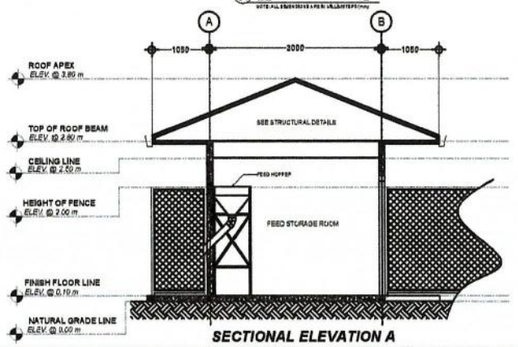
REAR ELEVATION



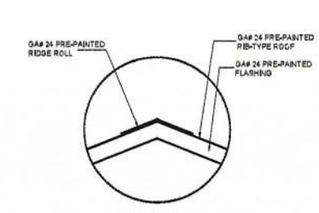
RIGHT SIDE ELEVATION



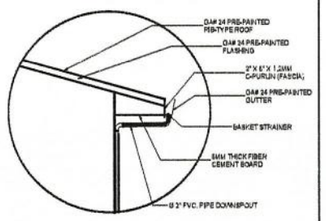
LEFT SIDE ELEVATION



SECTIONAL ELEVATION A



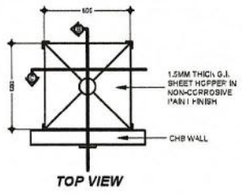
DETAIL 1



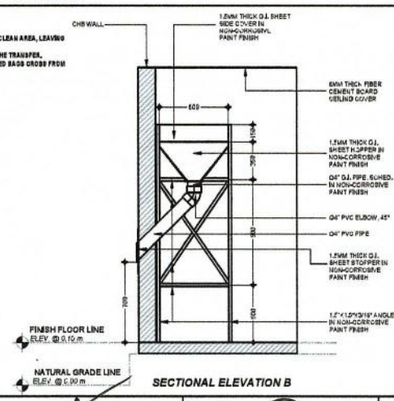
DETAIL 2

GENERAL NOTES:

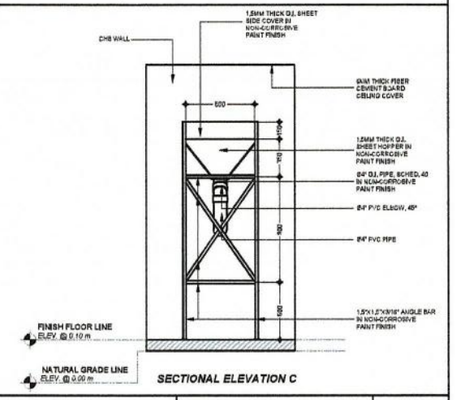
- IN THIS MODULAR DESIGN, THE PLACEMENT OF FEED HOPPER AIDS TO TRANSFER THE FEEDS FROM DIRTY TO CLEAN AREA, LEAVING THE FEED BAGS IN THE DIRTY AREA.
- THERE SHOULD BE A STOPPER ON THE OUTLET OF FEED HOPPER TO CONTROL THE FLOW OF FEEDS DURING THE TRANSFER.
- THE DESIGNER CAN MAKE OTHER ALTERNATIVE DESIGNS TO TRANSFER THE FEEDS WITHOUT HAVING THE FEED BAGS CROSS FROM DIRTY TO CLEAN AREA.



TOP VIEW



SECTIONAL ELEVATION B



SECTIONAL ELEVATION C

FEED HOPPER DETAILS

A 2-6 SCALE 1:20

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

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PROJECT TITLE

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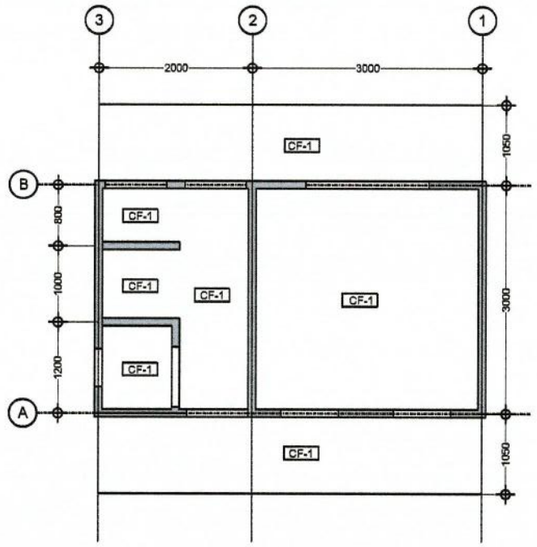
ENGR. ROMEL A. GABALLERO	ENGR. NOEMIL L. CARPIO	ENGR. JUANA T. TAPEL, Ph.D	ENGR. ARIODEAR C. RICO	DR. RUTH S. MIGLAT-SONACO
ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV OFFICE OF THE DIRECTOR	DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
FLOOR PLAN FRONT ELEVATION REAR ELEVATION LEFT SIDE ELEVATION RIGHT SIDE ELEVATION SECTIONAL ELEVATIONS	A-2
DATE	1 of 11

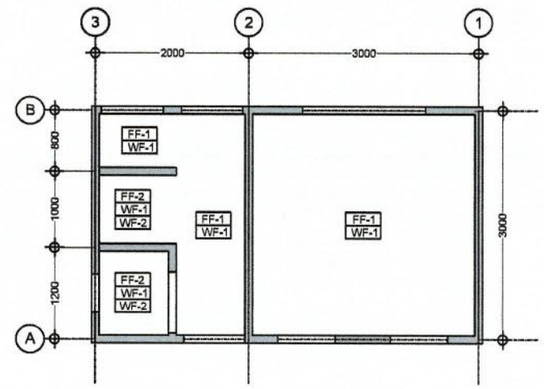
LEGEND	
CEILING FINISHES	
CF-1	6MM THICK FIBER CEMENT BOARD IN FLAT PAINT FINISH ON STANDARD METAL FURRING SPACE @ 600MM/600MM O.C. B.W.



A 2-7 REFLECTED CEILING PLAN
SCALE 1:75

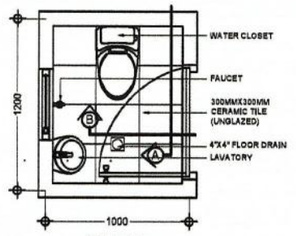
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

LEGEND	
FLOOR FINISHES	
FF-1	POLISHED CONCRETE
FF-2	300MMX300MM CERAMIC TILES (UNGLAZED)
WALL FINISHES	
WF-1	PLAIN CEMENT PLASTER IN PAINT FINISH
WF-2	300MMX300MM CERAMIC TILES (GLAZED)

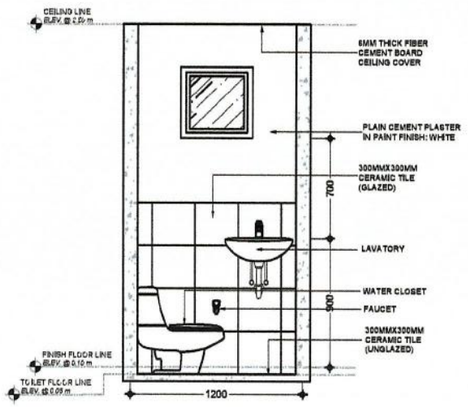


A 2-8 FINISHES PLAN
SCALE 1:75

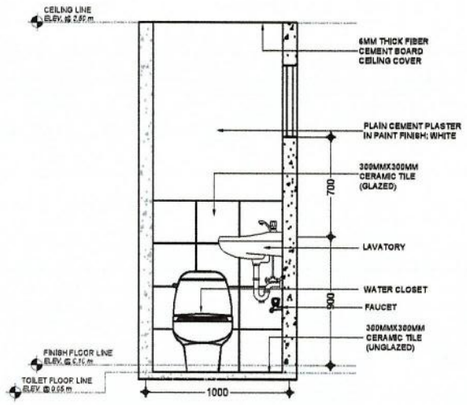
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)



PLAN



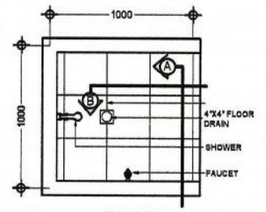
SECTIONAL ELEVATION A



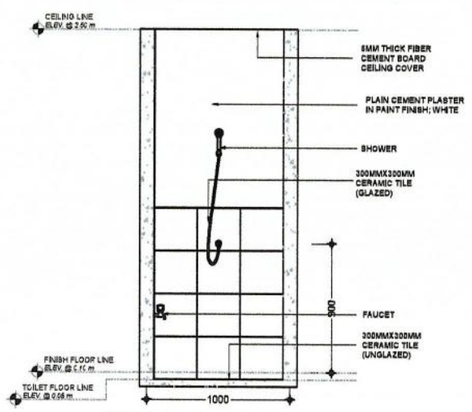
SECTIONAL ELEVATION B

A 2-9 TOILET DETAILS
SCALE: 1:50

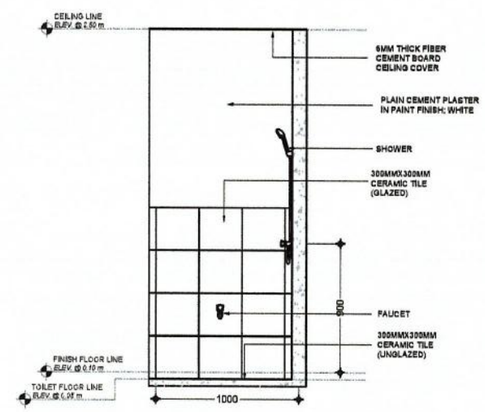
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)



PLAN



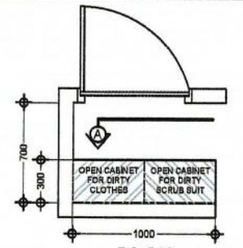
SECTIONAL ELEVATION A



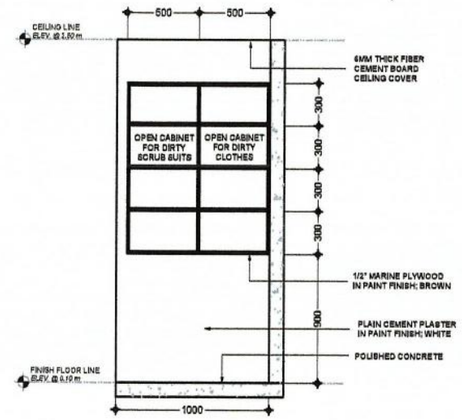
SECTIONAL ELEVATION B

A 2-10 SHOWER ROOM DETAILS
SCALE: 1:40

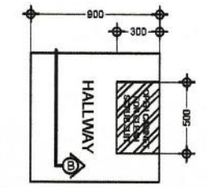
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)



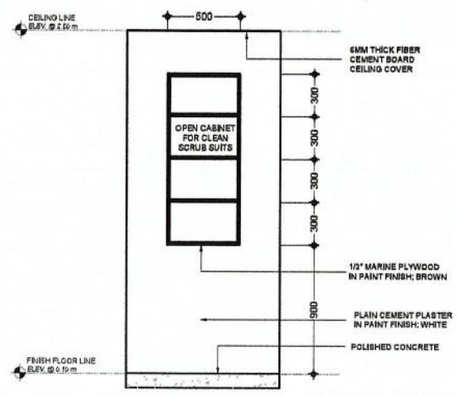
PLAN



SECTIONAL ELEVATION A



PLAN



SECTIONAL ELEVATION B

A 2-11 OPEN CABINET DETAILS
SCALE: 1:40

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES
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PROJECT TITLE	PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
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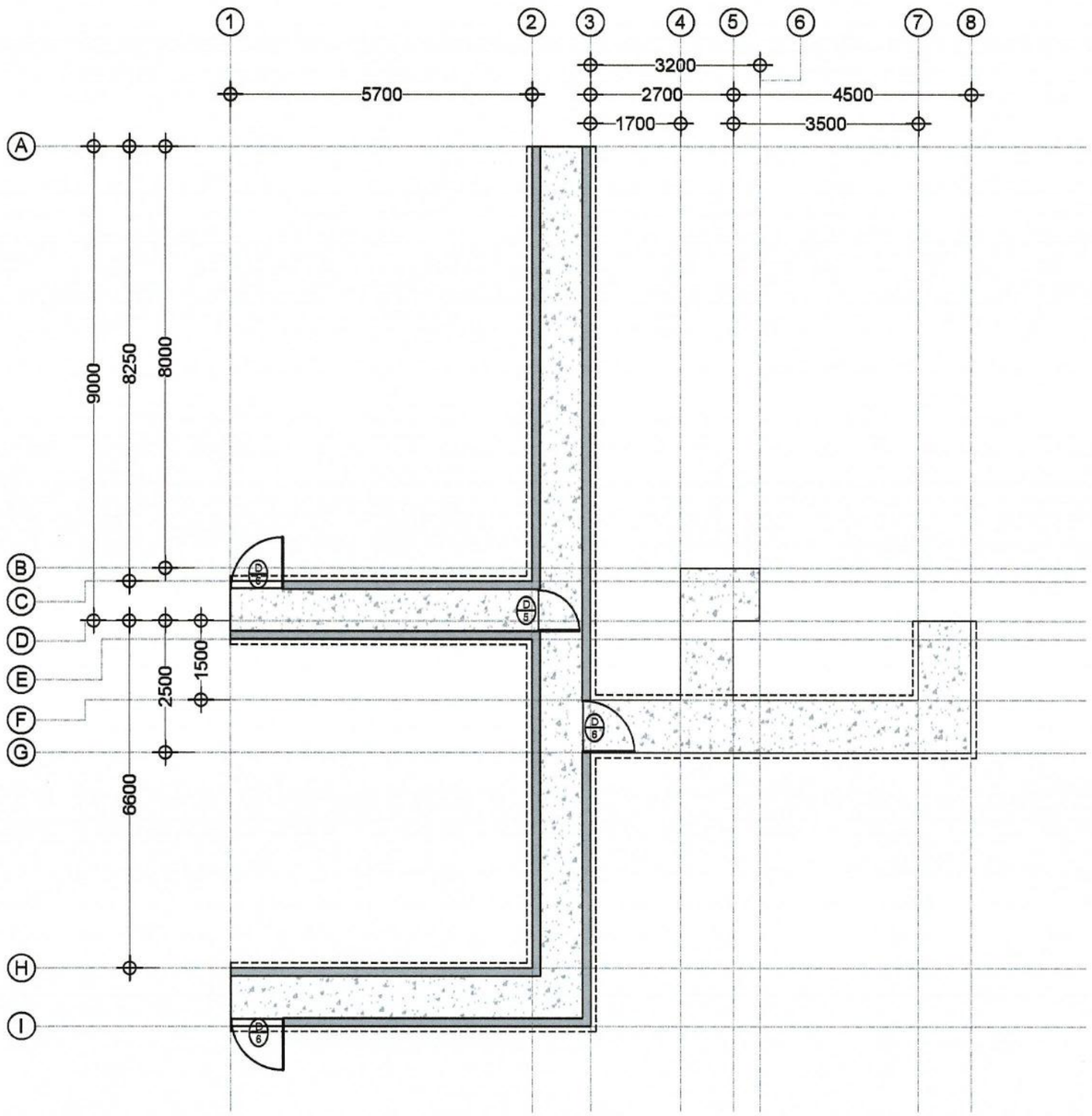
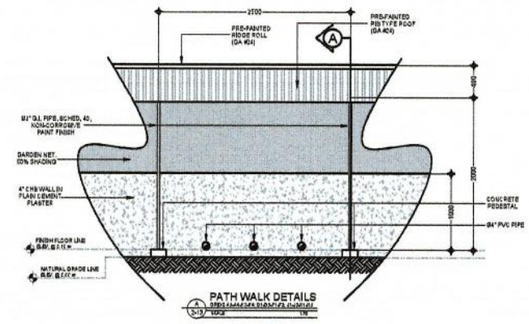


A
2-12

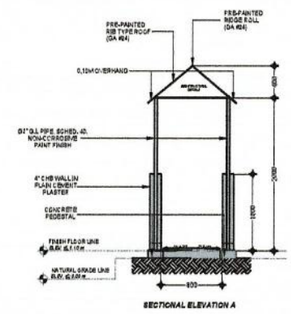
PATH WALK PLAN

SCALE: 1:100

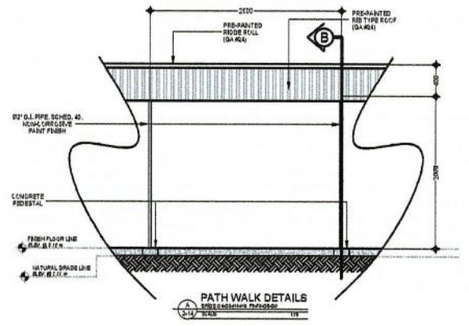
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)



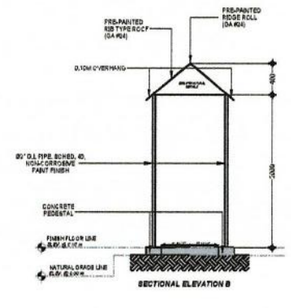
PATH WALK DETAILS



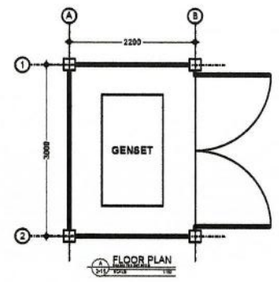
SECTIONAL ELEVATION A



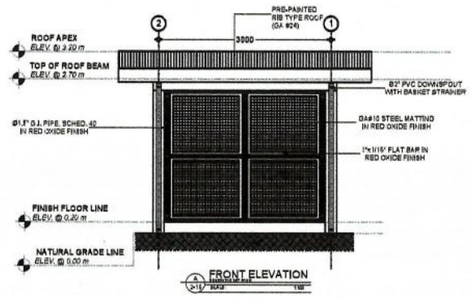
PATH WALK DETAILS



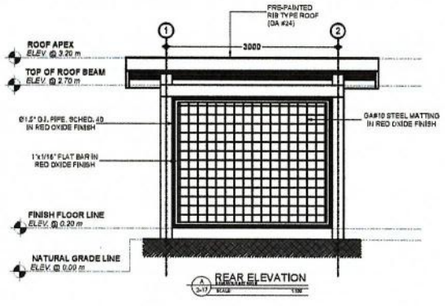
SECTIONAL ELEVATION B



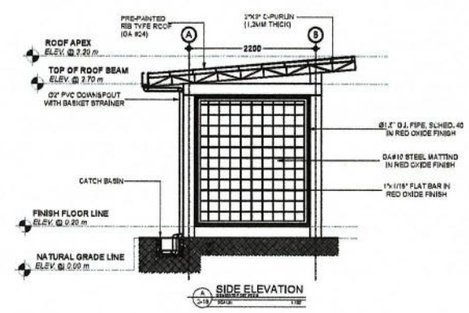
FLOOR PLAN



FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

GENERATOR SET ROOM

NOTE: THE COST ESTIMATE FOR GENSET FACILITY IS NOT INCLUDED IN THIS MODULAR DESIGN

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

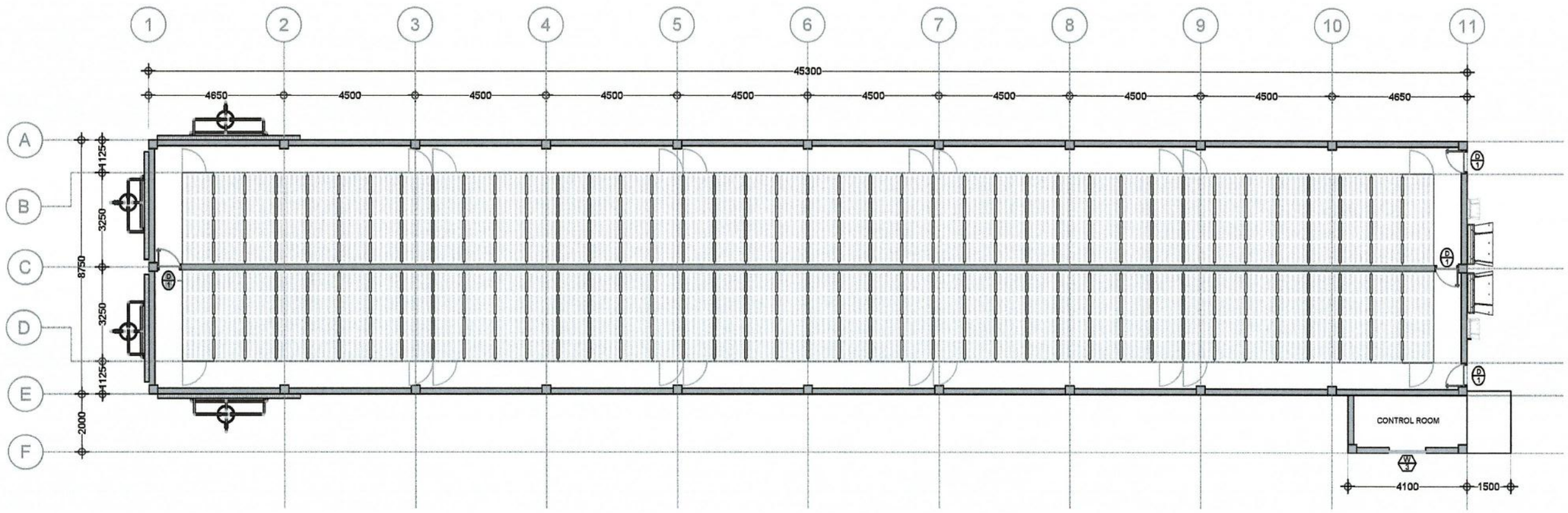
PROJECT TITLE	PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	ENGR. ROMEL A. CABALLERO ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MIRALAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	PATHWALK PLAN PATHWALK DETAILS GENERATOR SET ROOM FLOOR PLAN AND ELEVATIONS DATE	A-2 3 of 11

LEGENDS

REPRESENTATION	DESCRIPTION
	EVAPORATIVE COOLING SYSTEM
	GALVANIZED CONE EXHAUST FAN
	REINFORCED CONCRETE SLATS (3.15m X 1.075m)
	FINISHER PEN

GENERAL NOTES:

- THE SPACE REQUIREMENT USED FOR THE FINISHER BUILDING IS 0.9 SQUARE METER PER HEAD. IN ADDITION, THE EACH PEN IS CONSIST OF 15 HEADS FINISHER.
- THE FINISHER BUILDING IS COMPOSED OF 2 ROWS OF PENS WHEREIN THE DIMENSION OF EACH PEN IS 4.30 METERS BY 3.15 METERS. THIS DIMENSION IS DERIVED FROM THE SPACE REQUIREMENT USED MULTIPLIED BY THE NUMBER OF HEADS PER PEN.
- IN THIS MODULAR DESIGN, THE TYPE OF FLOORING USED FOR THE FINISHER PEN IS REINFORCED CONCRETE SLAT TO CREATE A WASTE DISPOSAL SYSTEM AND PROVIDE LESS LABOR INTENSIVE SYSTEM IN THE REMOVAL OF WASTE. HOWEVER, OTHER TYPES OF FLOORING FOR THE PEN CAN BE USED AS ALTERNATIVE FOR REINFORCED CONCRETE SLAT AS PER THE DESIGN CONSIDERATIONS OF THE DESIGNER.
- THERE MUST BE A PROVISION FOR A CLOSE CABINET INTENDED FOR THE STORAGE OF BIOLOGIC PRODUCTS AT THE CONTROL ROOM. IN ADDITION, THE CONTROL ROOM CAN BE USED AS QUARTER/OFFICE FOR THE FARM WORKERS AND STORAGE OF NECESSARY DOCUMENTS.



FLOOR PLAN

A / 2-19 — 300 HEADS FINISHER BUILDING

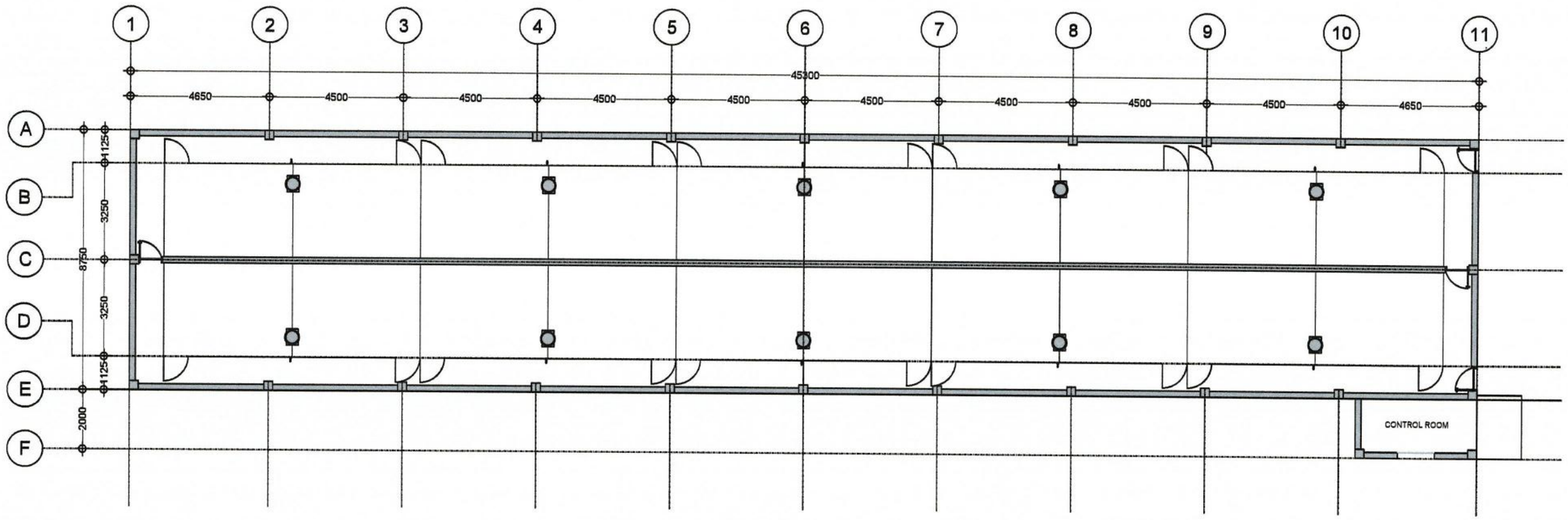
SCALE: 1:150

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. ROMEL A. CABALLERO, ENGINEER I, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO, ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D, DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO, DIRECTOR IV, OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MICLAT-SONACO, DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT: FLOOR PLAN DATE	SHEET NO.: A-2 4 of 11

LEGENDS

REPRESENTATION	DESCRIPTION
	SELF FEEDER
	FINISHER PEN
	FAUCET (FOR CLEANING)



EQUIPMENT LAYOUT

A 2-20

300 HEADS FINISHER BUILDING

SCALE: 1:100

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

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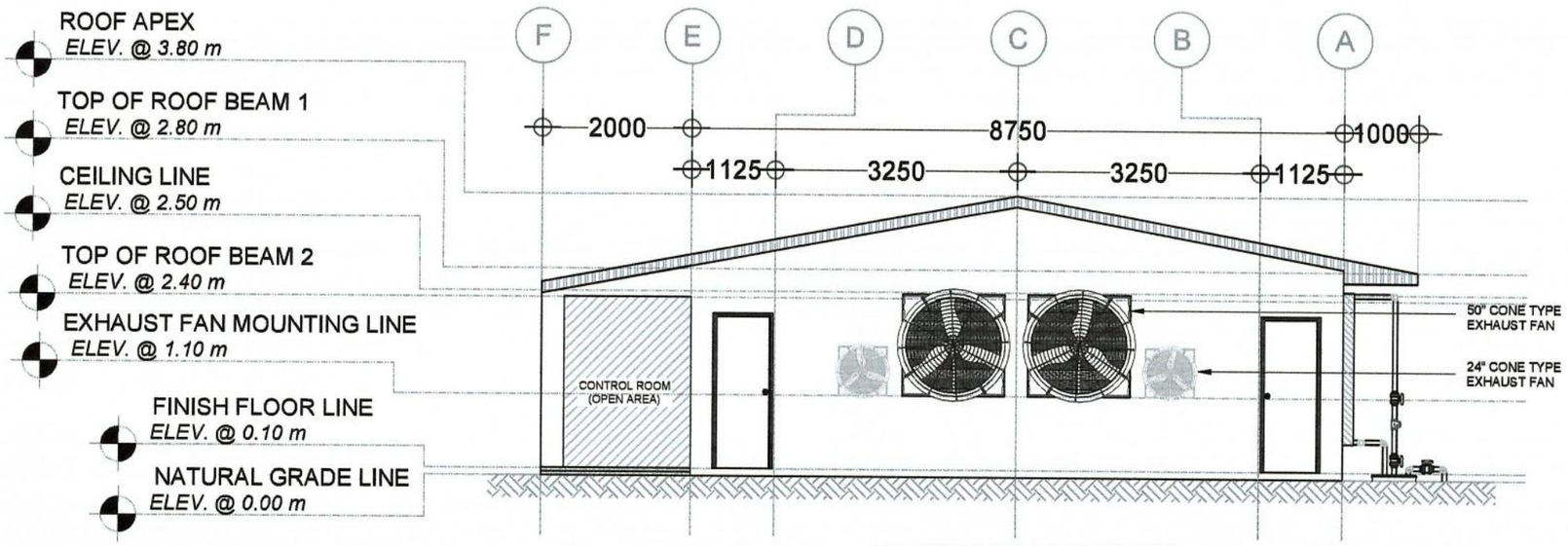
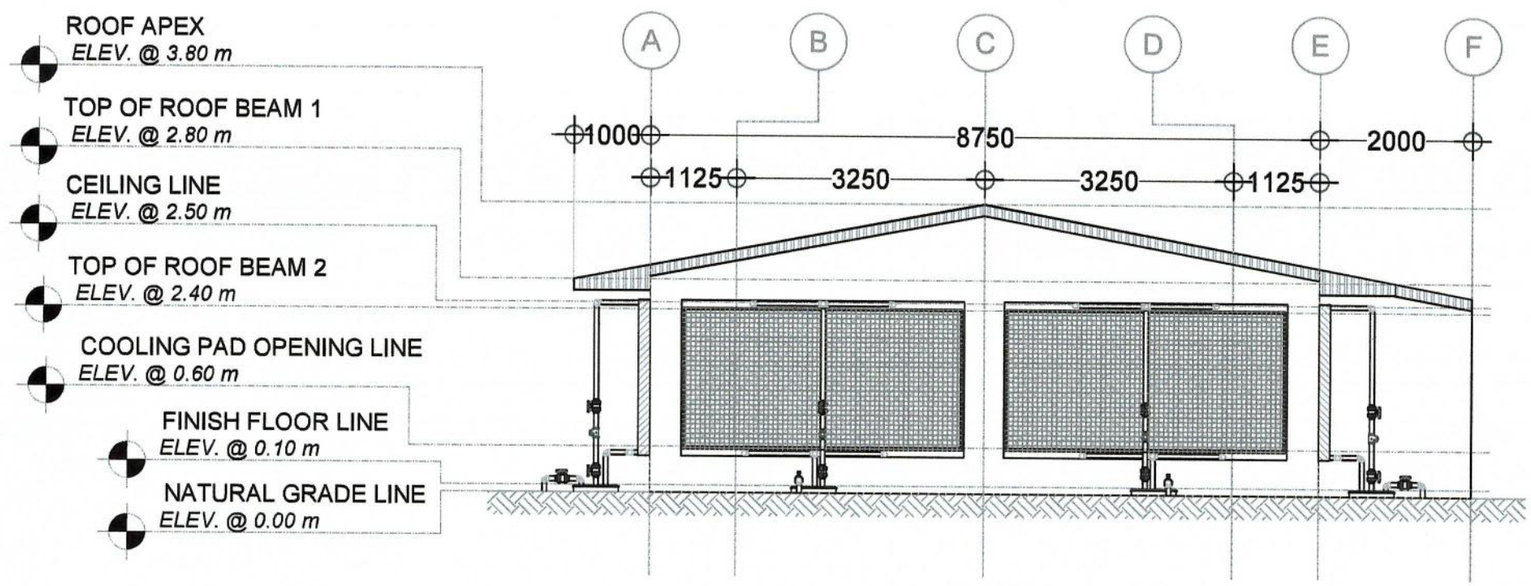


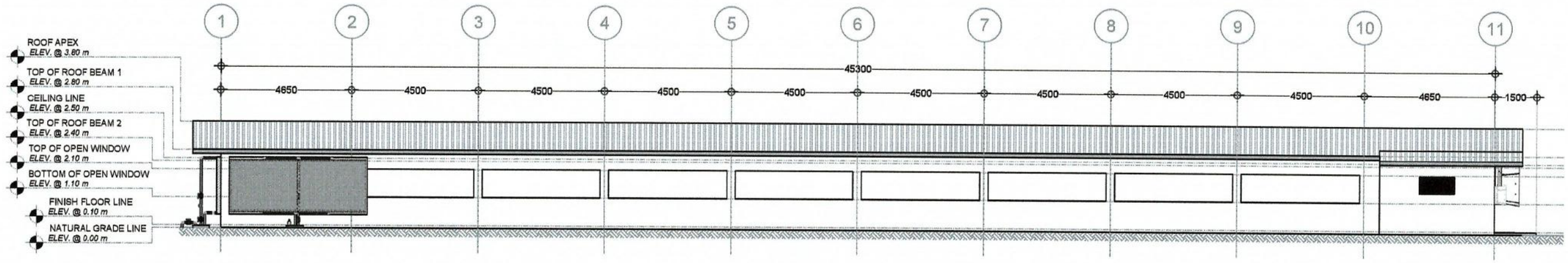
A 2-21 **FRONT ELEVATION**
300 HEADS FINISHER BUILDING
SCALE: 1:75



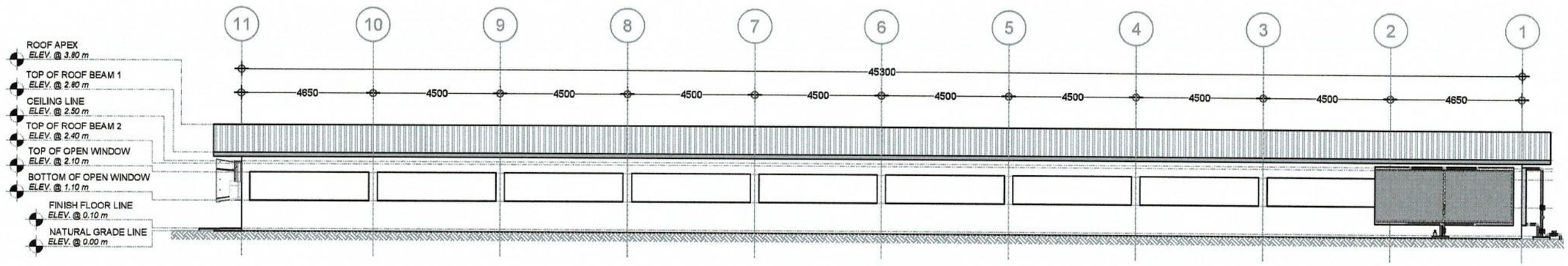
A 2-22 **REAR ELEVATION**
300 HEADS FINISHER BUILDING
SCALE: 1:75

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY ENGR. ROMEL A. CABALLERO ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI U. CARPIO ENGINEER ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. ANCLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT FRONT ELEVATION REAR ELEVATION DATE	SHEET NO. A-2 6 of 11



A 2-23 **LEFT SIDE ELEVATION**
300 HEADS FINISHER BUILDING
SCALE: 1:150

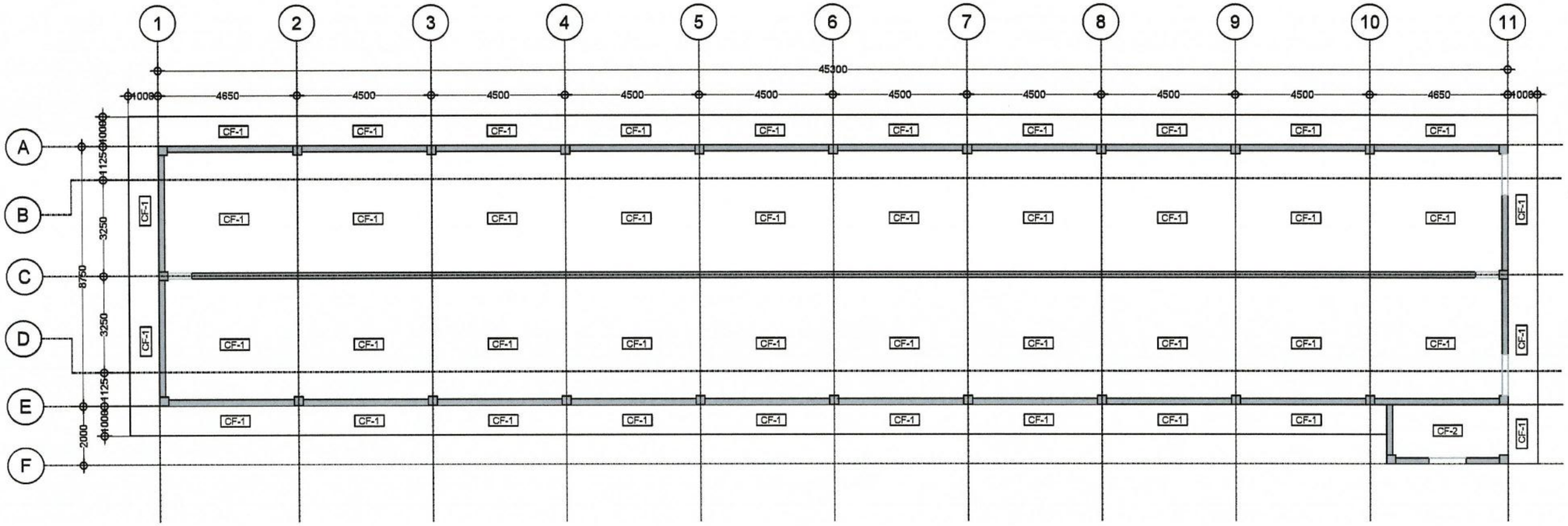


A 2-24 **RIGHT SIDE ELEVATION**
300 HEADS FINISHER BUILDING
SCALE: 1:150

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES **DEPARTMENT OF AGRICULTURE** BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**	PREPARED BY ENGR. ROMEL A. CABALLERO ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MISAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT LEFT SIDE ELEVATION RIGHT SIDE ELEVATION DATE	SHEET NO. A-2 7 of 11

LEGEND	
CEILING FINISHES	
CF-1	6MM THICK FIBER CEMENT BOARD IN FLAT PAINT FINISH ON STANDARD METAL FURRING SPACE @ 600MMx600MM O.C. B.W.
CF-2	OPEN CEILING



A 2-25 REFLECTED CEILING PLAN
300 HEADS FINISHER BUILDING
SCALE: 1:150

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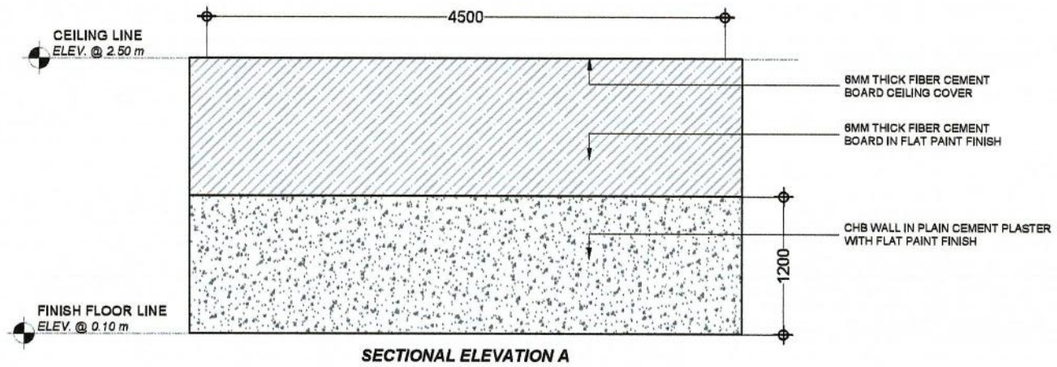
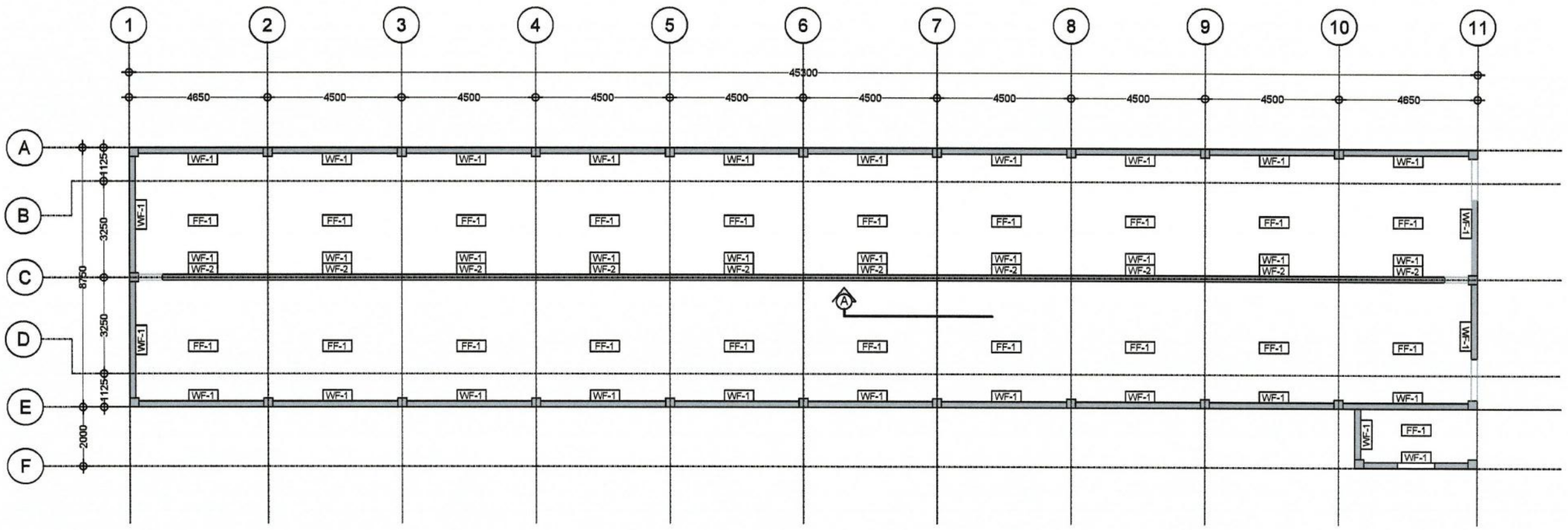
ENGINEER I, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV, OFFICE OF THE DIRECTOR	DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	DATE	8 of 11

LEGEND	
FLOOR FINISHES	
FF-1	ROUGH CONCRETE
WALL FINISHES	
WF-1	PLAIN CEMENT PLASTER IN PAINT FINISH
WF-2	6MM THICK FIBER CEMENT BOARD IN PAINT FINISH



SECTIONAL ELEVATION A



FINISHES PLAN
A — 300 HEADS FINISHER BUILDING
2-26 — SCALE: 1:150

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

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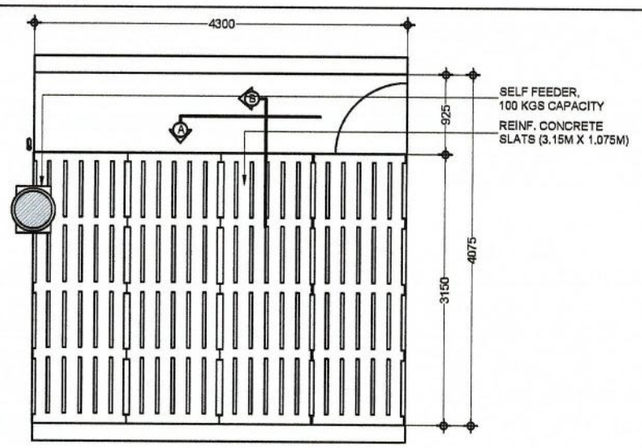
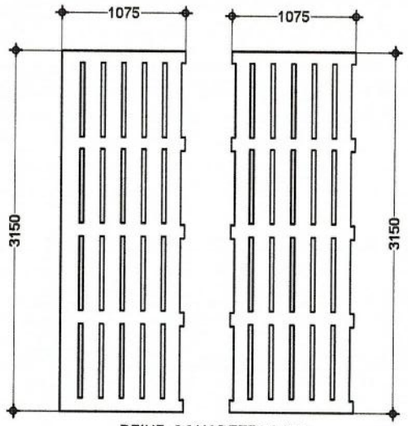
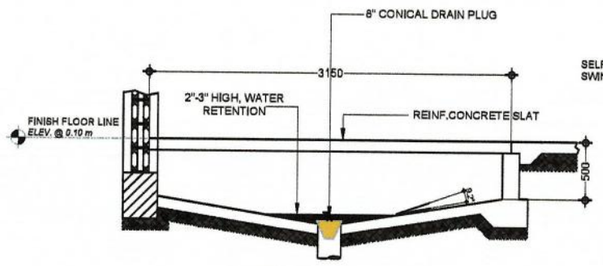


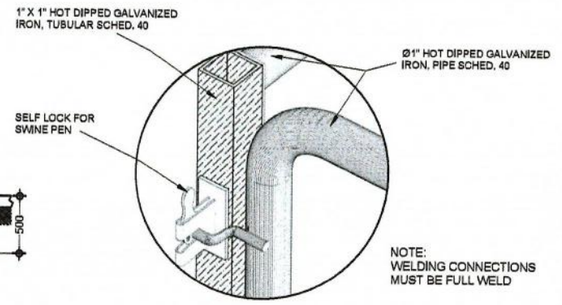
PLAN



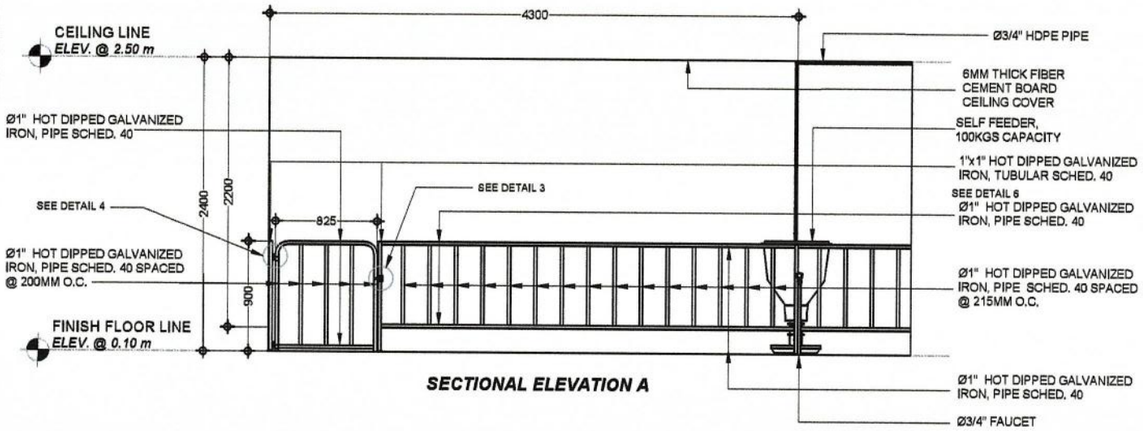
REINF. CONCRETE SLATS



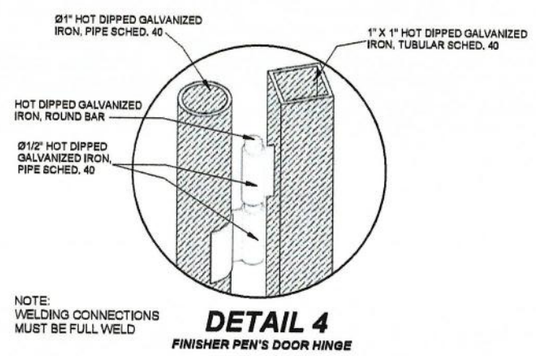
SECTIONAL ELEVATION C



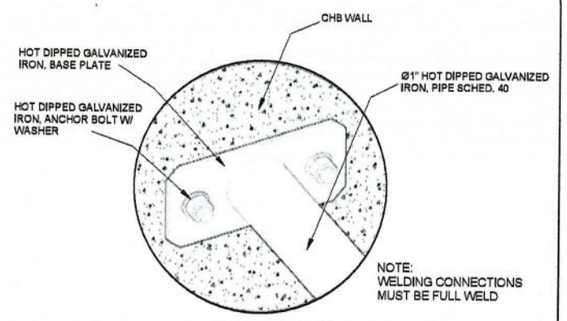
DETAIL 3
FINISHER PEN'S DOOR LOCK



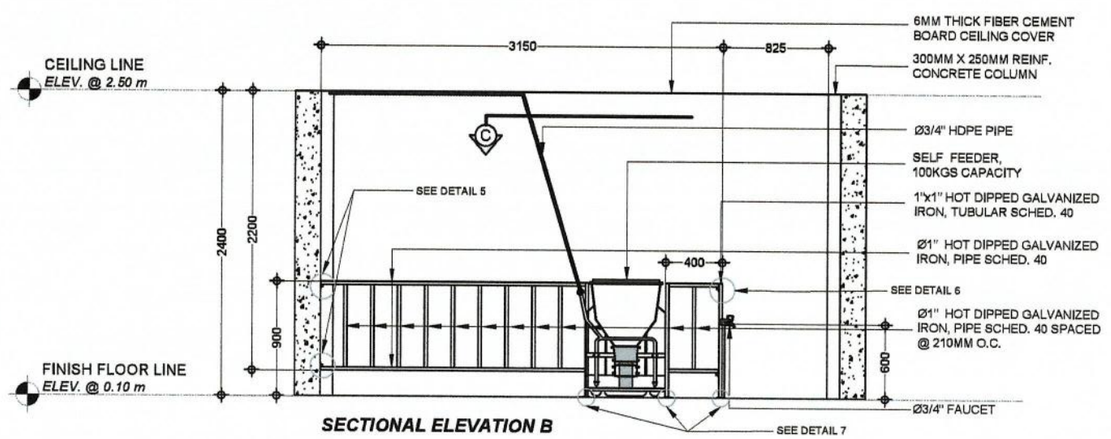
SECTIONAL ELEVATION A



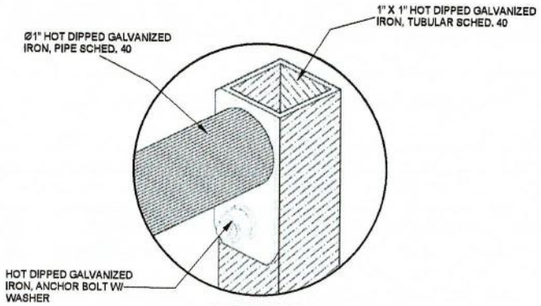
DETAIL 4
FINISHER PEN'S DOOR HINGE



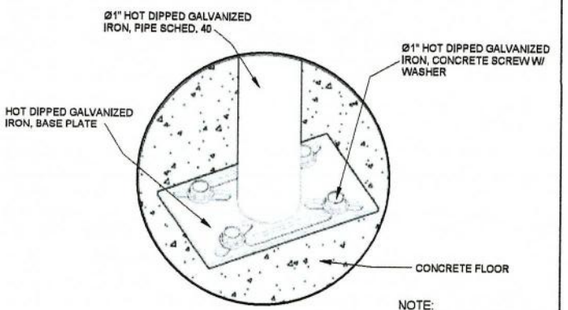
DETAIL 5



SECTIONAL ELEVATION B



DETAIL 6



DETAIL 7

A 2-27 **FINISHER PEN DETAILS**
SCALE: NTS

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

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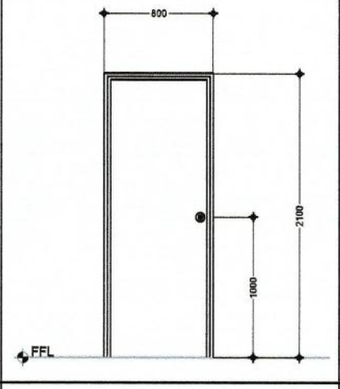
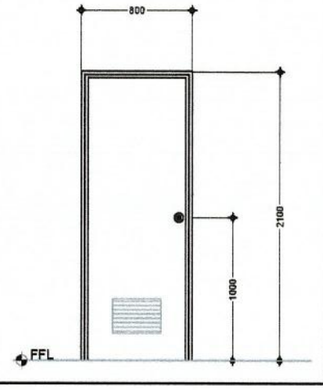
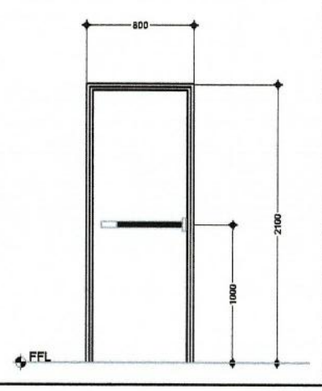
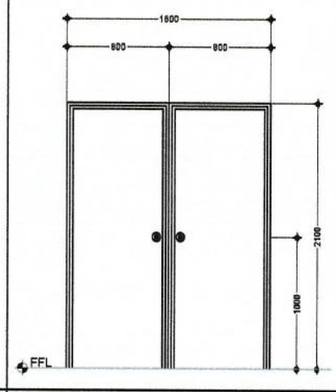
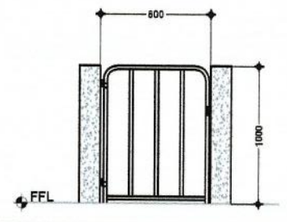
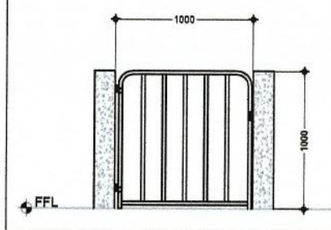
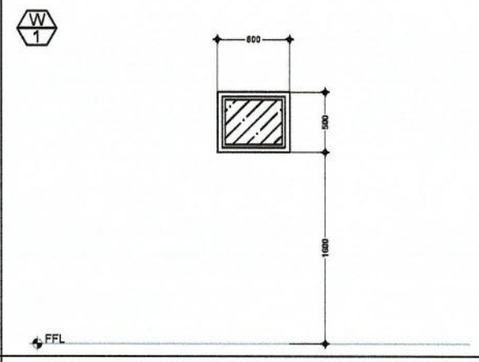
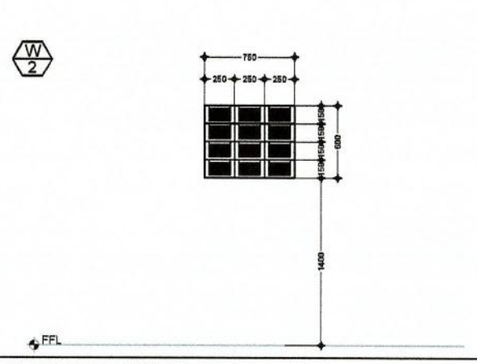
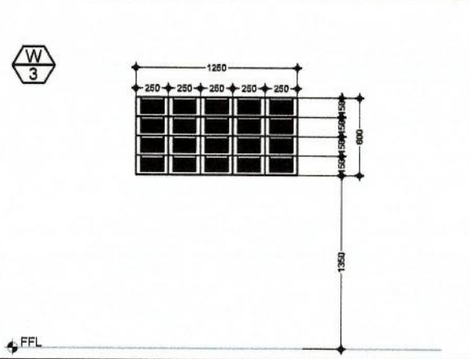
SCHEDULE OF DOORS AND WINDOWS

	D/1	D/2	D/3	D/4	D/5	D/6
						
DESCRIPTION: DOOR & JAMB	50MM THICK HOLLOW CORE SINGLE LEAF WOODEN LAMINATED FLUSH DOOR W/ 2"X4" SOLID WOOD JAMB & HEAD IN CHOCOLATE BROWN FINISH	50MM THICK HOLLOW CORE SINGLE LEAF PVC LAMINATED FLUSH DOOR W/ LOUVER IN LAMINATED FINISH W/ PVC JAMB & HEAD	50MM THICK HOLLOW CORE SINGLE LEAF WOODEN LAMINATED FLUSH DOOR W/ 2"X4" SOLID WOOD JAMB & HEAD IN CHOCOLATE BROWN FINISH, PANIC PUSH BAR DEVICE & HARDWARE	50MM THICK HOLLOW CORE DOUBLE LEAF WOODEN LAMINATED FLUSH DOOR W/ 2"X4" SOLID WOOD JAMB & HEAD IN CHOCOLATE BROWN FINISH	SINGLE LEAF Ø1" GALVANIZED IRON PIPE GATE IN NON-CORROSIVE SILVER FINISH	SINGLE LEAF Ø1" GALVANIZED IRON PIPE GATE IN NON-CORROSIVE SILVER FINISH
LOCATION:	DISINFECTION AREA AND FINISHER BUILDING	DISINFECTION AREA	DISINFECTION AREA	FEED STORAGE ROOM	PATH WALK	PATH WALK
ACCESSORIES:	DOOR KNOB W/ COMPLETE LOCKSET AND HINGES	DOOR KNOB W/ COMPLETE LOCKSET AND HINGES	NONE	DOOR KNOB W/ COMPLETE LOCKSET AND HINGES	COMPLETE GATE LOCKSET AND HINGES	COMPLETE GATE LOCKSET AND HINGES
NO. OF SET:	5 SETS	1 SET	2 SETS	1 SET	1 SET	3 SETS

	W/1	W/2	W/3	
				
DESCRIPTION: WINDOW	POWDER COATED ALUMINUM FRAME AWNING WINDOW W/ 6MM THICK TEMPERED GLASS	4" CONCRETE LOUVER BLOCKS, 12 PCS (4 ROWS & 3 COLUMNS)	4" CONCRETE LOUVER BLOCKS, 20 PCS (4 ROWS & 5 COLUMNS)	
LOCATION:	DISINFECTION AREA (TOILET)	FEED STORAGE ROOM	CONTROL ROOM	
NO. OF SET:	1 SET	2 SETS	1 SET	

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE: **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
ENGR. ROMEL A. CABALLERO ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. NOEMI U. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MIGLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SCHEDULE OF DOORS & WINDOWS DATE	A-2 11 of 11

DESIGN CRITERIA

LIVE LOAD	= 75 PSF
ROOF LOVE LOAD	= 10.445 PSF
SLATS	= 70 PSF
WIND LOAD	= 280 KPH
SEISMIC LOAD	= 0.4 G

GENERAL NOTES

A. CONCRETE UNITS

1. ALL CONCRETE, UNLESS OTHERWISE STATED, SHALL BE DESIGNED AS FOLLOWS:

ELEMENTS	STRUCTURAL	SLAB
UNIT		
A. MINIMUM COMPRESSIVE STRENGTH (28 DAYS)	28 MPA	20.68 MPA
B. AGGREGATE SIZE (MINIMUM)	20 MM	20 MM
C. MAXIMUM SLUMP	100 MM	100 MM

2. OWNER OR CONTRACTOR SHALL NOTIFY ENGINEER IF LOCAL CONDITIONS OFFER FROM THE LISTED ABOVE.
3. ALL CEMENT TO BE TYPE GU.
4. CONCRETE COVER FOR REINFORCING STEEL BE AS FOLLOWS:

CONCRETE COVER FOR REINFORCEMENT STEEL	MEASUREMENT
A. CONCRETE DEPOSITED DIRECTLY AGAINST EARTH	70 MM
B. CONCRETE EXPOSED TO EARTH BUT POURED AGAINST FORMS.	50 MM
C. BEAM STIRRUPS, COLUMN/ PEDESTAL TIES, AND SLAB ON GRADE	38 MM
D. SUSPENDED SLABS AND WALLS, EXCEPT AS NOTED ON [A], [B], AND [C].	28 MM

5. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRAYING, CURING COMPOUND OR OTHER APPROVED METHODS.

B. MASONRY UNITS

1. MASONRY WORK SHOULD CONFORM TO ASTM C 55 (LATEST EDITION) (VERIFY W/ LOCAL AUTHORITY).
2. STRUCTURAL DESIGN OF MASONRY TO ASTM C 129 (LATEST EDITION) (VERIFY W/ LOCAL AUTHORITY).
3. MORTAR TO ASTM C 270 (LATEST EDITION)
4. ALL CONCRETE BLOCKS HOLLOW CORES SHALL BE FILLED WITH MORTAR.
5. USE LIGHTWEIGHT MASONRY BLOCK WITH COMPRESSIVE STRENGTH OF 5 MPA.
6. ALL GROUT TO BE NON-SHRINK, MON-METALLIC, TO CSA A179 (LATEST EDITION) TYPE S. (VERIFY WITH LOCAL AUTHORITY)
7. INSIDE FACE OF ALL MANURE GUTTER WALLS TO BE PARGED. (VERIFY ENVIRONMENTAL COMPLIANCE WITH LOCAL BUILDING AUTHORITY).

C. REINFORCING STEEL

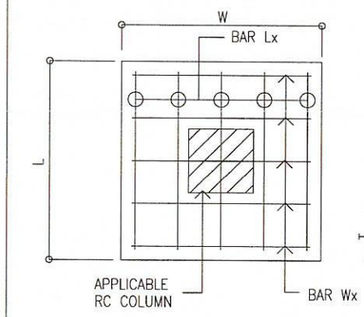
1. ALL REINFORCING STEEL SHALL BE HIGH BOND DEFORMED BARS CONFORMING TO ASTM A 615 M WITH YIELD STRENGTH (fy) OF 414 MPA FOR 10ø OR LARGER.
2. ALL BENDING DETAILS, DIMENSIONS, ANCHORAGE, CUT-OFF LENGTHS, BAR SUPPORTS, SPACERS, AND LOCATION OF REINFORCING SPLICES SHALL BE IN ACCORDANCE WITH ACI CODE LATEST EDITION, UNLESS OTHERWISE SHOWN.
3. ALL REINFORCING SPLICES SHALL BE LOCATED AT POINTS OF MIN. STRESS, UNLESS OTHERWISE SHOWN.
4. PROVIDE CORNER BARS TO MATCH HORIZONTAL WALL REINFORCING ON THE OUTSIDE FACE OF ALL EXTERIOR CORNERS.

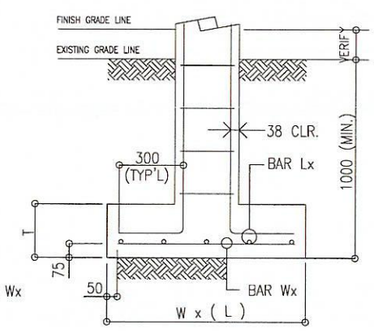
D. WATER PROOFING

1. WATERPROOF THE INTERIOR PIT FLOORS AND WALLS TO PREVENT A WATER LEAKAGE, INGRESS OR SEEPAGE IN CONCRETE STRUCTURES OR ANY CEMENTIOUS SUBSTRATE BEFORE POURING, IF NEEDED. THE FORMATION AND DEVELOPMENT OF INSOLUBLE CRYSTAL INTO WATER BEARING CAPILLARIES AND FISSURES EFFECTIVELY BLOCKS THE FURTHER PASSAGE OF WATER AND ENSURES PERMANENT WATER TIGHTNESS FOR THE LIFE OF THE STRUCTURE.
2. PLACE A 0.15 MM POLYETHYLENE VAPOR BARRIER ON PIT AND FLOOR SLAB BEFORE CONCRETE POURING.

E. FOUNDATION & EXCAVATION

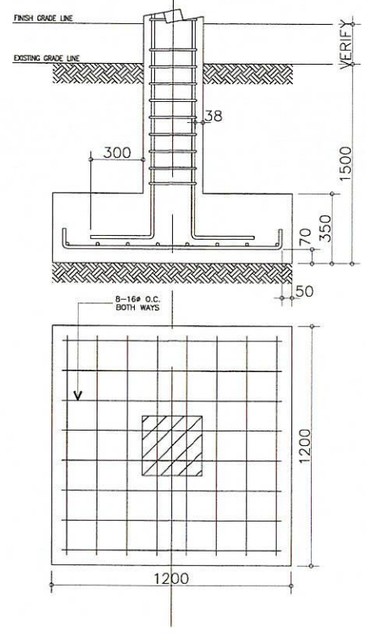
1. PRESUMED SOIL BEARING CAPACITY IS 3000 PSF (14647.29 KG/M²) ON FIRM VIRGIN SOIL OR COMPACTED ENGINEERED FILL. BEARING CAPACITY SHALL BE VERIFIED BY THE OWNERS GEOTECHNICAL ENGINEER PRIOR TO PLACING FOOTING CONCRETE.
2. FILL MATERIAL SHALL BE FREE OF ROOTS. WOOD OR OTHER ORGANIC MATERIAL AND COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. MATERIALS USED FOR FILL UNDER FOOTINGS AND WITHIN BUILDING LIMITS SHALL BE TESTED AND APPROVED FOR THE USE BY THE GEOTECHNICAL TESTING AGENCY.
3. ALL FILL MATERIALS SHALL BE SELECTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. MATERIALS SHALL BE CLEAN, LOW PLASTIC SOIL WITH A PLASTICITY INDEX OF 10 OR LESS (MAXIMUM OF 10), LIQUID LIMIT OF 45 OR LESS (MAXIMUM OF 45), UNIT WEIGHT OF 120 PCF, AND SHALL BE FREE OF FIBROUS ORGANIC MATERIALS. PARTIALLY WEATHERED ROCK MATERIALS MAY BE USED FOR STRUCTURAL FILL PROVIDED THE MATERIAL CAN BE REDUCED TO MAXIMUM DIMENSIONS OF 6 INCHES.
4. FILL PLACED BELOW FOOTING BASE ELEVATION AND WITHIN THE TOP 12 INCHES OF SOIL SUB GRADE BELOW PAVEMENTS SHALL BE COMPACTED TO AT LEAST 98 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY PER ASTM D-698. FILL PLACED ABOVE FOOTING ELEVATION FOR SUPPORT OF THE LIGHTLY LOADED FLOOR SLABS (250 PSF OR LESS) OR MORE THAN 12 INCHES FROM THE FINISHED SUB GRADE LEVEL WITHIN THE PAVEMENT AREAS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D-698. THE FILL SHALL BE PLACED AND COMPACTED AT MOISTURE CONTENTS WITHIN A RANGE OF 1 PERCENT BELOW TO 3 PERCENT ABOVE THE MATERIAL'S OPTIMUM MOISTURE CONTENT PER ASTM D-698.
5. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEERS APPROVAL.
6. CONTRACTOR SHALL REMOVE AND REPLACE UNACCEPTABLE SOILS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. ALL SOILS WITH PLASTICITY INDICES GREATER THAN 10 SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN 3'-0" OR GREATER THAN 10 SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN MATERIAL OCCURS BELOW FOUNDATIONS.
7. FOUNDATION WALLS RETAINING EARTH SHALL BE BRACED AGAINST BACK FILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.
8. FOUNDATION WALLS OR GRADE BEAMS HAVING EARTH PLACED ON EACH SIDE SHALL HAVE BOTH FILLED SIMULTANEOUSLY TO MAINTAIN A COMMON ELEVATION.
9. DO NOT PLACE CONCRETE IN ANY EXCAVATION CONTAINING WATER, OTHERWISE REMOVE THE WATER AND RE-COMPACT.
10. EARTH FORMED FOOTING SHALL CONFORM TO THE SHAPE, LINES, AND DIMENSIONS AS SHOWN ON FOUNDATION PLAN. ALL WATER SHALL BE REMOVED BEFORE DEPOSITING CONCRETE.
11. BEFORE PLACING CONCRETE, ALL EMBEDDED ITEMS SHALL BE PROPERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED SECURELY IN PLACE.
12. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
13. PERIMETER FOUNDATION MUST NOT EXCEED 1/4" ELEVATION VARIATION ALONG ANY 50' DISTANCE OR BUILDING LENGTH.
14. PERIMETER FOUNDATION TO EXTEND BELOW WATER LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRIOR TO PROCEEDING WITH FOUNDATION WORK.
15. THE NATIONAL FARM BUILDING CODE LATEST EDITION AND ALL PERTINENT RECOMMENDATIONS OF CSA STANDARDS A23.1 AND A23.3 HAVE BEEN REFERENCED FOR THE DESIGN AND CONSTRUCTION OF ALL WORK ON THIS PROJECT. LOCAL PROFESSIONAL ENGINEER TO REVIEW DESIGN FOR COMPLIANCE WITH LOCAL BUILDING CODES.
16. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WITH THE ALSO HE/SHE MUST NOTIFY OF ANY DISCREPANCY PR DEVIATION IN EXISTING CONDITION.
17. FLOOR TO BE ONE CONTINUOUS POUR, NO CONSTRUCTION JOINTS. IF CONSTRUCTION JOINTS ARE REQUIRED, VERIFY DESIGN WITH ENGINEER.
18. STRIP ALL TOPSOIL, ENSURE ALL ORGANIC MATERIAL IS REMOVED.
19. INSITU SOIL SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
20. ALL FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 6" AND SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
21. WHERE SUITABLE SITE FILL IS NOT AVAILABLE, CLEAN SAND OR GRAVEL SHALL BE USED.
22. ORIENTATION AND LAYOUT OF WASTE WATER TREATMENT PLANT IS SUBJECTED TO THE TERRAIN/SLOPE OF THE PROPERTY.





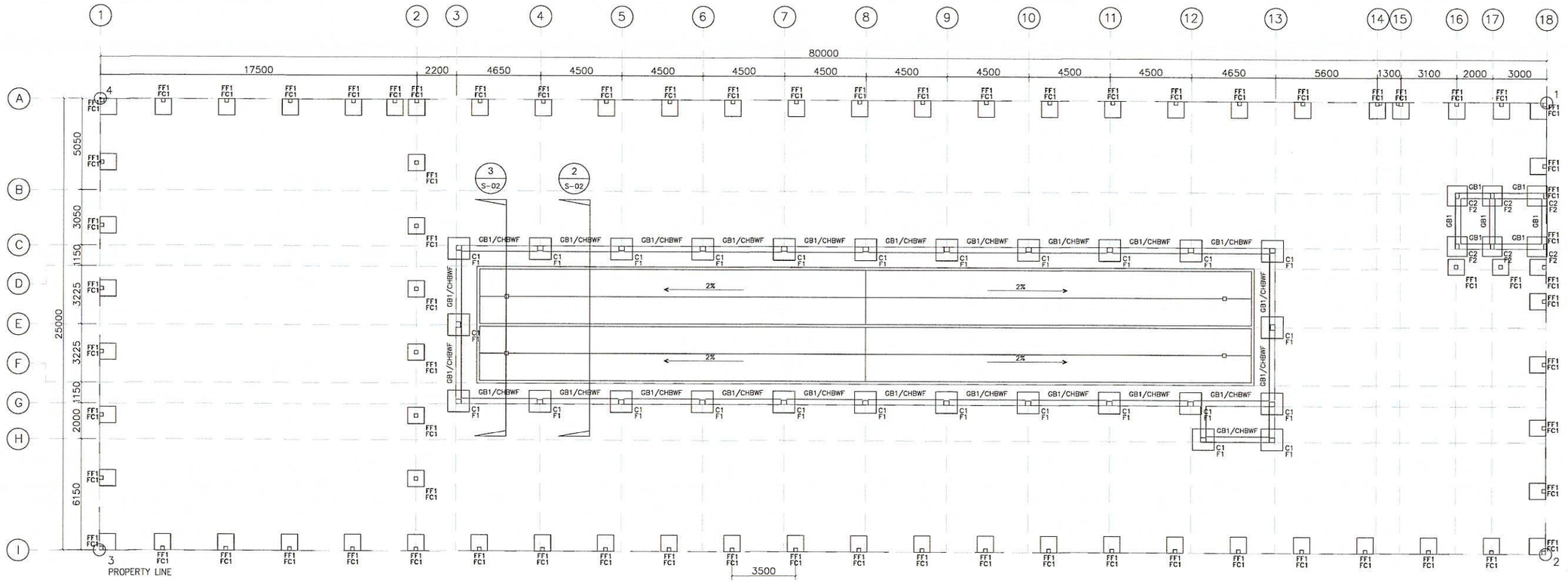
1 / S-01 SCHEDULE OF COLUMN FOOTINGS
SCALE NTS. (MM)

FOOTING MARK	FOOTING SIZE			STEEL REINFORCEMENT	
	L	W	T	BAR Wx	BAR Lx
F1	1200	1200	300	8-16ø	8-16ø
F2	1100	1100	300	6-16ø	6-16ø

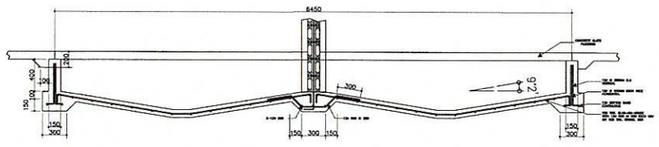


2 / S-01 C1; F1 DETAILS
SCALE NTS. (MM)

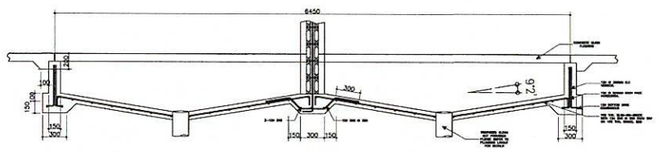
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. ERDEY A. BIALZA ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	REVIEWED & EVALUATED BY: ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT GENERAL NOTES FOOTING DETAILS C1, F1 DETAILS DATE: February 18, 2022	SHEET NO. S-1 1 of 9



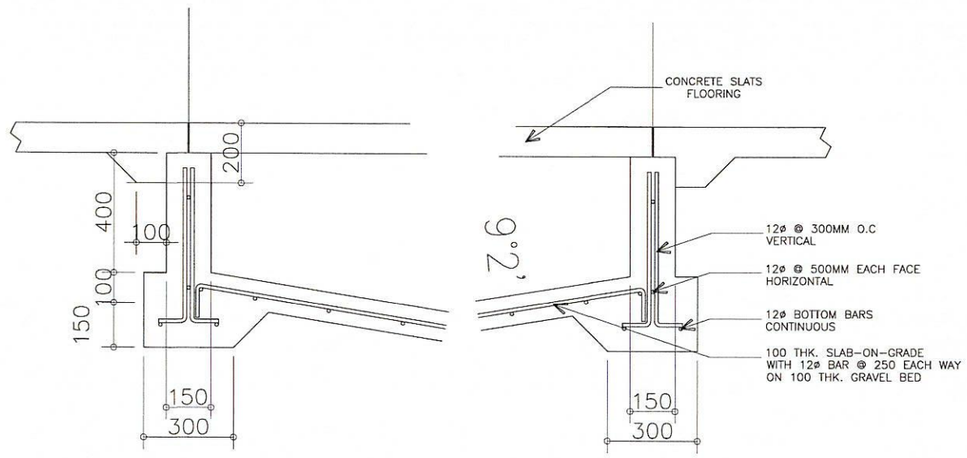
1 S-02 FOUNDATION PLAN
SCALE 1:250 MM



2 S-02 PIT WALL DETAIL
SCALE NTS. (MM)



3 S-02 SUMP PIT DETAIL
SCALE NTS. (MM)



4 S-02 BLOW UP DETAIL
SCALE NTS. (MM)

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BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

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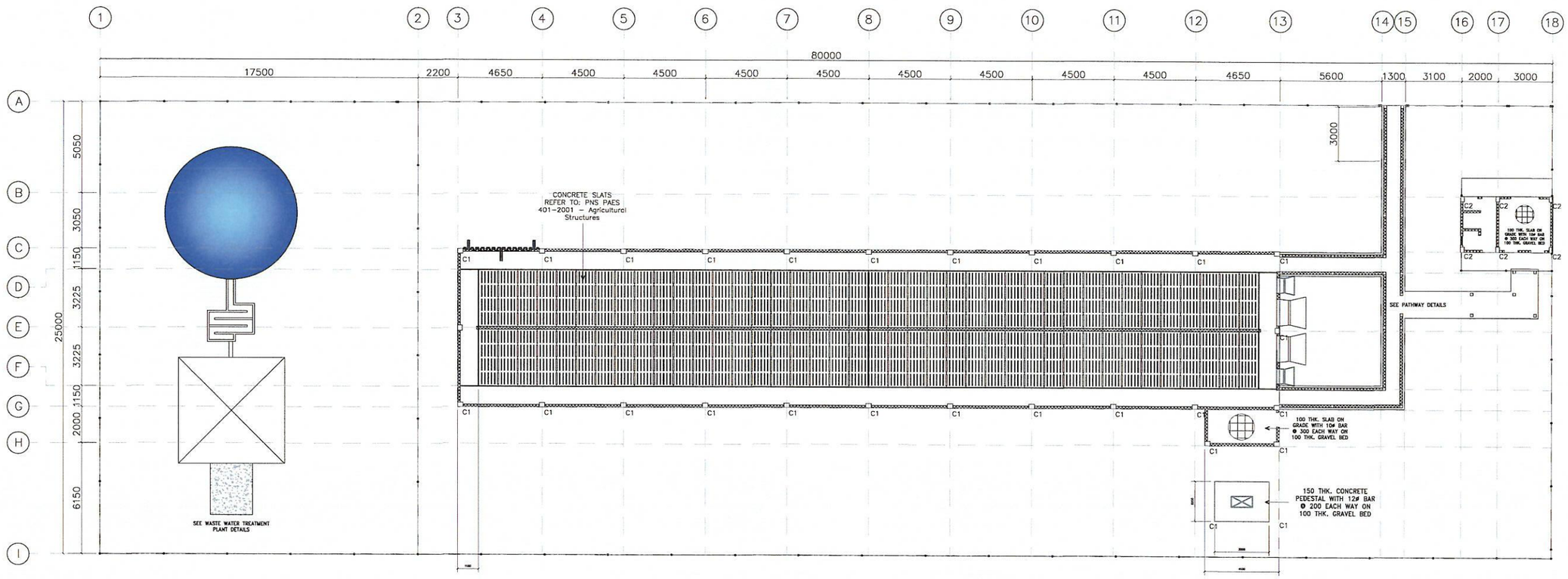
PREPARED BY:	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
ENGR. ERDHYA. BIALZA ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
FOUNDATION PLAN SUMP PIT DETAIL	S-2
DATE: February 18, 2022	2 of 9



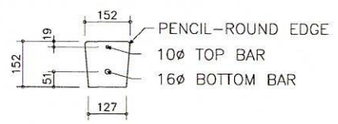
1 / S-03 GROUND FLOOR FRAMING PLAN
SCALE 1:250 MM

NOTES ON BACKFILLING:

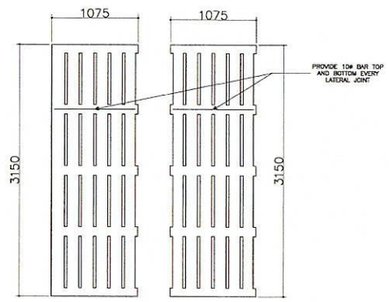
1. EARTH FILLING SHALL BE OF GOOD QUALITY SOIL; NON-PLASTIC TO AVOID SETTLEMENT.
2. FILL SHALL BE COMPACTED IN LAYERS OF 200 MM. TO A RELATIVE DENSITY OF 95%.
3. REMOVE/REPLACE TOP SOIL WHICH ARE HIGHLY PLASTIC TO AVOID CRACKING OF SLAB ON GRADE.

LEGEND:

125THK CHB WALL W/ 10ø @ 600 EA. WAY (TYPICAL)



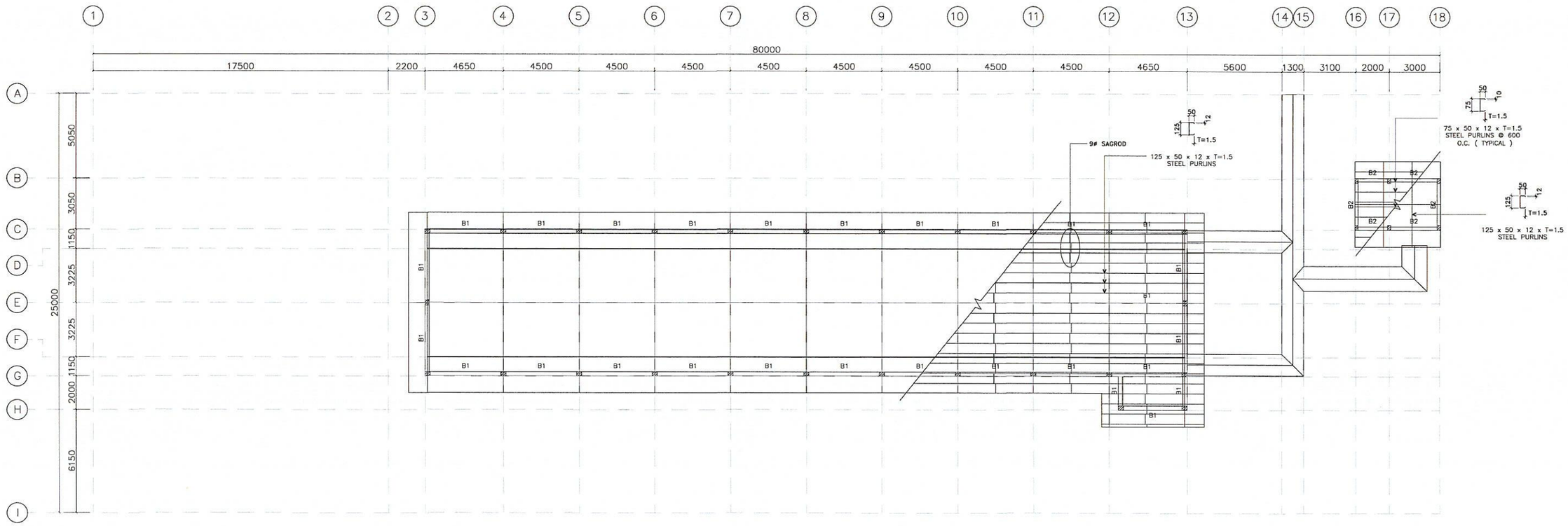
2 / S-03 CONCRETE SLATS DETAIL
SCALE NTS. (MM)



3 / S-03 CONCRETE SLATS
SCALE NTS. (MM)

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE	PREPARED BY	REVIEWED & EVALUATED BY	RECOMMENDING APPROVAL	APPROVED BY	CONCURRED BY	SHEET CONTENT	SHEET NO.
PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	ENGR. ERDHA A. BIALZA ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	GROUND FLOOR FRAMING PLAN DATE February 18, 2022	S-3 3 of 9



1/S-04 ROOF PLAN
SCALE 1:250 MM

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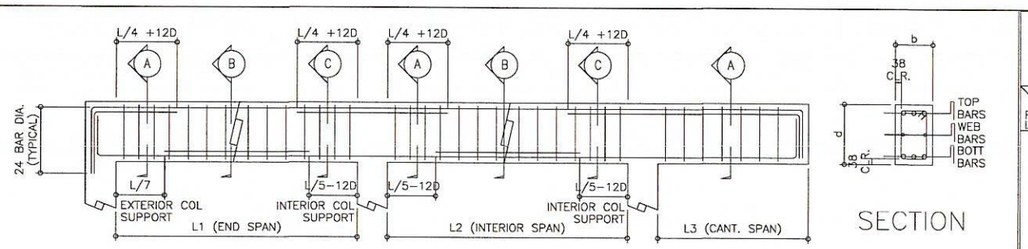


TYPICAL BEAM ELEVATION TYPE A

1 S-05 SCHEDULE OF BEAMS

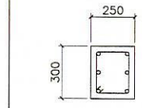
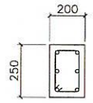
SEE KEY PLANS AND KEY SECTIONS

LEGEND :
CE – CONTINUOUS END
Nmax – MAXIMUM NUMBER OF REBARS PER LAYER ALLOWABLE IN A GIVEN WIDTH OF BEAM

BEAM MARK	SIZE (MM)		BEAM TYPE	SIZE (MM)	STEEL REINFORCEMENTS						Nmax	WEB (MM)	STIRRUPS	
					SECTION A		SECTION B		SECTION C					
	b	d			TOP	BOTT	TOP	BOTT	TOP	BOTT			SIZE	SPACING
B1	250	300	A	16ø	2	2	2	2	2	2	2	2-10ø	10ø	1 @ 50; 5 @ 100; REST @ 150
B2	200	300	A	12ø	3	2	2	3	3	2	3	2-10ø	10ø	1 @ 50; REST @ 200

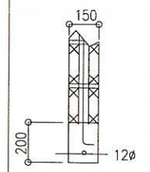
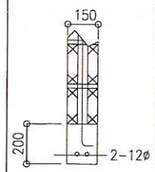
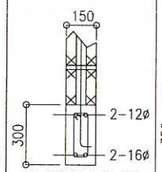
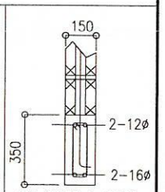
2 S-05 SCHEDULE OF COLUMNS

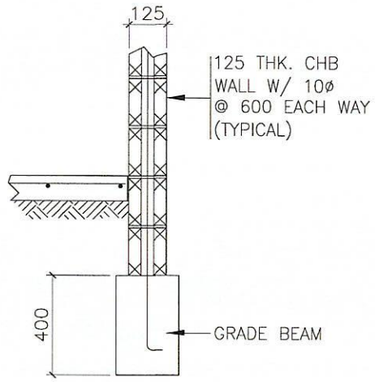
SCALE NTS. (MM)

COL. MARK / FLR. LEVEL	C1	C2
FOUNDATION TO 1ST FLOOR LEVEL	 6-16ø VERTICAL BARS W/ 10ø TIES 1 @ 50; 8 @ 75 REST @ 150	 6-16ø VERTICAL BARS W/ 10ø TIES 1 @ 50; 8 @ 75 REST @ 150

3 S-05 LINTEL BEAM SCHEDULE

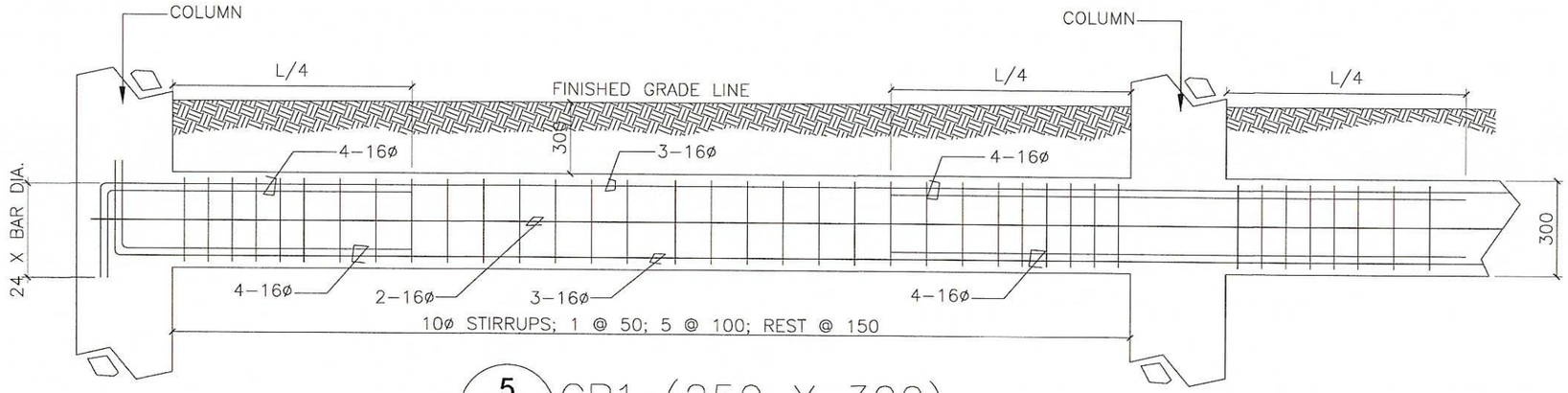
ABOVE DOOR / WINDOW OPENINGS ON CHB WALL (EXTEND 0.30M. FROM EDGES OF MASONRY OPENINGS)

			
10ø STIRR 1 @ 50; REST @ 300	10ø STIRR 1 @ 50; REST @ 300		
MAX SPAN 1.20M	MAX SPAN 2.50M	MAX SPAN 3.50M	MAX SPAN 4.00M



4 S-05 CHB WALL ON GB

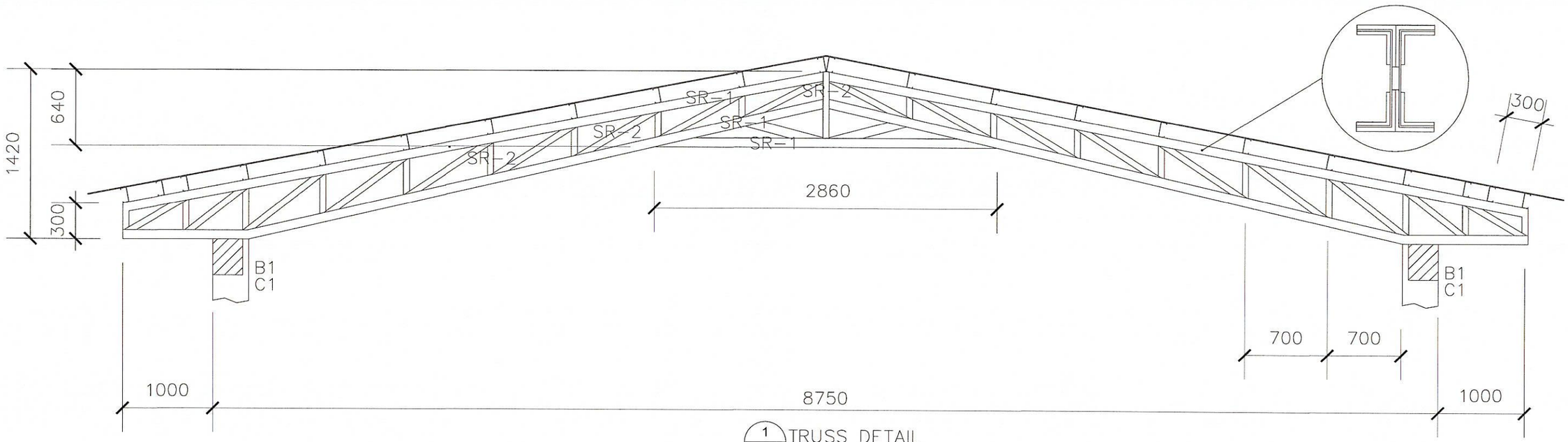
SCALE NTS. (MM)



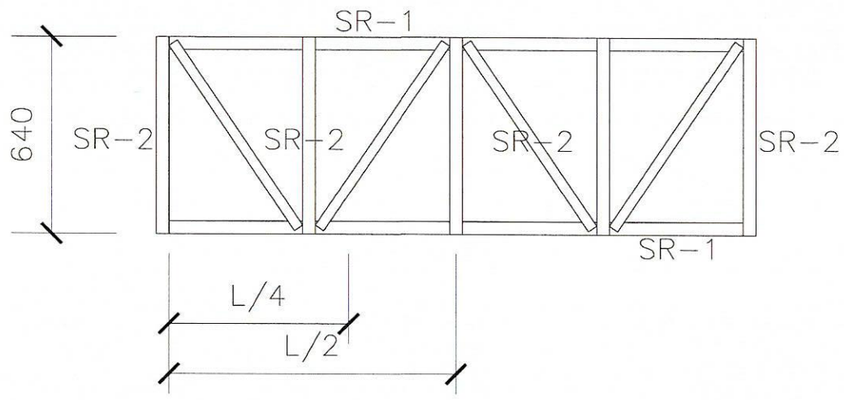
5 S-05 GB1 (250 X 300)

SCALE NTS. (MM)

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. ERDHY A. BIALZA ENGINEER I SPECIAL PROJECT ENGINEERING DIVISION	REVIEWED & EVALUATED BY: ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT: SCHEDULE OF BEAMS SCHEDULE OF COLUMNS SCHEDULE OF LINTEL BEAM GRADE BEAM DETAIL DATE: February 18, 2022	SHEET NO.: S-5 5 of 9



1 / S-06 TRUSS DETAIL
SCALE NTS. (MM)



2 / S-06 LATERAL TRUSS DETAIL
SCALE NTS. (MM)

3 / S-06 SCHEDULE OF STEEL MEMBERS
SEE KEY PLANS AND KEY SECTIONS

MEMBER MARKS	AISC DESIGNATION
SR-1	L 3" x 3" x 5 MM
SR-2	L 2" x 2" x 5 MM

REPUBLIC OF THE PHILIPPINES
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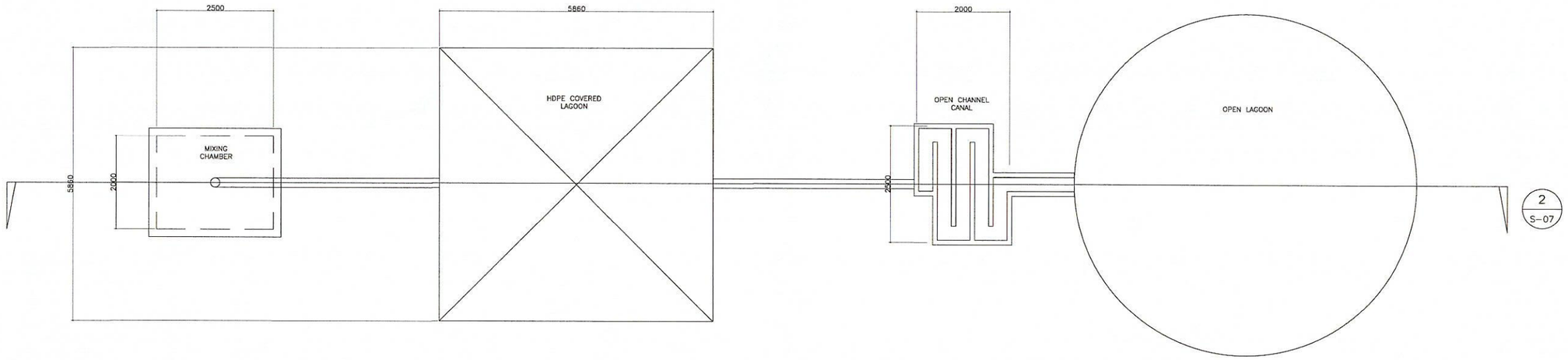
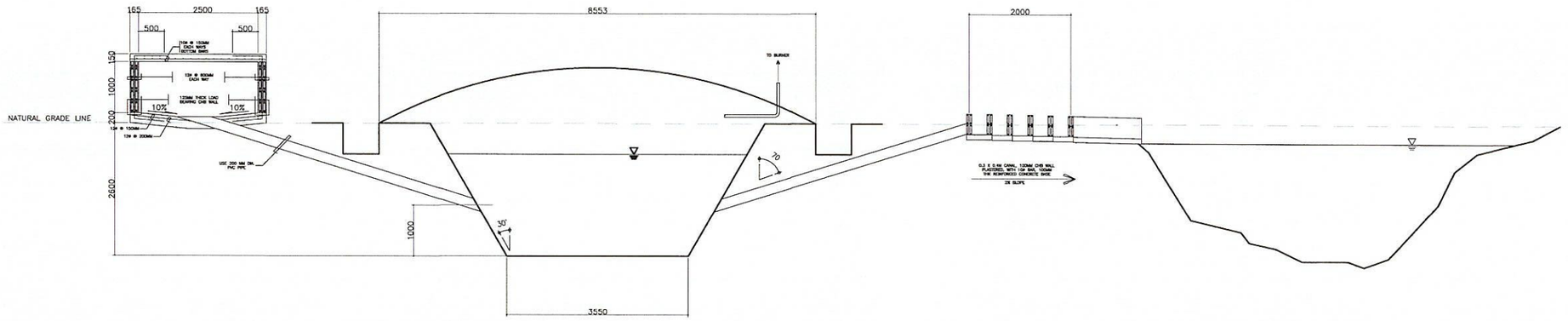
PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL	APPROVED BY:	CONCURRED BY:
ENGR. ERDYKA A. BIALZA ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
TRUSS DETAILS SCHEDULE OF STEEL MEMBER	S-6
DATE: February 18, 2022	6 of 9

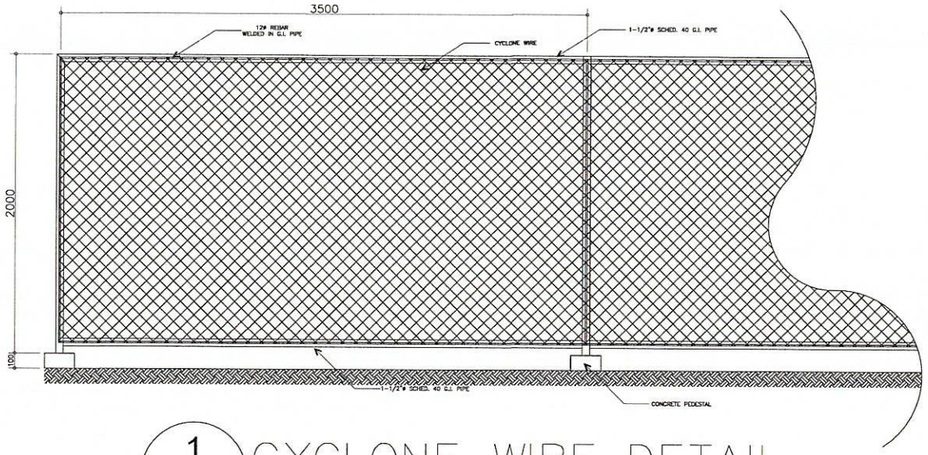


1 / S-07 WASTE WATER TREATMENT PLANT STRUCTURAL DETAIL
SCALE NTS. (MM)

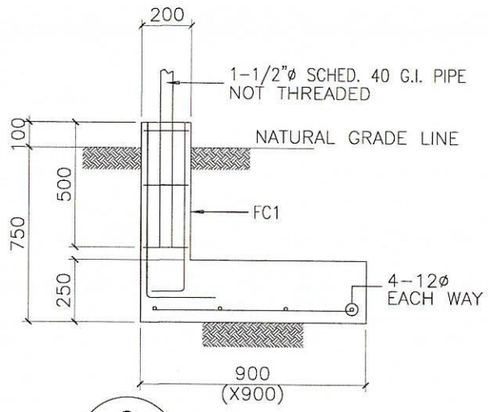


2 / S-07 WASTE WATER TREATMENT PLANT CROSS SECTION
SCALE NTS. (MM)

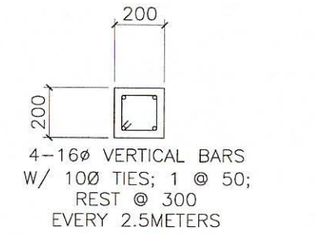
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. ERDHY A. BIALZA ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	REVIEWED & EVALUATED BY: ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MIOLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT WASTE WATER TREATMENT PLANT DETAIL DATE: February 18, 2022	SHEET NO. S-7 7 of 9



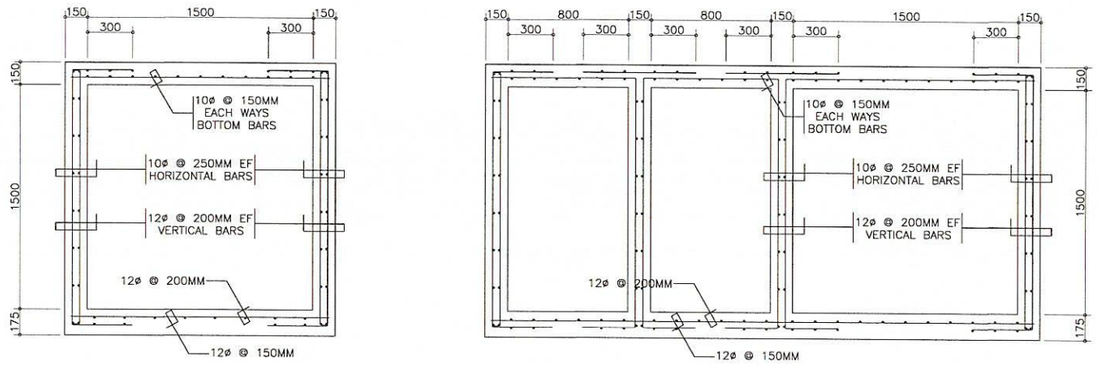
1 / S-08 CYCLONE WIRE DETAIL
SCALE NTS. (MM)



2 / S-08 FF1
SCALE NTS. (MM)

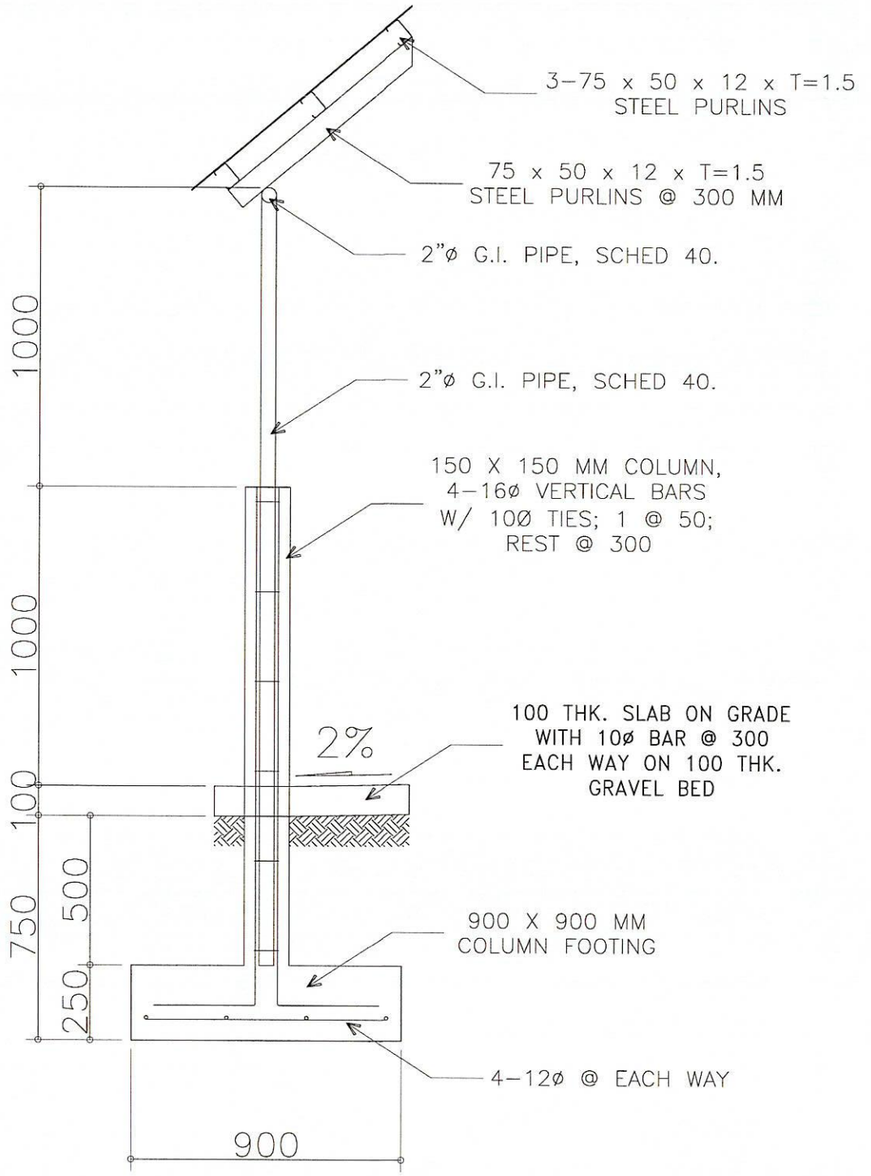


3 / S-08 FC1
SCALE NTS. (MM)

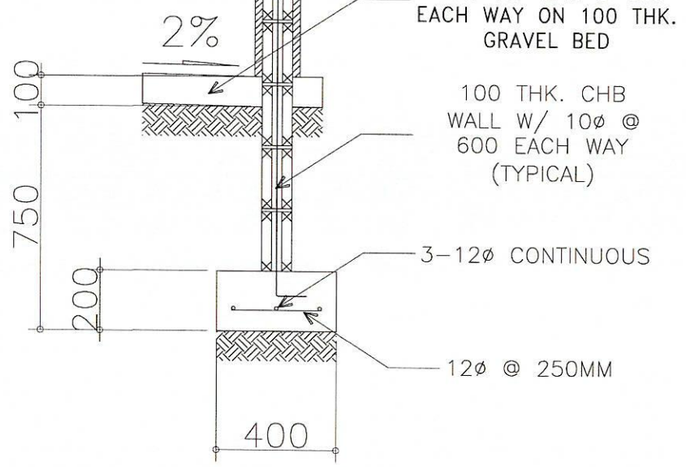


4 / S-08 SEPTIC TANK DETAIL
SCALE NTS. (MM)

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. ERDAY A. BIALZA ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	REVIEWED & EVALUATED BY: ENGR. DENNIS I. TACTAC ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT: CYCLONE WIRE DETAIL FENCE FOOTING DETAIL SEPTIC TANK DETAIL DATE: February 18, 2022	SHEET NO.: S-8 8 of 9



1 S-09 PATHWAY COLUMN DETAIL
SCALE NTS. (MM)



2 S-09 PATHWAY WALL DETAIL
SCALE NTS. (MM)

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

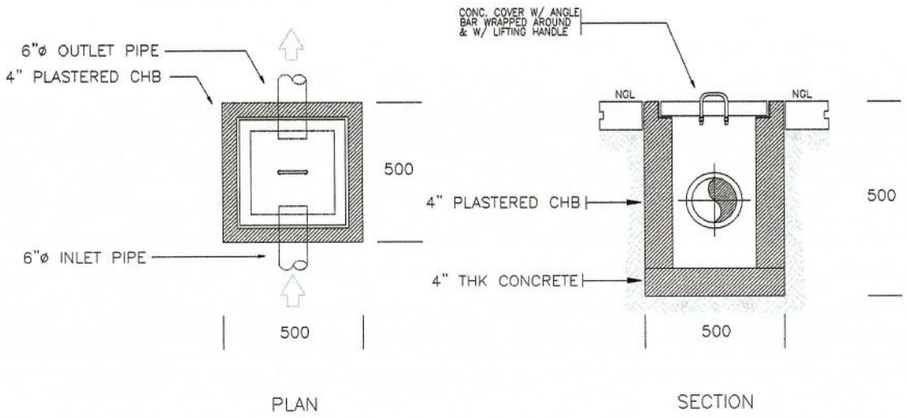
PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PREPARED BY:	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
ENGR. ERDHY A. BIALZA	ENGR. DENNIS I. TACTAC	ENGR. JUANA T. TAPEL, Ph.D	ENGR. ARIODEAR C. RICO	DR. RUTH S. MICLAT-BONACO
ENGINEER II SPECIAL PROJECT ENGINEERING DIVISION	ENGINEER V SPECIAL PROJECT ENGINEERING DIVISION	DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV OFFICE OF THE DIRECTOR	DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
PATHWAY DETAILS	S-9
DATE: February 18, 2022	9 of 9

PLUMBING GENERAL NOTES:

1. ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE PROVISIONS OF THE NATIONAL PLUMBING CODE, THE NATIONAL BUILDING CODE AND THE RULES AND REGULATIONS OF THE LOCAL GOVERNMENT.
2. COORDINATE THE DRAWING WITH OTHER RELATED DRAWINGS AND SPECIFICATION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN. HIS DECISION SHALL BE FINAL
3. 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 ENGINEER.
4. PROPOSED SANITARY UTILITIES SHALL CONFORM TO THE ACTUAL LOCATION, DEPTH, AND INVERT ELEVATION OF EXISTING PIPES AND STRUCTURES AS VERIFIED BY THE CONTRACTOR
5. ALL FIXTURES SHALL BE VENTED, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE AND COORDINATE THE WORKS WITH THE SEWER EFFLUENT DISPOSAL AND WATER LINE SERVICE CONNECTING POINT.
7. ALL SLOPES FOR HORIZONTAL DRAINAGE SHALL MAINTAIN 1% UNLESS OTHERWISE SPECIFIED.
8. SIZE OF WATER SUPPLY PIPES TO FIXTURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
9. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE, COORDINATE THE WORKS WITH THE SEWER LINE EFFLUENT DISPOSAL POINT AND WATER LINE SERVICE CONNECTING POINT.
10. THE WORK THROUGHOUT SHALL BE EXECUTED IN THE BEST AND MOST THOROUGH MANNER KNOWN TO THE TRADE AND TO THE SATISFACTION OF THE ENGINEER.
11. ALL PIPES SIZES ARE IN MILLIMETERS AND ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
12. THE EFFLUENT SHOULD CONFORM TO THE D.A ADMINISTRATIVE ORDER 2007-26 OR THE GUIDELINES ON THE PROCEDURES AND TECHNICAL STANDARDS FOR THE ISSUANCE OF A CERTIFICATION ALLOWING FOR THE SAFE RE-USE OF WASTE WATER FOR THE PURPOSE OF IRRIGATION AND OTHER AGRI-CULTURAL USE.



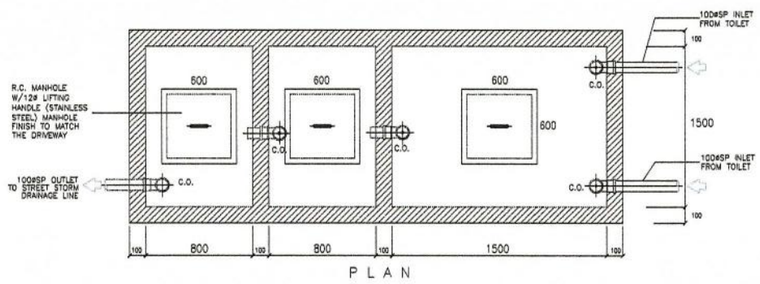
P/1 CLOSED CATCH BASIN

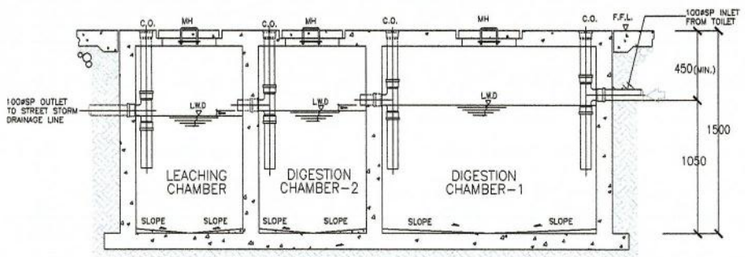
NOT TO SCALE

LEGENDS:

MH	MANHOLE
VTR	VENT THRU ROOF
SV	SEPTIC VAULT
DS	DOWN SPOUT
FD	FLOOR DRAIN
KS	KITCHEN SINK
LAV	LAVATORY
SH	SHOWER
—⋈—	GATE VALVE
—Ⓜ—	WATER METER
CO	CLEANOUT
SPS	SOIL PIPE STACK
WLR	WATER LINE RISER
- · - · - · -	WATER LINE
- - - - -	DRAINAGE LINE
———	SEWER LINE

—⋈—	FLOAT VALVE
—⋈—	CHECK VALVE





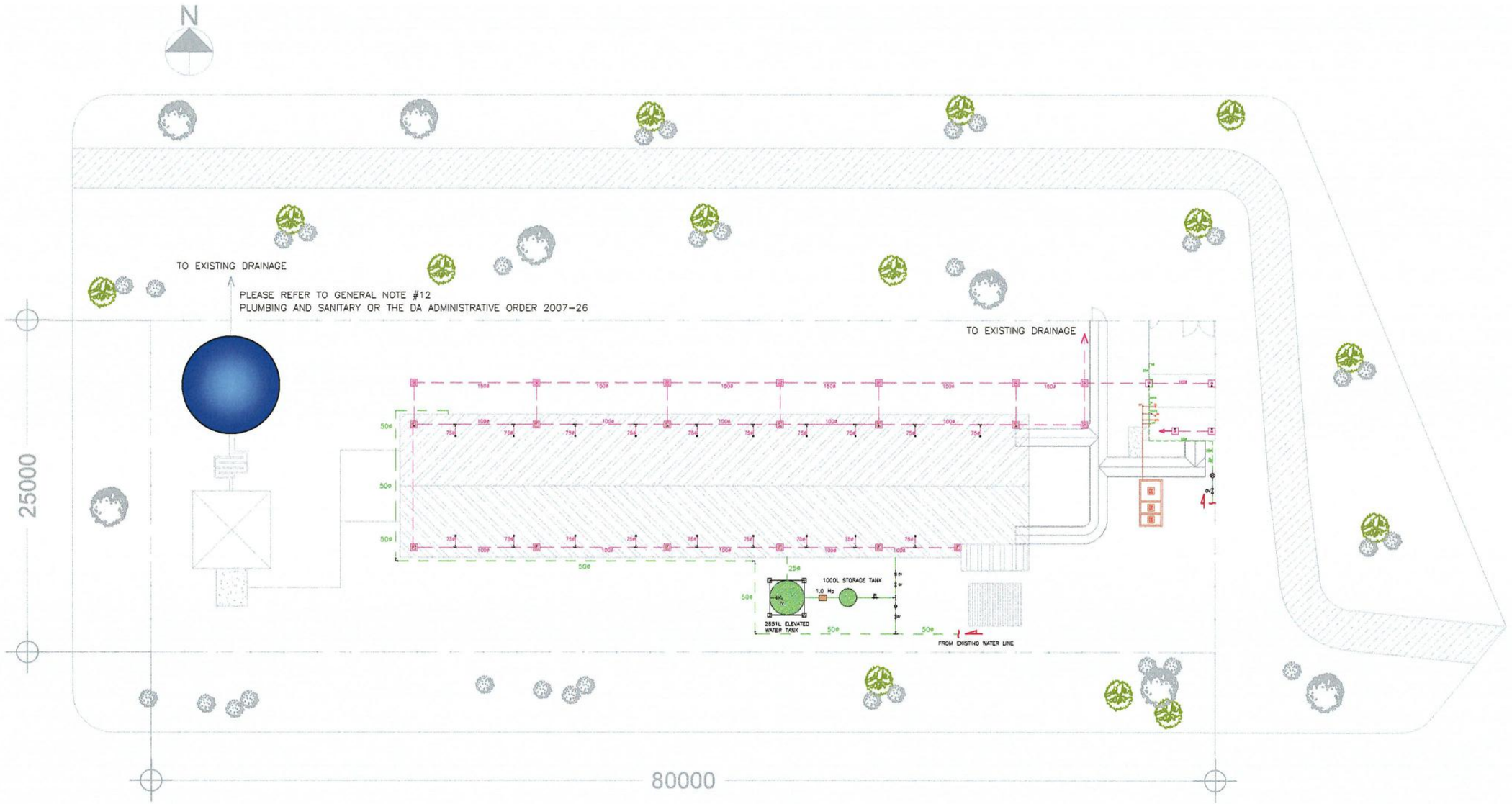
P/1 SEPTIC TANK DETAIL
DISINFECTION AREA

NOT TO SCALE

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
ENGR. RENREN JAY R. PASIA, ENGINEER II, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. NOEMI L. CARPIO, ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D, DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO, DIRECTOR IV, OFFICE OF THE DIRECTOR	DR. RUTH S. MICLAT-SONACO, DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	PLUMBING GENERAL NOTES SEPTIC TANK DETAIL LINE CANAL DETAIL	P-1
				01/02	DATE	1 of 7

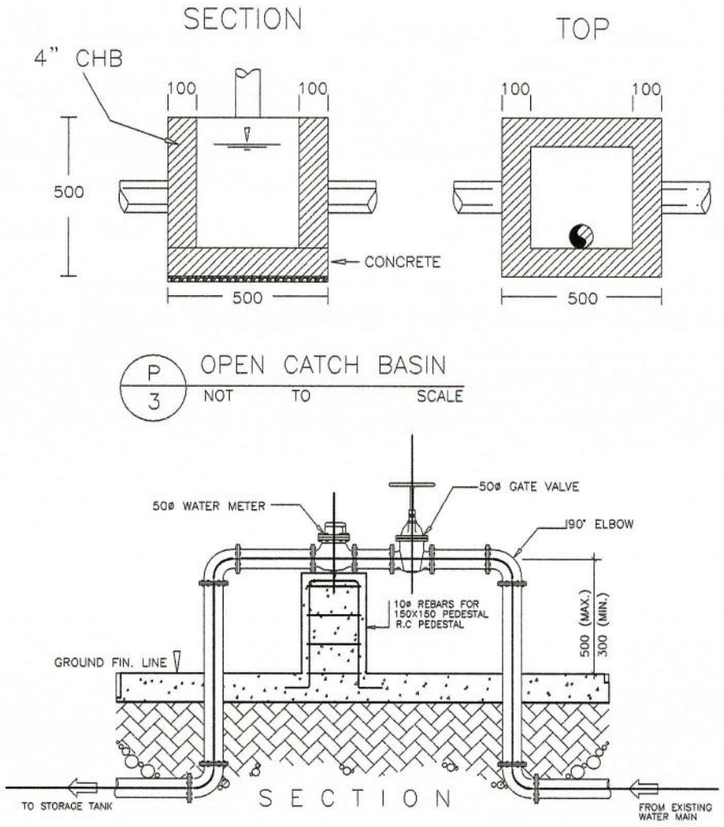


P/2 FARMSTEAD PLAN PLUMBING LAYOUT

SCALE 1:300

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

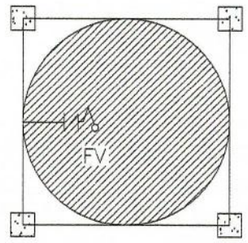
PROJECT TITLE	PREPARED BY:	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	ENGR. RENREN JAY R. PASIA ENGINEER II ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SITE DEVELOPMENT PLAN PLUMBING LAYOUT DATE	P-2 2 of 7

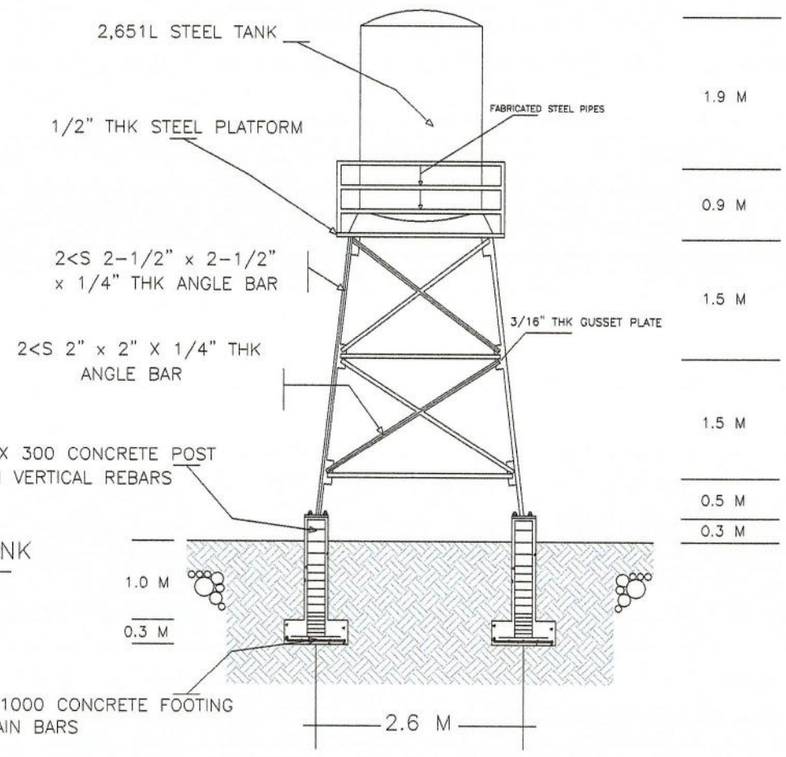


P/3 OPEN CATCH BASIN
NOT TO SCALE

P/3 DETAILS OF WATER METER
NOT TO SCALE

2651L ELEVATED WATER TANK





P/3 DETAILS OF ELEVATED WATER TANK
NOT TO SCALE

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

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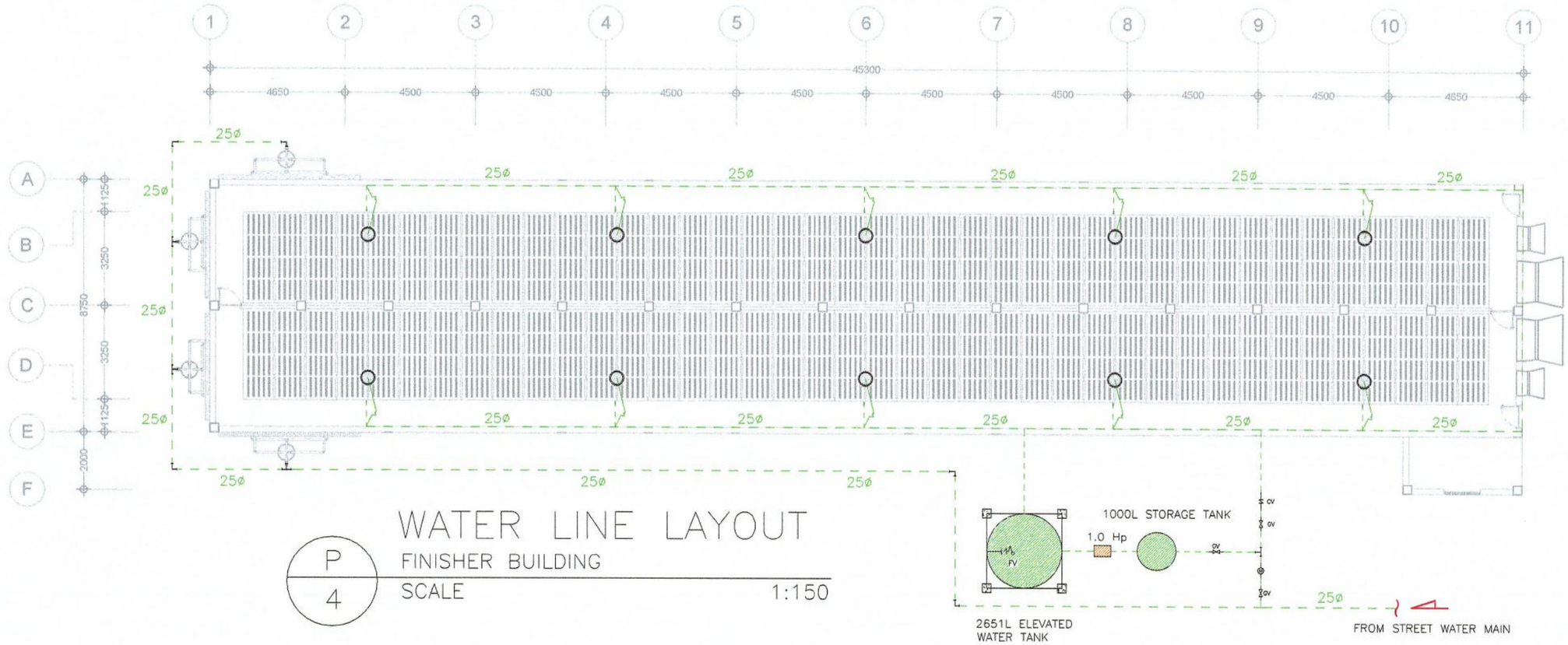
PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
ENGR. RENRENJAY R. PASIA ENGINEER II ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MIGLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
ELEVATED WATER TANK DETAIL WATER METER DETAIL CATCHBASIN DETAIL	P-3
DATE	3 of 7

LEGEND

	WATER LINE	CV	CHECK VALVE
GV	GATE VALVE		STORAGE TANK
M	WATER METER		ELEVATED WATER TANK



WATER LINE LAYOUT

P/4

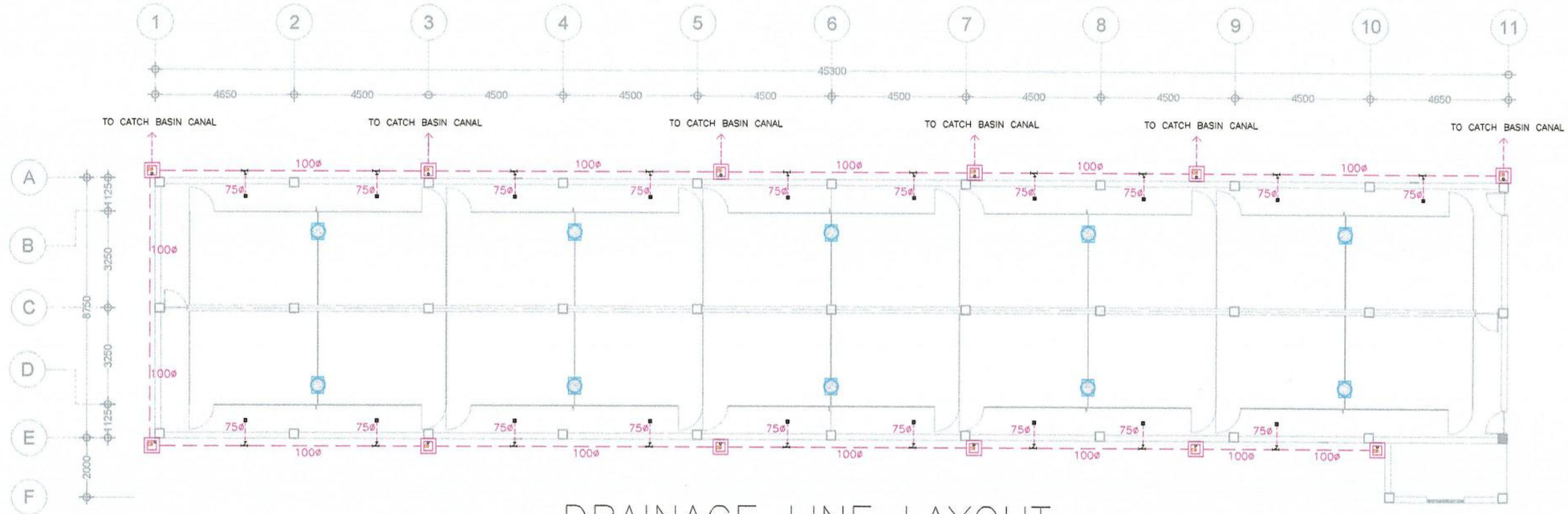
FINISHER BUILDING

SCALE 1:150

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY ENGR. RENREN SAYR. PASIA ENGINEER II ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI C. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT WATER LINE LAYOUT FINISHER BUILDING DATE	SHEET NO. P-4 4 of 7

LEGEND

	DRAINAGE LINE
	CATCH BASIN
	FEEDER



DRAINAGE LINE LAYOUT

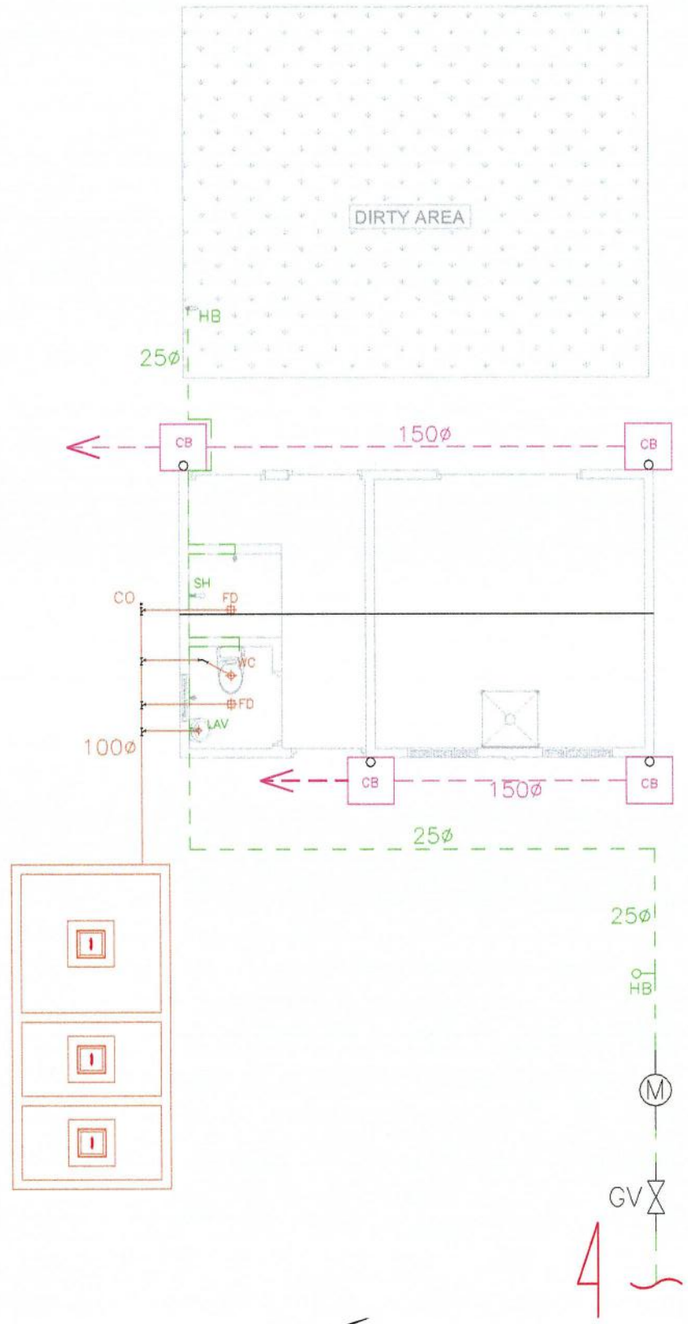
P / 5

FINISHER BUILDING

SCALE 1:150

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY ENGR. RENREN JAY R. PASIA ENGINEER II ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. NICOLAS-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT DRAINAGE LAYOUT FINISHER BUILDING DATE	SHEET NO. P-5 5 of 7

LEGEND			
	WATER LINE		SEPTIC TANK
	SEWER LINE		DOWNSPOUT
	DRAINAGE LINE		



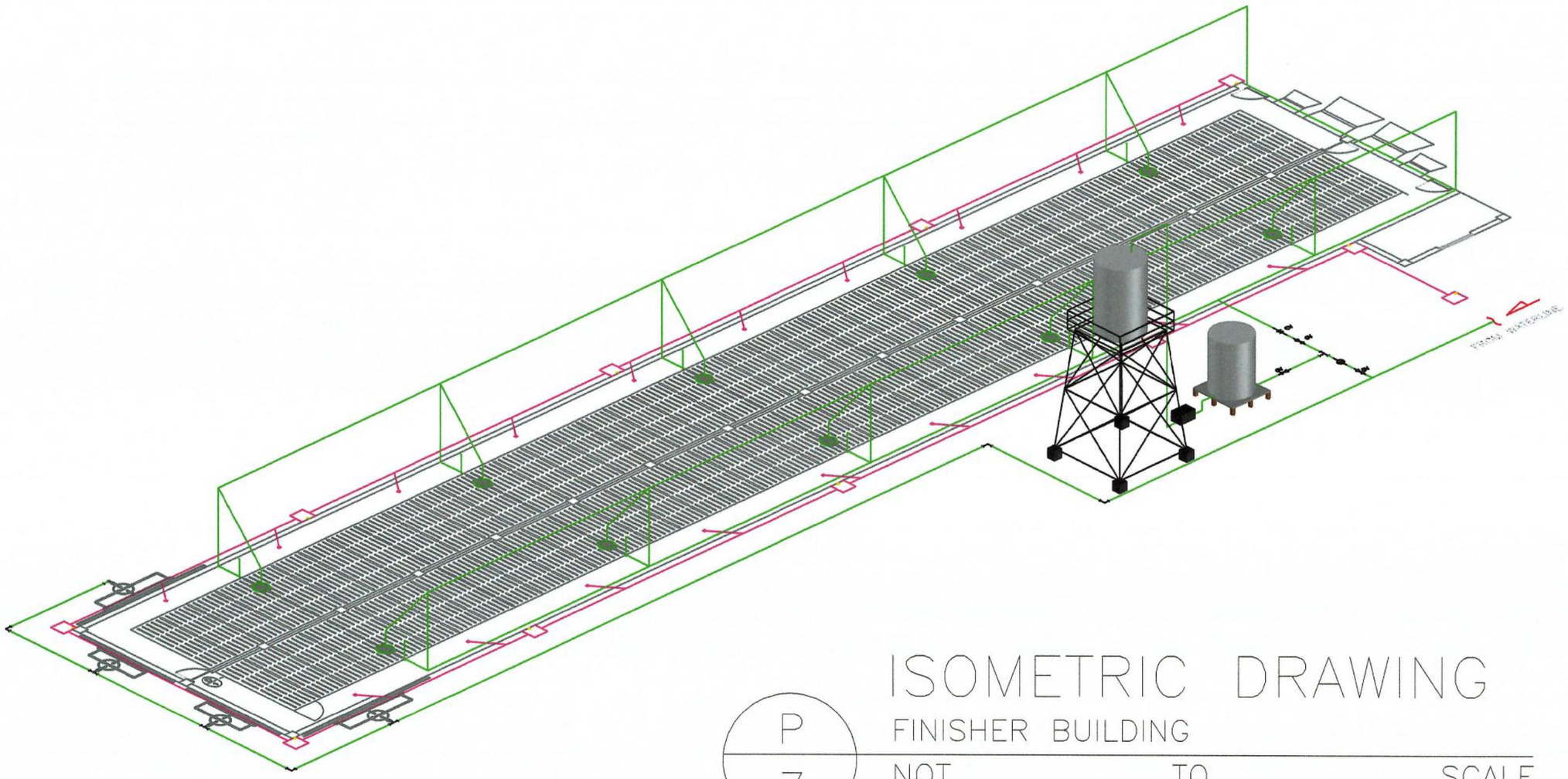
PLUMBING LAYOUT

P / 5

DISINFECTION AREA AND FEED STORAGE

SCALE 1:60

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. RENREN JAY R. PASIA ENGINEER II ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MIGLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT PLUMBING LAYOUT DISINFECTION AREA AND FEED STORAGE ROOM DATE	SHEET NO. P-6 6 of 7



ISOMETRIC DRAWING

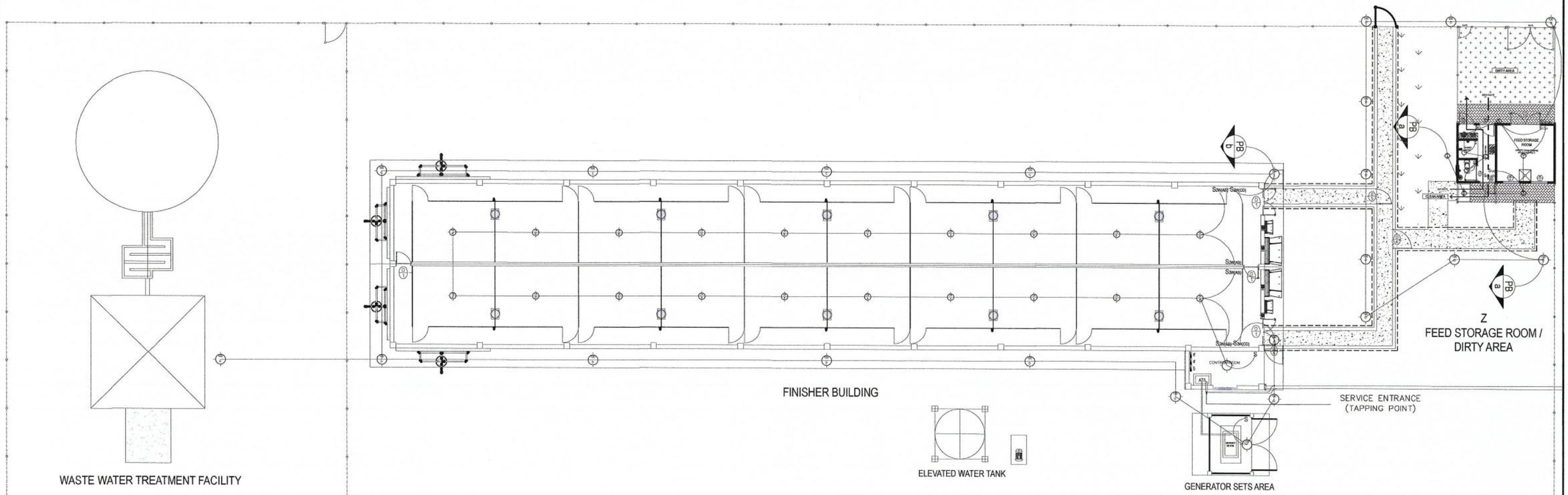
FINISHER BUILDING

NOT TO SCALE

P
7

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY: ENGR. RENREN JAY R. PASIA ENGINEER II ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MIGUEL-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE-NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT PLUMBING LAYOUT ISOMETRIC DRAWING FINISHER BUILDING DATE:	SHEET NO. P-7 7 of 7

LEGEND:	
SYMBOL	DESCRIPTION
100	1-100W LIGHTING OUTLET
24	1-24W LIGHTING OUTLET @50lux
	POWER OUTLET, DUPLEX
	PANEL BOARD, MARKED AS"DP"
PB b	CIRCUIT HOMERUN
S_1	SWITCH, 1-GANG
S_{2W-1}	2-WAY SWITCH, 1-GANG
P	PUMP
ATS	AUTOMATIC TRANSFER SWITCH



LIGHTING LAYOUT

FE 1 — 300 HEADS FINISHER BUILDING — SCALE: 1:100

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**	PREPARED BY ENGR. EMMANUEL R. LANUZA ENGINEER III STANDARDS REGULATION AND ENFORCEMENT DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MIGLATSONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT FARM ELECTRIFICATION PLAN: LIGHTING OUTLET DATE	SHEET NO. FE-1 1 of 5

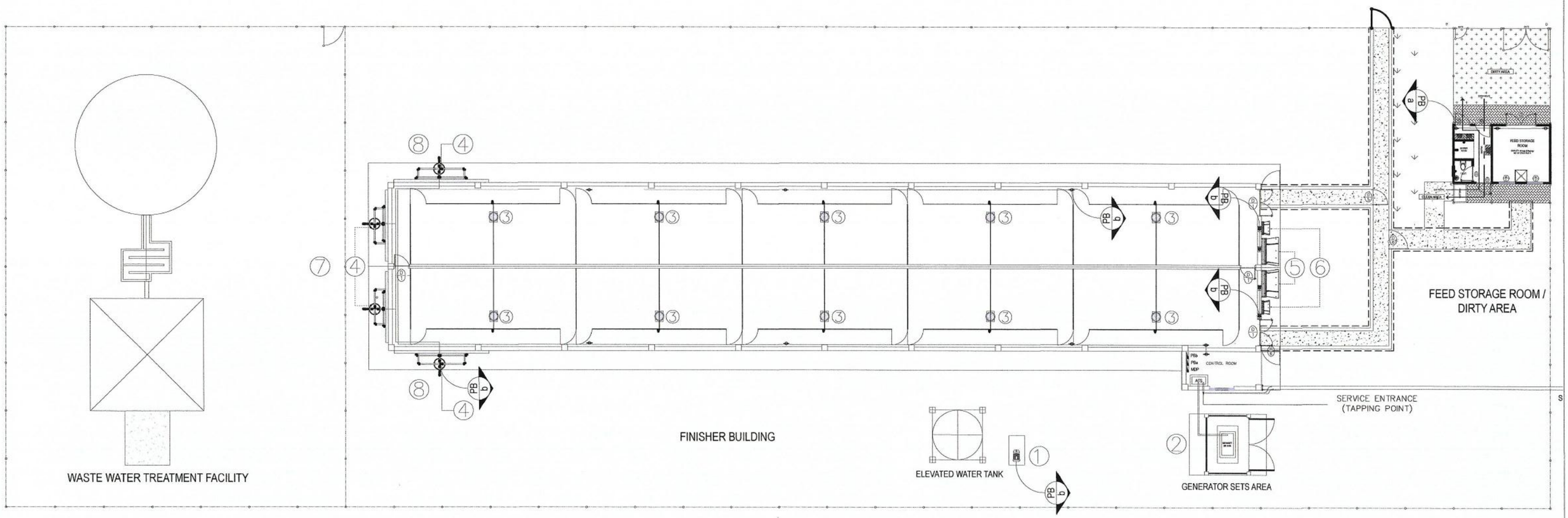
ITEM	DESCRIPTION	QUANTITY	DESCRIPTION
①	WATER PUMP	1	1HP,230V,1PHASE
②	GENERATOR SETS	1	20KVA,230V,1PHASE
③	SELF FEEDER	10	SELF FEEDER (100kg capacity)
④	SUBMERSIBLE PUMP	4	0.5HP,230V,1PHASE
⑤	EXHAUST FAN	2	50" GALVANIZED CONE FAN
⑥	EXHAUST FAN	2	24" GALVANIZED CONE FAN
⑦	COOLING PAD	2	1.8 X 3.6 M WALL-MOUNTED
⑧	COOLING PAD	2	1.8 X 4.8 M. WALL-MOUNTED

FINISHER BUILDING
2 ROWS OF 10 PENS
PENS ARE 4.3 X 3.15 METERS
15 ANIMALS PER PEN
AT 0.9 SQ.M PER ANIMAL

LOCAL BUILDING
BUILDING IS CURTAIN SIDED
CEILING HEIGHT IS 2.40 METERS

FLOORING IS TOTAL CONCRETE SLATS
(EXCEPT WALKWAY)
3.15 M X 1.075 M GANG SLATS

LEGEND:	
SYMBOL	DESCRIPTION
	1-100W LIGHTING OUTLET
	1-24W LIGHTING OUTLET @50lux
	POWER OUTLET, DUPLEX
	PANEL BOARD, MARKED AS"DP"
	CIRCUIT HOMERUN
S_1	SWITCH, 1-GANG
S_{2W-1}	2-WAY SWITCH, 1-GANG
P	PUMP
ATS	AUTOMATIC TRANSFER SWITCH



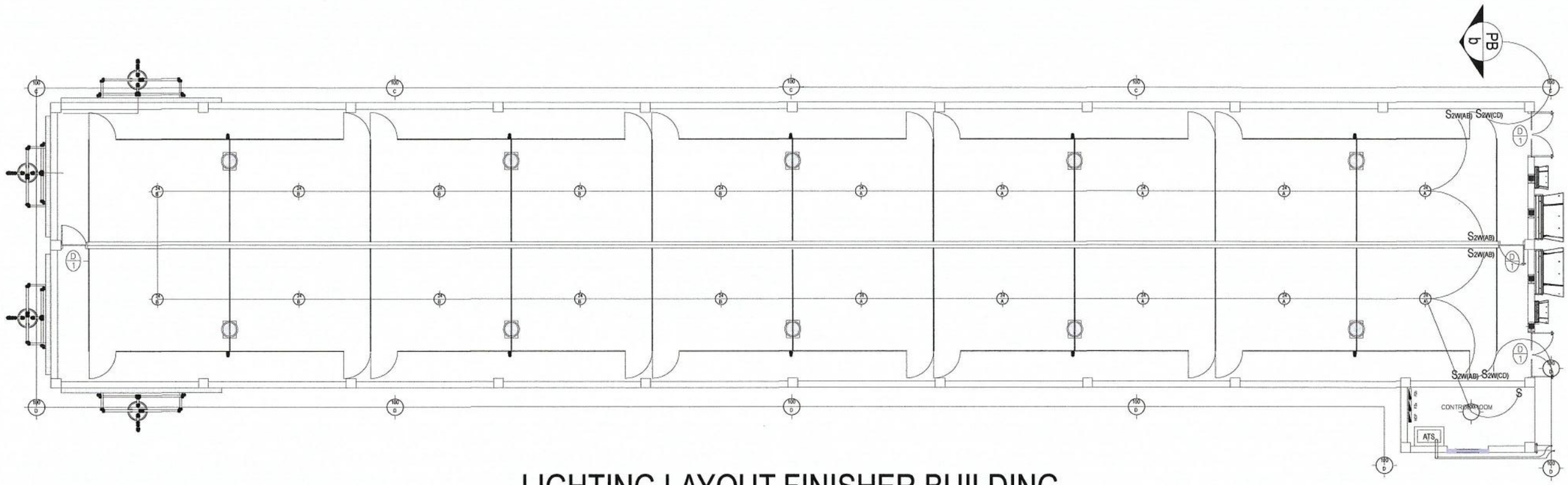
POWER LAYOUT
FE 1 — 300 HEADS FINISHER BUILDING
SCALE: 1:100

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE: **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
ENGR. EMMANUEL R. LANUZA	ENGR.NOEMI L. CARPIO	ENGR. JUANA T. TAPEL, Ph.D	ENGR. ARIODEAR C. RICO	DR. RUTH S. MOLAT-SONACO
ENGINEER III	ENGINEER V	DIRECTOR III	DIRECTOR IV	DIRECTOR
STANDARDS REGULATION AND ENFORCEMENT DIVISION	ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	OFFICE OF THE ASSISTANT DIRECTOR	OFFICE OF THE DIRECTOR	DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
POWER LAYOUT	FE-2
DATE	2 of 5



LIGHTING LAYOUT-FINISHER BUILDING

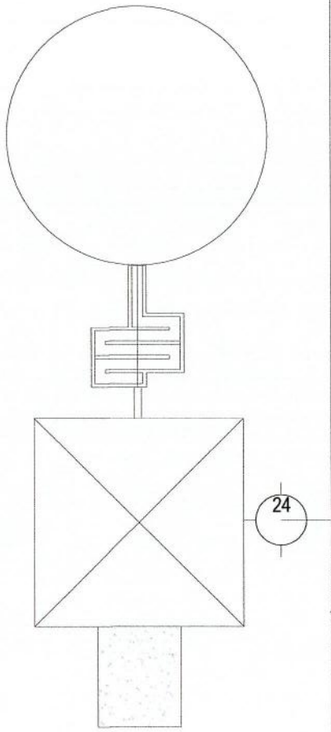
FE 3-1

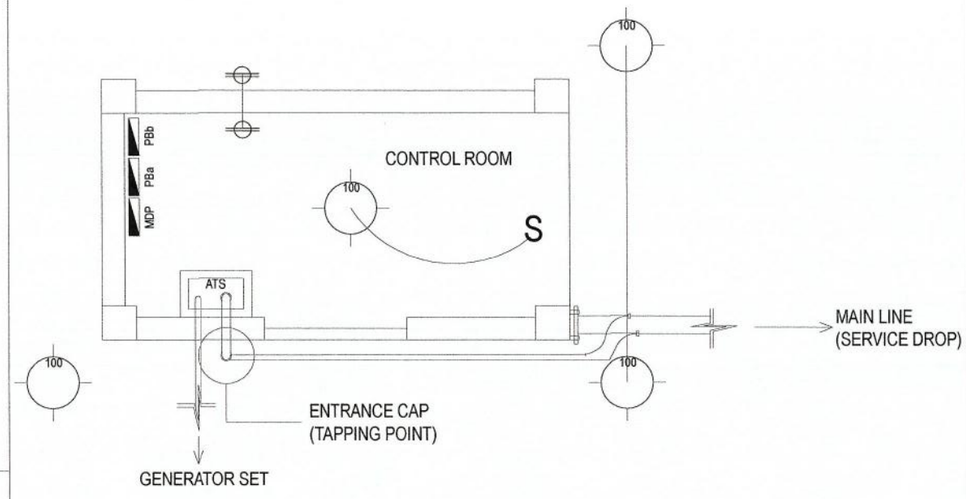
300 HEADS FINISHER BUILDING

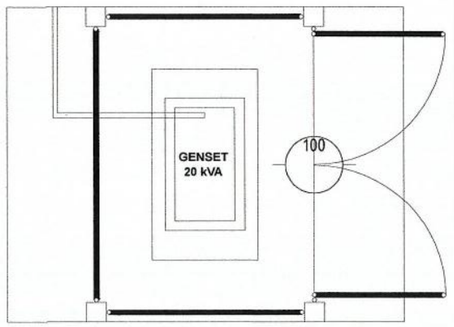
SCALE: 1:150

LEGEND:

SYMBOL	DESCRIPTION
100	1-100W LIGHTING OUTLET
24	1-24W LIGHTING OUTLET @50lux
	POWER OUTLET, DUPLEX
	PANEL BOARD, MARKED AS"DP"
PB b	CIRCUIT HOMERUN
S_1	SWITCH, 1-GANG
S_{2W-1}	2-WAY SWITCH, 1-GANG
P	PUMP
ATS	AUTOMATIC TRANSFER SWITCH







GENERATOR SETS

LIGHTING LAYOUT - WASTE TREATMENT FACILITY, CONTROL ROOM, AND GENERATOR SET

FE 3-2

300 HEADS FINISHER BUILDING

NOT TO SCALE

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

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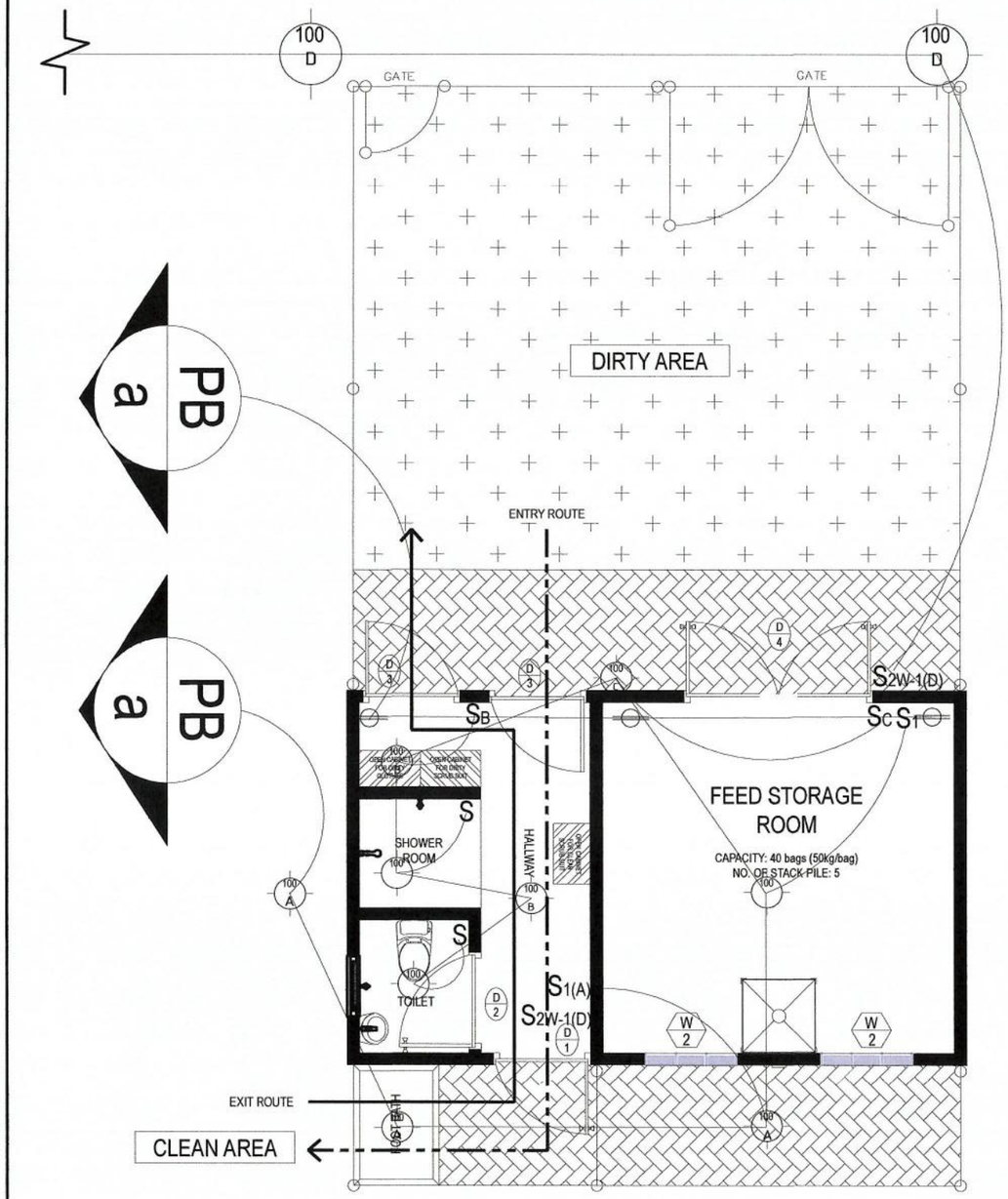
ENGR. EMMANUEL R. LANUZA ENGINEER III STANDARDS REGULATION AND ENFORCEMENT DIVISION	ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MIGUAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
LIGHTING LAYOUT : FINISHER BUILDING BIOGAS FACILITY GENERATOR SET & CONTROL ROOM	FE-3
DATE	3 of 5

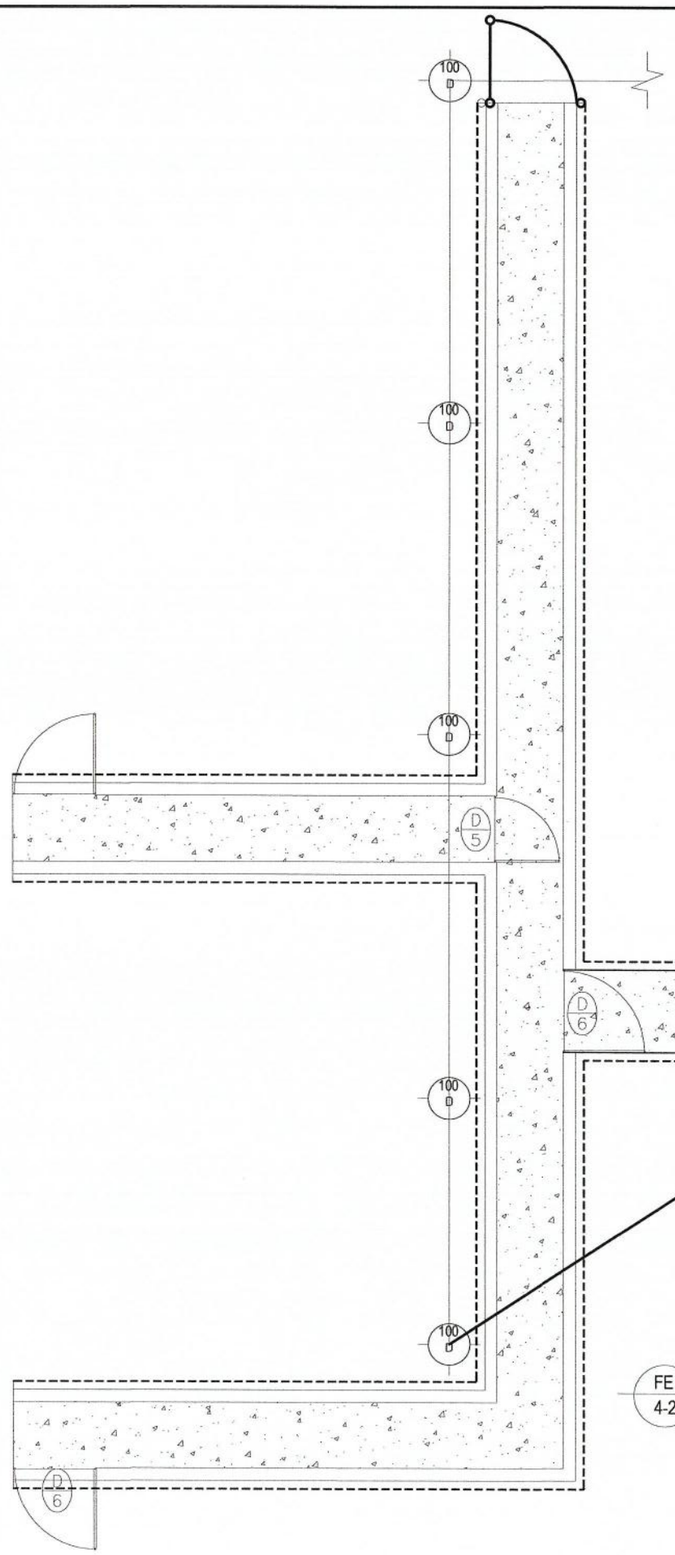


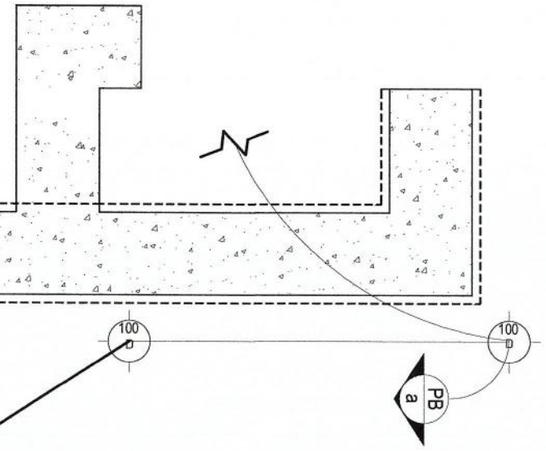
LIGHTING AND POWER LAYOUT-SHOWER ROOM AND FEED STORAGE ROOM

FE 4-1

300 HEADS FINISHER BUILDING

SCALE: 1:50





LIGHTING LAYOUT-COVERED PATH WALK

FE 4-2

300 HEADS FINISHER BUILDING

SCALE: 1:75

LEGEND:	
SYMBOL	DESCRIPTION
	1-100W LIGHTING OUTLET
	1-24W LIGHTING OUTLET @50lux
	POWER OUTLET, DUPLEX
	PANEL BOARD, MARKED AS"DP"
	CIRCUIT HOMERUN
S_1	SWITCH, 1-GANG
S_{2W-1}	2-WAY SWITCH, 1-GANG

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
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ENGINEER III, STANDARDS REGULATION AND ENFORCEMENT DIVISION	ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV, OFFICE OF THE DIRECTOR	DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
LIGHTING AND POWER LAYOUT : DISINFECTION AREA & FEED STORAGE ROOM LIGHTING LAYOUT: COVERED PATHWALK	FE-4
DATE	4 of 5

SCHEDULE OF LOADS

MAIN DISTRIBUTION PANEL (MDP)

CKT NO.	LOAD DESCRIPTION	QTY	VA	V	A	CIRCUIT BREAKER AF	CIRCUIT BREAKER POLE	CIRCUIT BREAKER AT	SIZE OF WIRE AND RACEWAY
1	PANEL BOARD A	1	3860	230	16.78	100	2	60	2 - 8.0 mm2 THWN Str. Cu. Wire, 3.5 mm2 THWN GND @ 25 mm dia. PVC Conduit
2	PANEL BOARD B	1	13218	230	57.47	100	2	80	2 - 8.0 mm2 THWN Str. Cu. Wire, 3.5 mm2 THWN GND @ 25 mm dia. PVC Conduit
	TOTAL CONNECTED LOAD		17078		74.25				

LOAD COMPUTATION:

TOTAL CURRENT : (A)
It = 74.25

MAIN FEEDER CONDUCTOR:
USE : 1 - 150AT, 150AF, 2P, 230V, 60 Hz MCCB
USE : 2 - 22 mm. sq. THWN Stranded Copper Wire
1 - 8.0 mm. sq. THWN GND @ 32 mm. dia. PVC Conduit

TOTAL KVA:
$S = \frac{74.25 \times 230}{1000}$
S = 17.078 KVA

PANEL BOARD A (FEED STORAGE & SHOWER ROOM)

CKT NO.	LOAD DESCRIPTION	QTY	VA	V	A	CIRCUIT BREAKER AF	CIRCUIT BREAKER POLE	CIRCUIT BREAKER AT	SIZE OF WIRE AND RACEWAY
1	(SPARE)	1	1080	230	4.70	50	2	40	
2	LIGHTING OUTLET -PATHWAY/FENCE, 100W	9	900	230	3.91	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
3	LIGHTING OUTLET -STORAGE, 100W	8	800	230	3.48	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
4	POWER OUTLET-2 GANG	3	1080	230	4.70	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
	TOTAL CONNECTED LOAD		3860		16.78				

LOAD COMPUTATION:

TOTAL CURRENT : (A)
It = 16.78

MAIN FEEDER CONDUCTOR:
$I @ 80\% = \frac{3860 \times 0.8}{230}$
I @ 80% = 13.43 AMP

USE:
2 - 3.5 mm. sq. THWN Stranded Copper Wire
1 - 2.0 mm. sq. THWN GND @ 20 mm. dia. PVC Conduit

SUB-BREAKER CAPACITY
I = 16.78 + 1.5 (4.7)
I = 23.83 A

USE:
1-50AT CB, 2P
230V, 60 Hz MCCB

PANEL BOARD B (FINISHER BUILDING)

CKT NO.	LOAD DESCRIPTION	QTY	VA	V	A	CIRCUIT BREAKER AF	CIRCUIT BREAKER POLE	CIRCUIT BREAKER AT	SIZE OF WIRE AND RACEWAY
1	WATER CIRCULATING PUMP,, 0.5 HP - COOLING PAD	4	1492	230	6.49	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
2	ELECTRIC PUMP- EXHAUST FAN, 50", 1650W	1	2300	230	10.00	50	2	40	2 - 8.0 mm2 THWN Str. Cu. Wire, @ 25 mm dia. PVC Conduit
	ELECTRIC PUMP- EXHAUST FAN, 20", 650W	1							
3	ELECTRIC PUMP- EXHAUST FAN, 50", 1650W	1	2300	230	10.00	50	2	40	2 - 8.0 mm2 THWN Str. Cu. Wire, @ 25 mm dia. PVC Conduit
	ELECTRIC PUMP- EXHAUST FAN, 20", 650W	1							
4	LIGHTING OUTLET -PIG PENS @ 24 W	20	480	230	2.09	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
5	LIGHTING OUTLET - CONTROL ROOM/FEED STORAGE/ OUTSIDE FINISHER BUILDING	15	360	230	1.57	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
6	POWER OUTLET-2 GANG	9	3240	230	14.09	50	2	40	2 - 8.0 mm2 THWN Str. Cu. Wire, @ 25 mm dia. PVC Conduit
7	WATER PUMP, 1HP , WATER TANK	1	746	230	3.24	50	2	20	2 - 3.5 mm2 THWN Str. Cu. Wire @ 20 mm dia. PVC Conduit
8	SPARE	1	2300	230	10.00	50	2	40	
	TOTAL CONNECTED LOAD		13218		57.47				

LOAD COMPUTATION:

TOTAL CURRENT : (A)
It = 57.47

MAIN FEEDER CONDUCTOR:
$I @ 80\% = \frac{13218 \times 0.8}{230}$
I @ 80% = 45.98 AMP

USE:
2 - 5.5 mm. sq. THWN Stranded Copper Wire
1 - 2.0 mm. sq. THWN GND @ 20 mm. dia. PVC Conduit

SUB-BREAKER CAPACITY
I = 57.47 + 1.5 (10.00)
I = 72.47 A

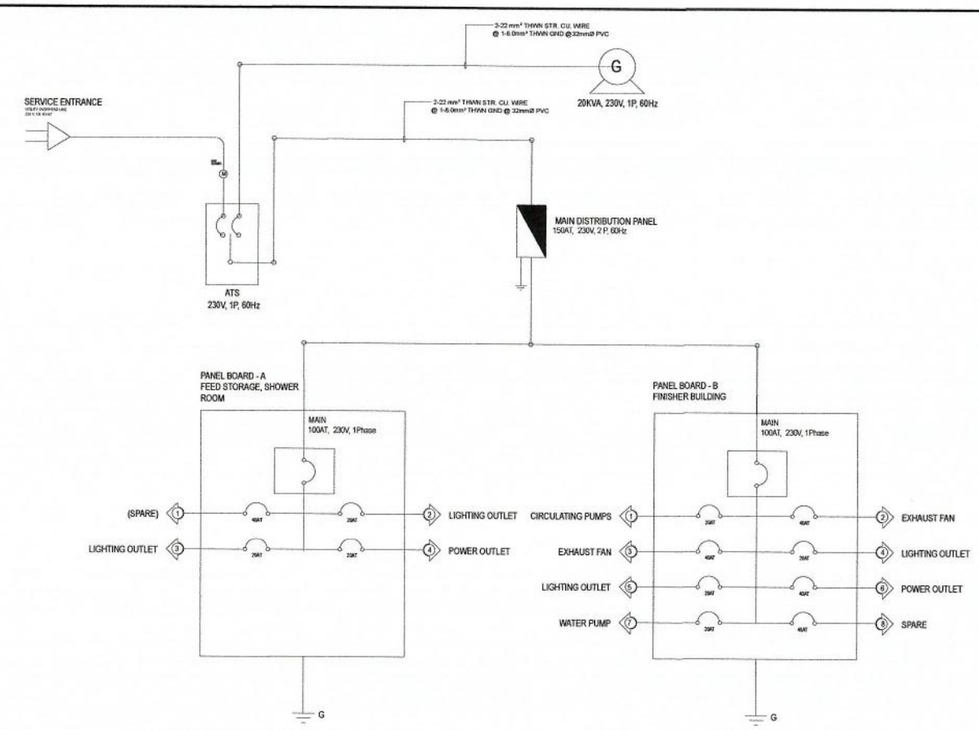
USE:
1- 100AT CB, 2P
230V, 60 Hz MCCB

1 SCALE: NTS — SCHEDULE OF LOADS

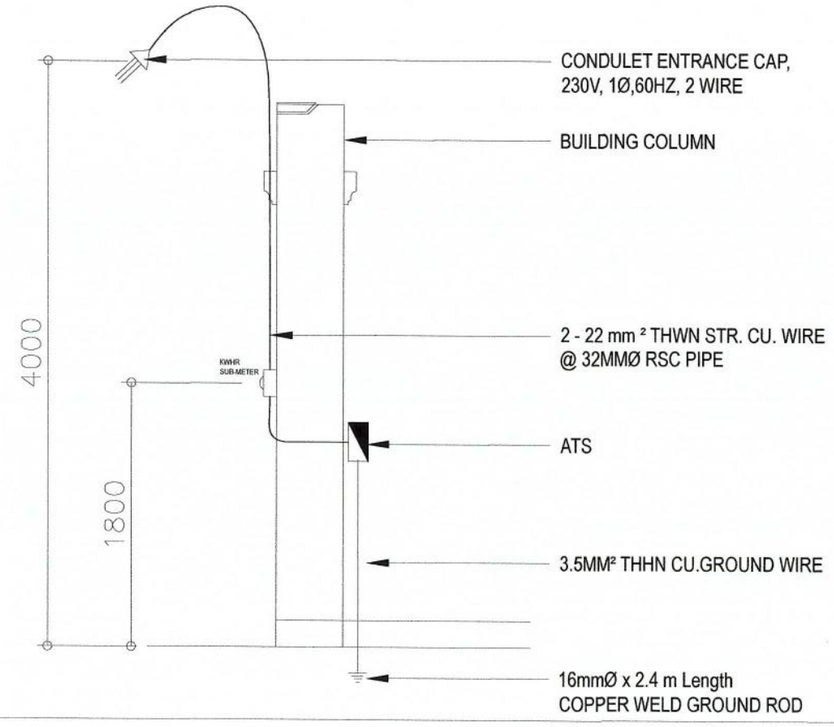
GENERAL NOTES:

1. ALL ELECTRICAL INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS ARE WITHIN THE APPLICABLE PROVISIONS OF LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
2. TYPES OF ELECTRICAL VOLTAGE SHALL BE 230 VOLTS, 3 PHASE OR SINGLE PHASE, 3 WIRE SYSTEM, 60 HZ, AND SHALL BE ONLY SERVICE DROP WIRE TO THE BUILDING.
3. METHOD OF WIRING SHALL BE PVC FOR BOTH EXPOSED AND EMBEDDED WORK WITH THE PROPER FITTING AND SUPPORT SERVICE ENTRANCE CONDUIT SHALL BE IN RIGID STEEL CONDUIT. VERIFY STANDARD SIZE OF WIRES BASED ON LOCAL CODES.
4. ALL WALL OUTLET SHALL BE INSTALLED AT THE FOLLOWING HEIGHT ABOVE FINISHED FLOOR LEVEL, UNLESS OTHERWISE SPECIFIED.
   A. WALL SWITCHES 1.40 MTS.
   B. CONVENIENCE OUTLET 1.40 MTS
   C. PANEL BOARD 1.60 MTS
   D. WELDING MACHINE OUTLET 1.40 MTS
5. ALL MATERIALS AND EQUIPMENT SHAL BE NEW AND OF APPROVED TYPE TO BOTH LOCATION AND PURPOSE INTENDED.
6. ALL CONVENIENCE RECEPTACLE CIRCUIT HOMES RUNS SHALL BE WIRED NOT LESS THAN 3.5MM SQ. COPPER CONDUCTOR, UNLESS OTHER INDICATED IN THE PLAN.
7. ALL LIGHTING AND POWER PANEL BOARD SHALL BE CIRCUIT BREAKER TYPE BOLT ON OR AS INDICATED ON THE PLAN.
8. ALL OUTDOOR INSTALLATION SHALL BE WEATHERPROOF.
9. UNLESS OTHERWISE SPECIFIED, JUNCTION AND UTILITY BOXES SHALL BE PROVIDED WHENEVER REQUIRED ALTHOUGH SUCH BOXES ARE NOT SHOWN ON THE PLAN.
10. ALL ELECTRICAL WORK HEREIN SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN
11. PROVISION OF GENERATOR SETS IS OPTIONAL FOR THE FINISHER BUILDING. HOWEVER, TO MAINTAIN THE PRIME ENVIRONMENT THROUGH COOLING, MAINTAIN SUPPLY OF WATER TO ANIMALS, AND KEEPING THE LIGHTS ON, GENERATOR IS NECESSARY TO PROVIDE THE POWER NEEDED.

2 SCALE: NTS — GENERAL NOTES



3 SCALE: NTS — SINGLE LINE DIAGRAM



4 SCALE: NTS — RISER DIAGRAM

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE: **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**

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ENGINEER III STANDARDS REGULATION AND ENFORCEMENT DIVISION	ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV OFFICE OF THE DIRECTOR	DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

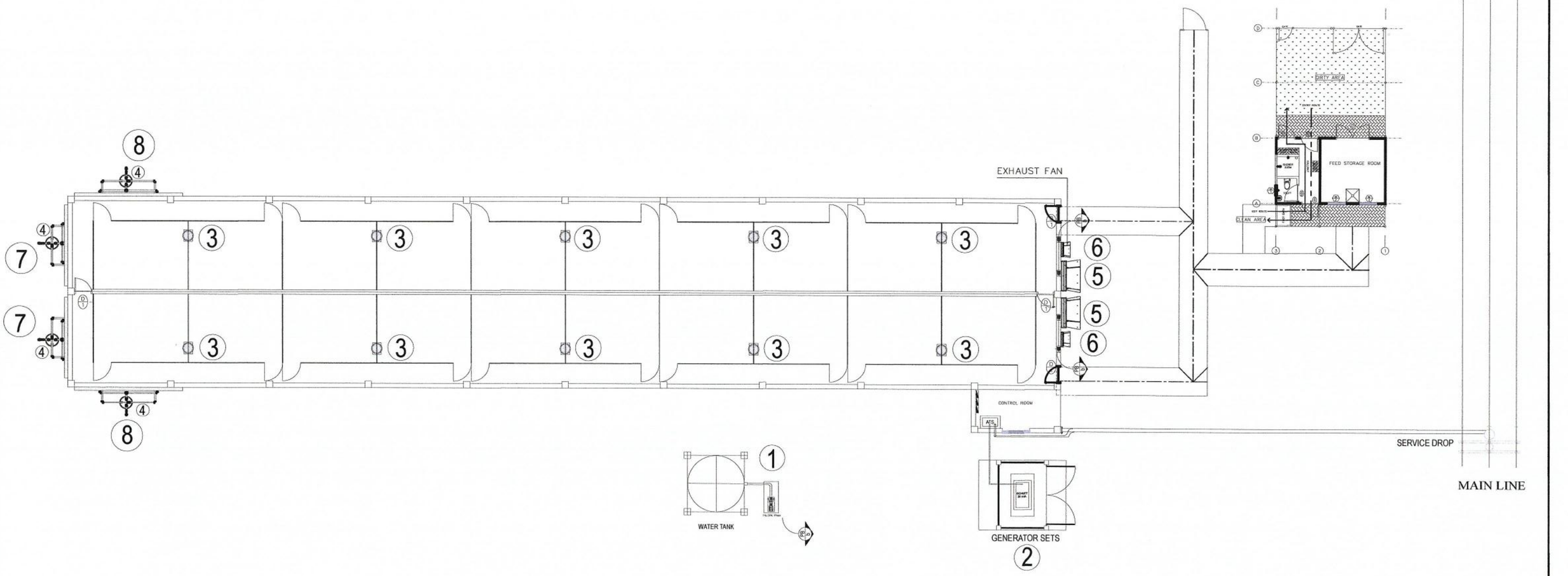
SHEET CONTENT	SHEET NO.
GENERAL NOTES SINGLE LINE DIAGRAM LOAD SCHEDULE RISER DIAGRAM	FE-5
DATE	5 of 5

ITEM	DESCRIPTION	QUANTITY	DESCRIPTION
①	WATER PUMP	1	1HP,230V,1PHASE
②	GENERATOR SETS	1	20KVA,230V,1PHASE
③	SELF FEEDER	10	SELF FEEDER (100kg capacity)
④	SUBMERSIBLE PUMP	4	0.5HP,230V,1PHASE
⑤	EXHAUST FAN	2	50" GALVANIZED CONE FAN
⑥	EXHAUST FAN	2	24" GALVANIZED CONE FAN
⑦	COOLING PAD	2	1.8 X 3.6 M WALL-MOUNTED
⑧	COOLING PAD	2	1.8 X 4.8 M. WALL-MOUNTED

FINISHER BUILDING
2 ROWS OF 10 PENS
PENS ARE 4.3 X 3.15 METERS
15 ANIMALS PER PEN
AT 0.9 SQ.M PER ANIMAL

LOCAL BUILDING
BUILDING IS CURTAIN SIDED
CEILING HEIGHT IS 2.40 METERS

FLOORING IS TOTAL CONCRETE SLATS
(EXCEPT WALKWAY)
3.15 M X 1.075 M GANG SLATS

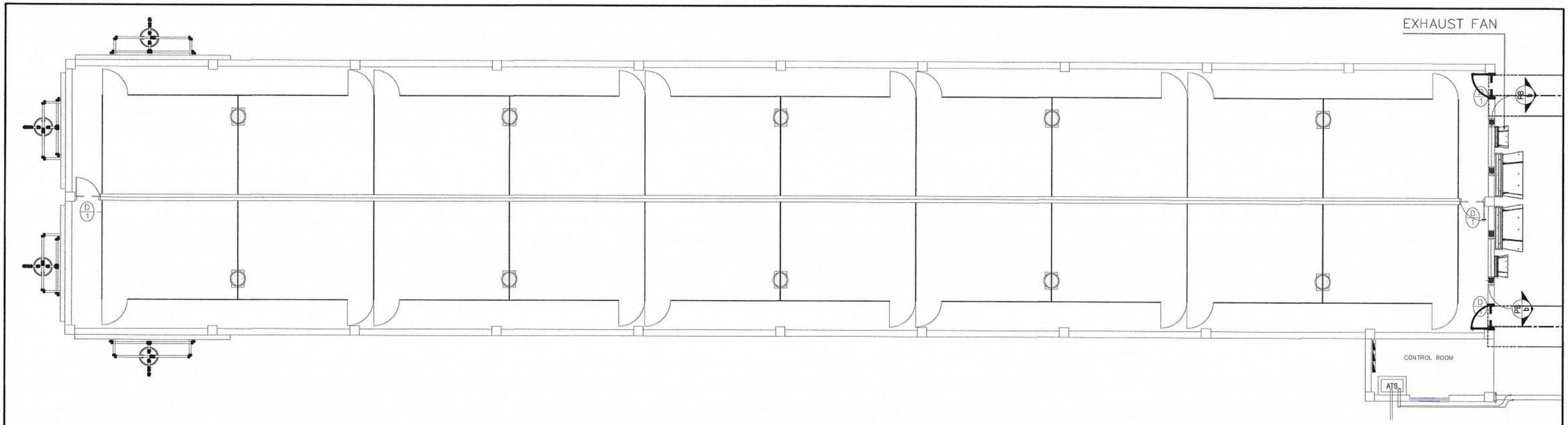


MACHINERY AND EQUIPMENT PLAN

MEP 1 — 300 HEADS FINISHER BUILDING

SCALE: 1:180

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY ENGR. EMMANUEL R. LANUZA ENGINEER III STANDARDS REGULATION AND ENFORCEMENT DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT MACHINERY & EQUIPMENT PLAN DATE	SHEET NO. MEP-1 1 of 3

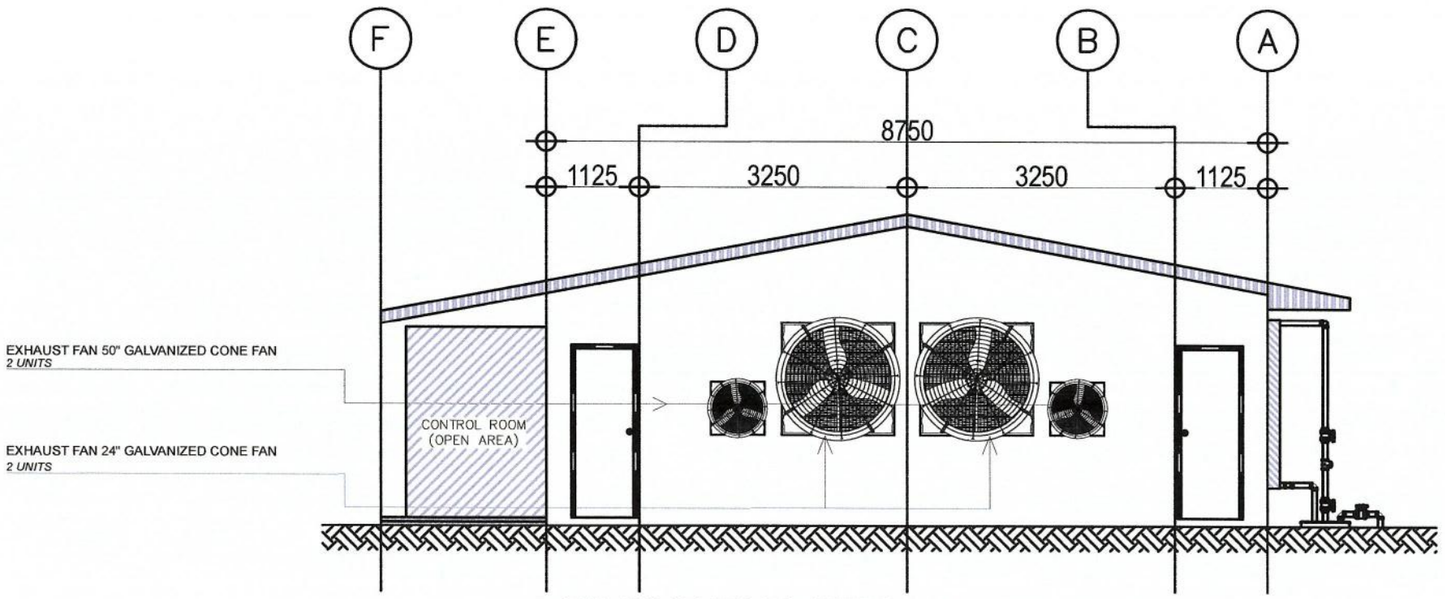


TOP ELEVATION

MEP 2-1

300 HEADS FINISHER BUILDING

SCALE: 1:125

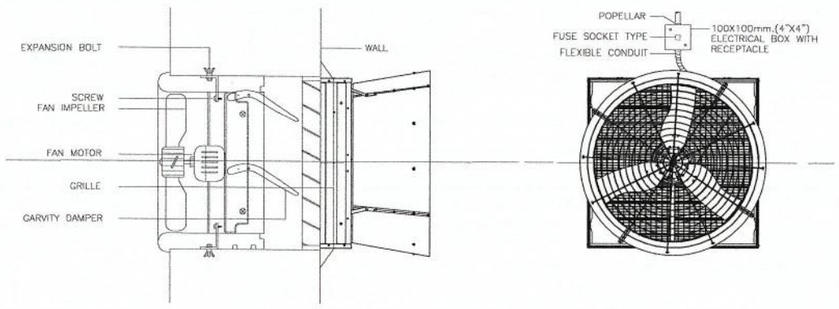


FRONT ELEVATION-EXHAUST FAN

MEP 2-2

300 HEADS FINISHER BUILDING

SCALE: 1:75



DETAILS OF 50" EXHAUST FAN

MEP 2-3

300 HEADS FINISHER BUILDING

SCALE: 1:50

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE	PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	ENGR. EMMANUEL R. LANUZA ENGINEER III STANDARDS REGULATION AND ENFORCEMENT DIVISION	ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MICLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	EXHAUST PLAN DATE	MEP-2 2 of 3

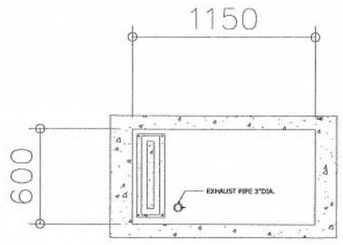
GENERATOR SETS

TECHNICAL SPECIFICATION

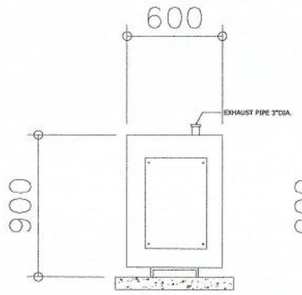
Capacity : 20 Kva
Voltage : 230V
Phase : 1
Frequency : 60 Hz

DIMENSION

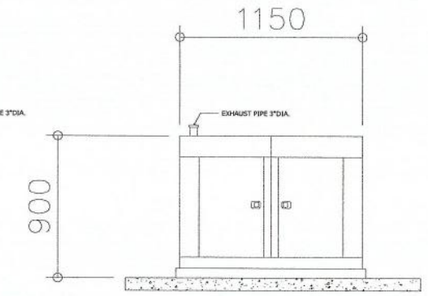
Length : 1,150 mm
Width : 600 mm
Height : 900 mm
Approximate Weight : 360 Kgs



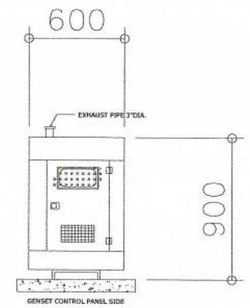
① TOP VIEW
N T S



② LEFT SIDE VIEW
N T S

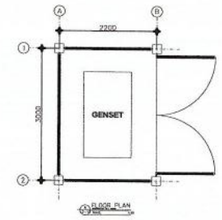


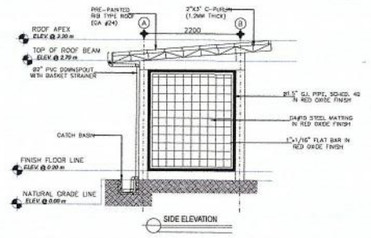
③ FRONT VIEW
N T S

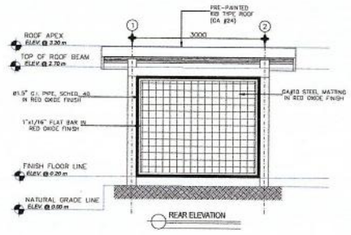


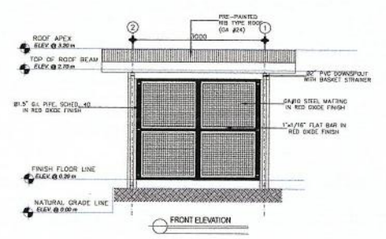
④ RIGHT SIDE VIEW
N T S

G



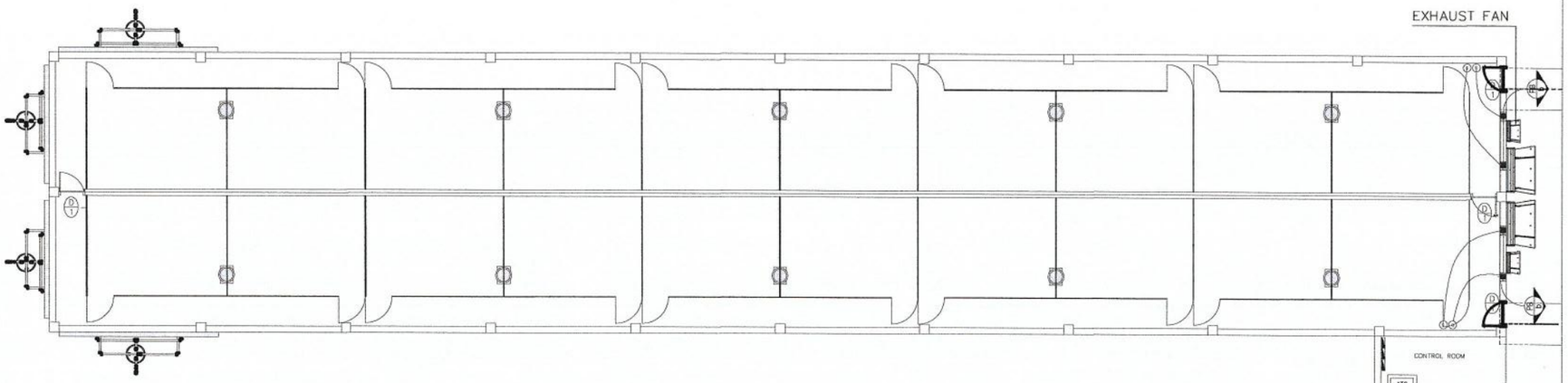


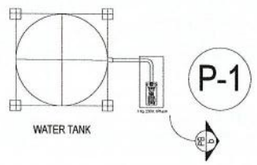




GENERATOR SET ROOM
NTS

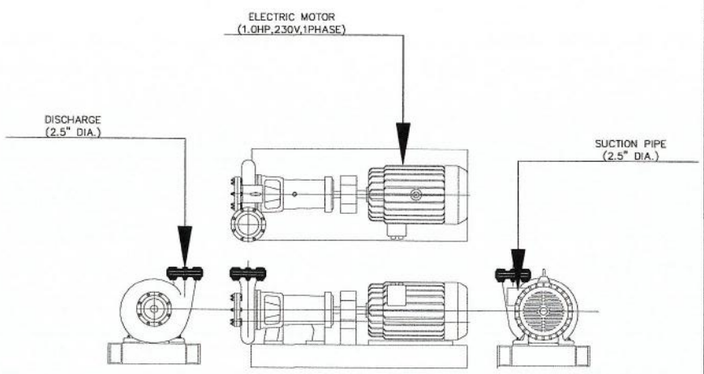
P-1





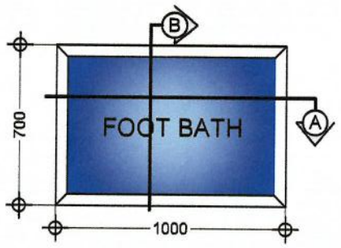
P-1

MEP 1 MACHINERY AND EQUIPMENT PLAN
300 HEADS FINISHER BUILDING
SCALE: 1:175

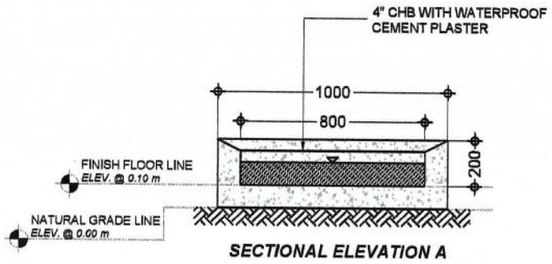


PS 2-1 ELECTRIC WATER PUMP-WATER TANK
300 HEADS FINISHER BUILDING
SCALE: NTS

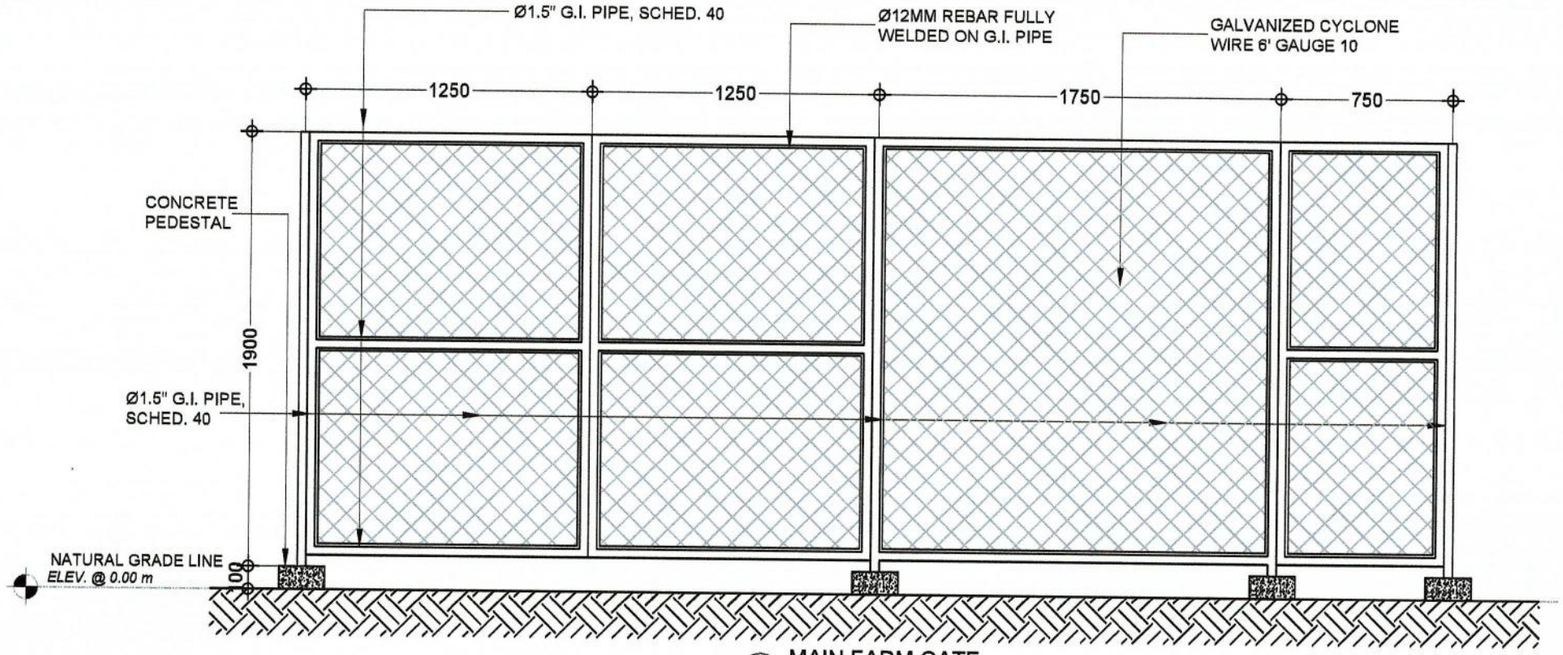
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY ENGR. EMMANUEL R. LANUZA ENGINEER II STANDARDS REGULATION AND ENFORCEMENT DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MIC-AT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT GENERATOR SETS ELECTRIC WATER PUMP DATE	SHEET NO. MEP-3 3 of 3



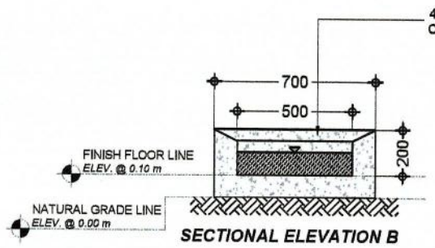
TOP VIEW



SECTIONAL ELEVATION A

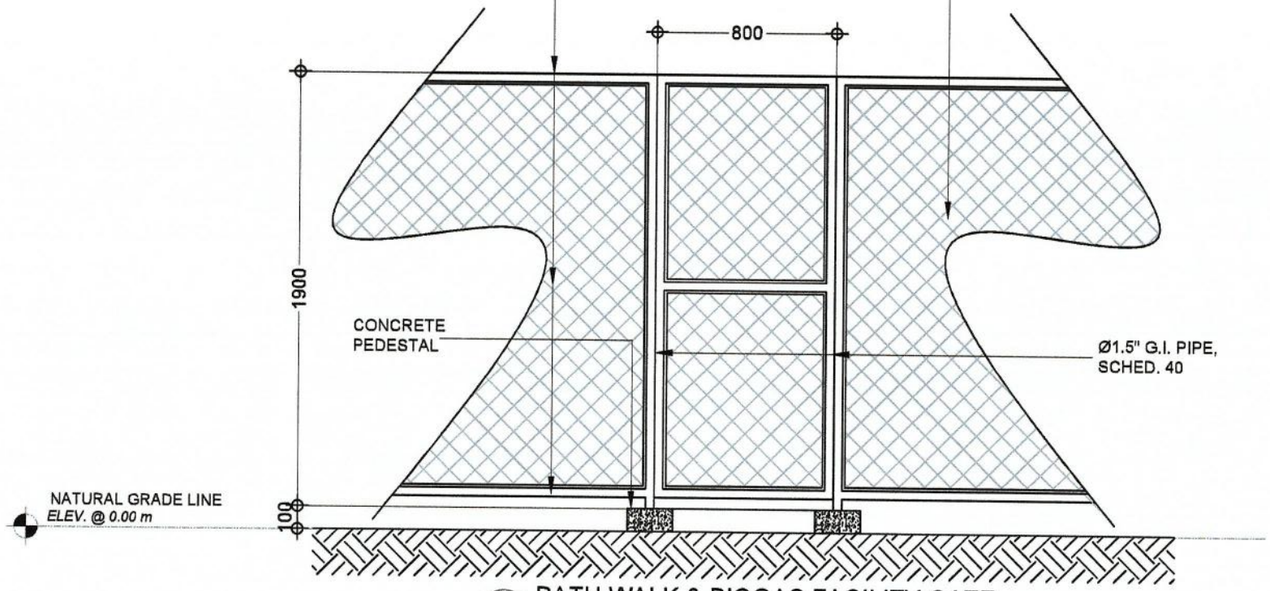


AU 8-2 MAIN FARM GATE
SCALE: 1:25



SECTIONAL ELEVATION B

AU 8-1 FOOT BATH DETAILS
SCALE: 1:25



AU 8-3 PATH WALK & BIOGAS FACILITY GATE
SCALE: 1:25

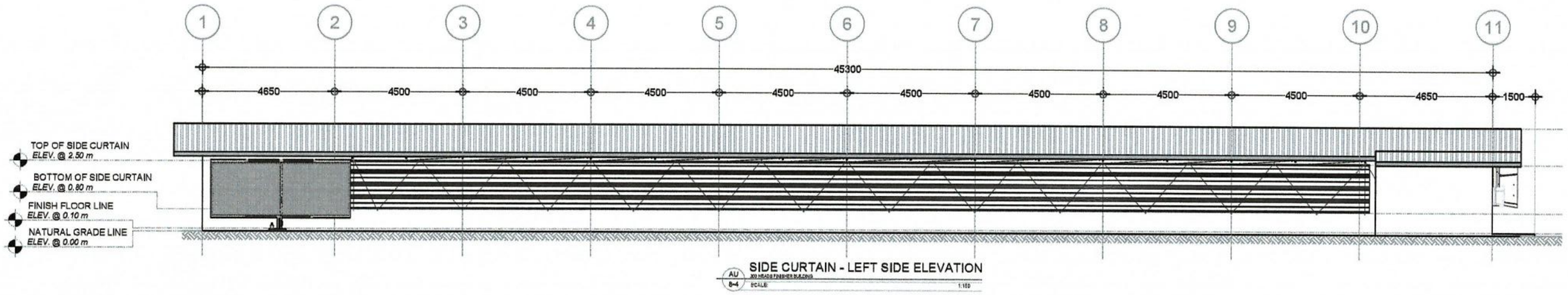
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

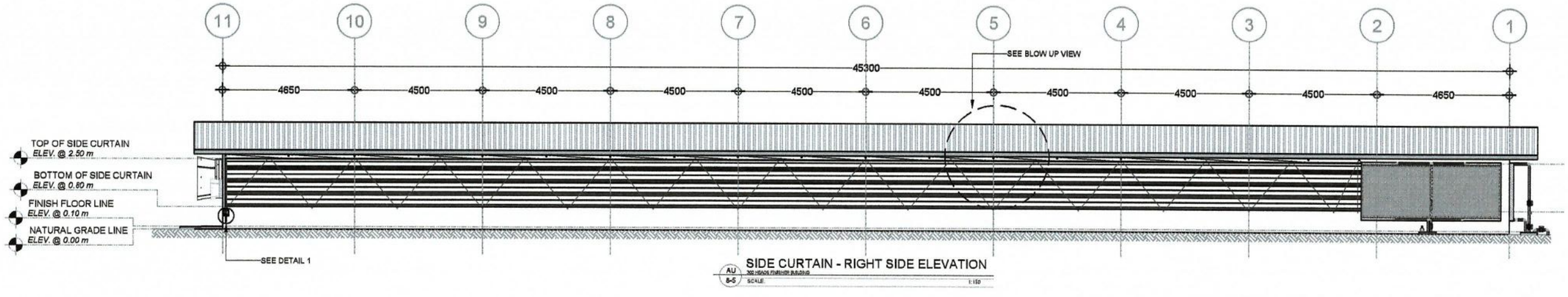
PROJECT TITLE: PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:	SHEET CONTENT	SHEET NO.
ENGR. ROMEL A. CABALLERO ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. NOEMI C. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	DR. RUTH S. MIGLAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	FOOT BATH DETAILS MAIN FARM GATE DETAILS PATHWALK GATE DETAILS DATE	AU-1 1 of 4

31/07



AU 8-4 SIDE CURTAIN - LEFT SIDE ELEVATION
300 HEADS FINISHER BUILDING
SCALE 1:100



AU 8-5 SIDE CURTAIN - RIGHT SIDE ELEVATION
300 HEADS FINISHER BUILDING
SCALE 1:100

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

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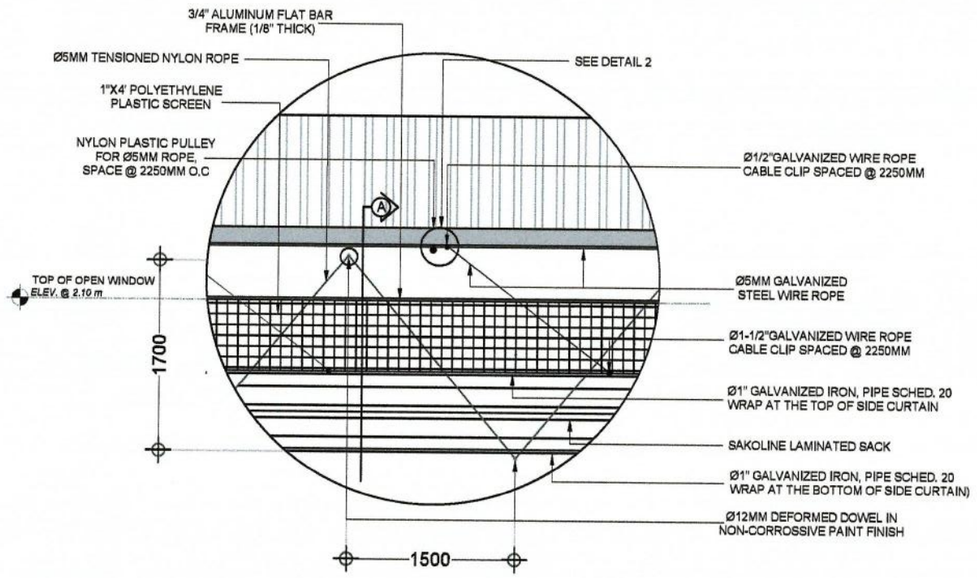
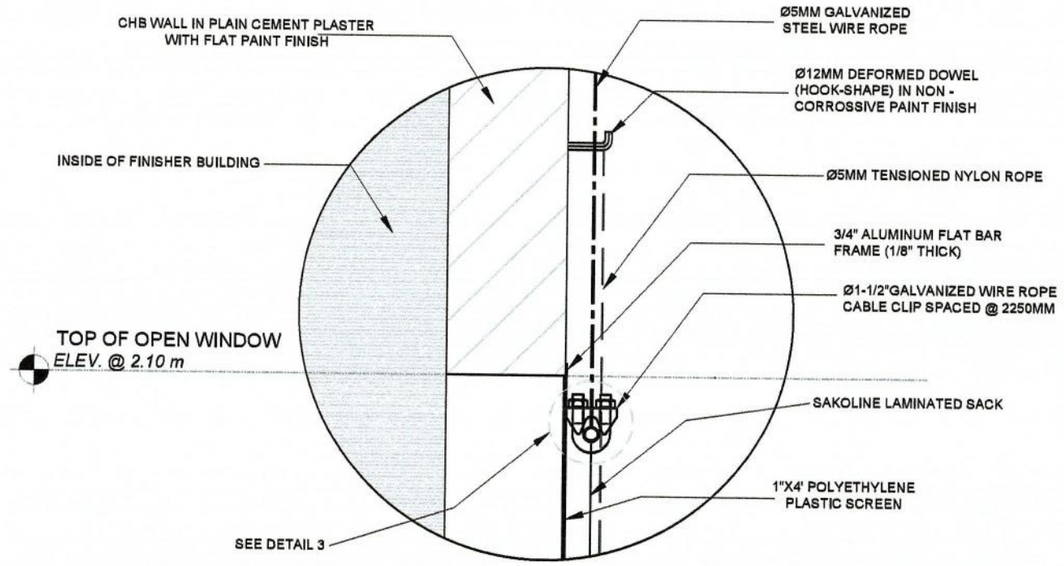
PROJECT TITLE: **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
ENGR. ROMEL A. CABALLERO	ENGR. NOEMI L. CARPIO	ENGR. JUANA T. TAPEL, Ph.D	ENGR. ARIODEAR C. RICO	DR. RUTH S. MACLAT-SONACO
ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV OFFICE OF THE DIRECTOR	DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

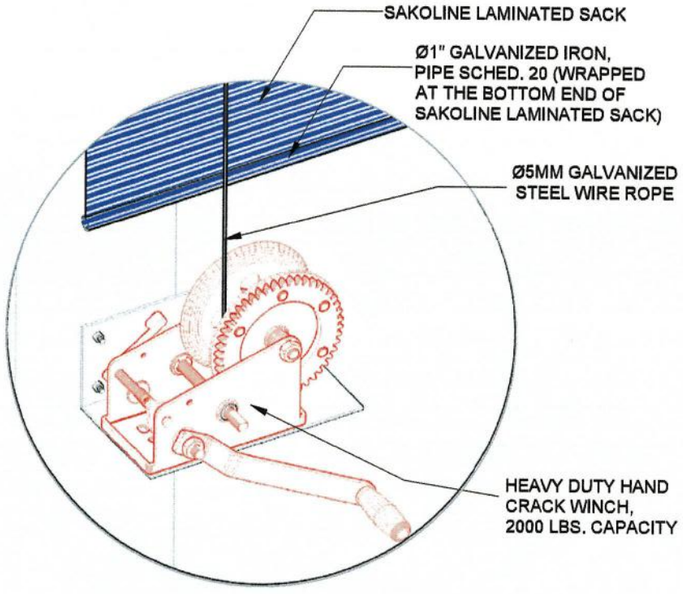
SHEET CONTENT	SHEET NO.
SIDE CURTAIN - LEFT SIDE ELEVATION SIDE CURTAIN - RIGHT SIDE ELEVATION	AU-1
DATE	2 of 4



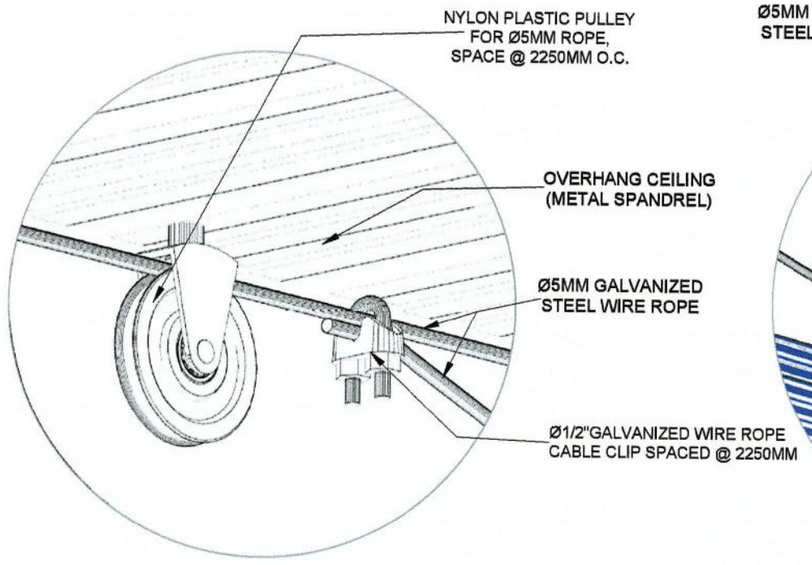
BLOW UP VIEW



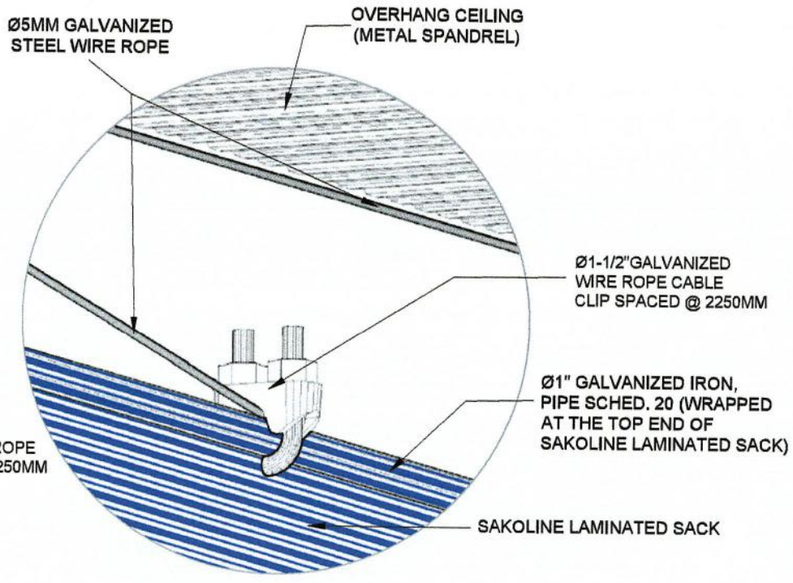
SECTIONAL DETAIL A



DETAIL 1



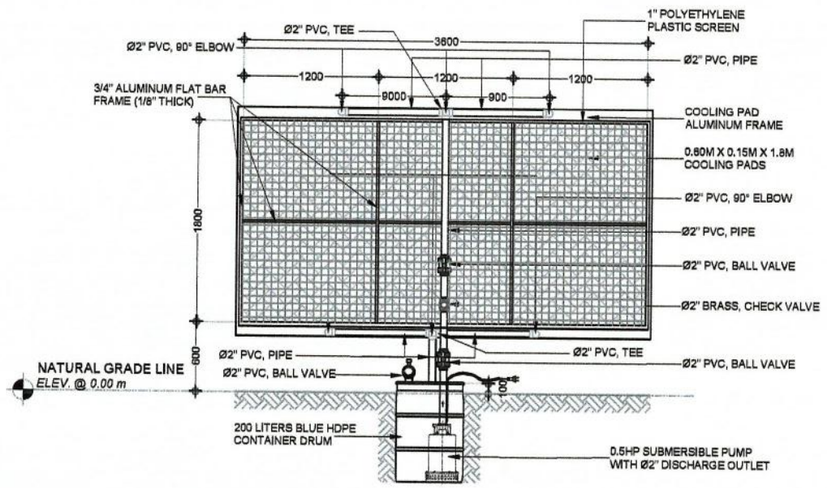
DETAIL 2



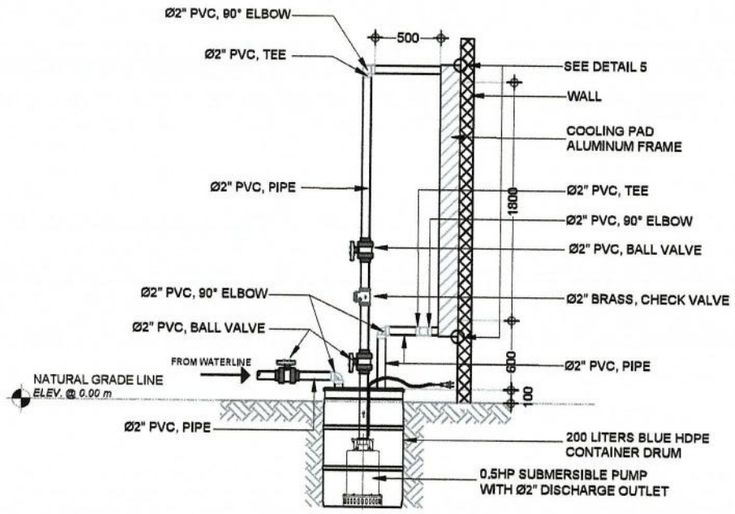
DETAIL 3

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

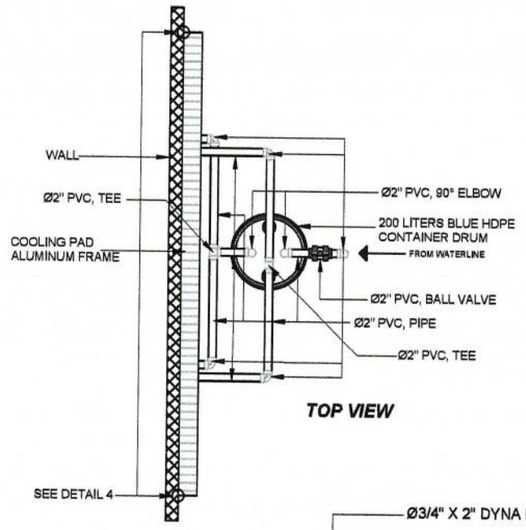
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING	PROJECT TITLE PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM	PREPARED BY ENGR. ROMEL A. CABALLERO ENGINEER I ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	REVIEWED & EVALUATED BY: ENGR. NOEMI L. CARPIO ENGINEER V ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	RECOMMENDING APPROVAL: ENGR. JUANA T. TAPEL, Ph.D DIRECTOR III OFFICE OF THE ASSISTANT DIRECTOR	APPROVED BY: ENGR. ARIODEAR C. RICO DIRECTOR IV OFFICE OF THE DIRECTOR	CONCURRED BY: DR. RUTH S. MIGUAT-SONACO DIRECTOR DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM	SHEET CONTENT SIDE CURTAIN SYSTEM DETAILS DATE	SHEET NO. AU-1 3 of 4



FRONT VIEW



SIDE VIEW

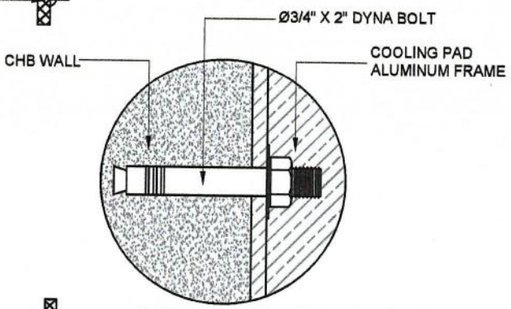


TOP VIEW

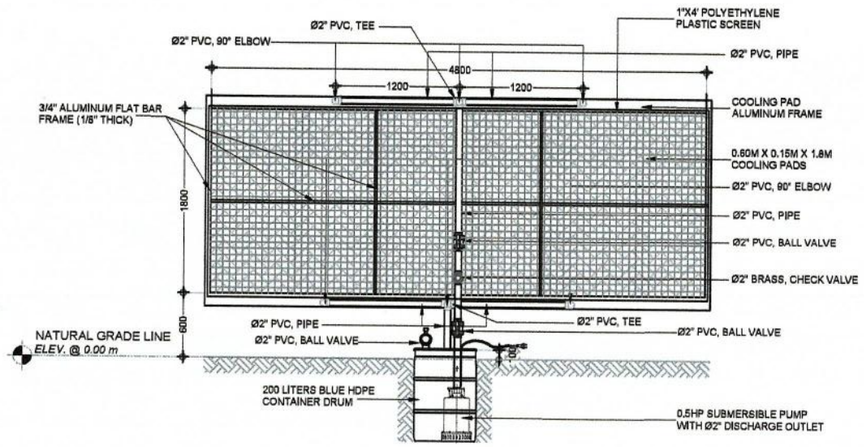
REAR COOLING PAD DETAILS

AU 8-6 SCALE: NTS

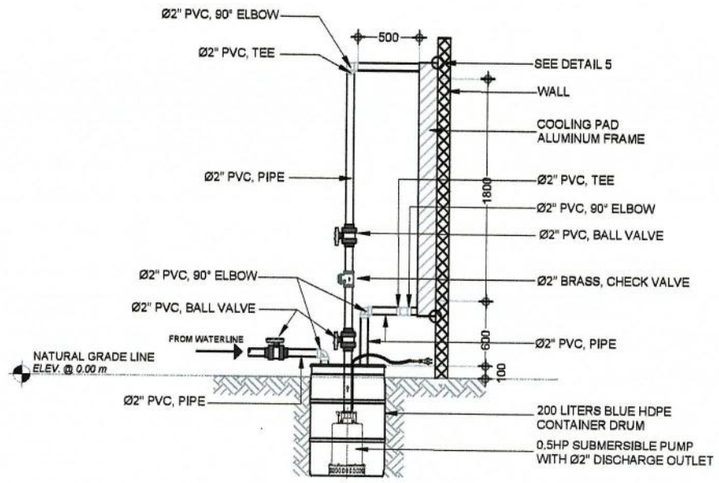
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)



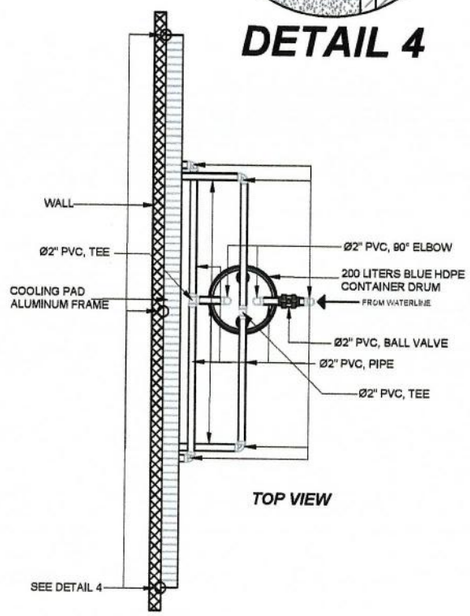
DETAIL 4



FRONT VIEW



SIDE VIEW



TOP VIEW

SIDE COOLING PAD DETAILS

AU 8-7 SCALE: NTS

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm)

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING

PROJECT TITLE: **PROPOSED MODULAR DESIGN OF 300 HEADS FINISHER BUILDING FOR INTEGRATED NATIONAL SWINE PRODUCTION INITIATIVES FOR RECOVERY AND EXPANSION (INSPIRE) PROGRAM**

PREPARED BY	REVIEWED & EVALUATED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	CONCURRED BY:
ENGR. ROMEL A. CABALLERO	ENGR. NOEMI U. CARPIO	ENGR. JUANA T. TAPEL, Ph.D	ENGR. ARIODEAR C. RICO	DR. RUTH S. MOLAR-SONACO
ENGINEER I, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	ENGINEER V, ENGINEERING PLANS, DESIGNS, AND SPECIFICATIONS DIVISION	DIRECTOR III, OFFICE OF THE ASSISTANT DIRECTOR	DIRECTOR IV, OFFICE OF THE DIRECTOR	DIRECTOR, DEPARTMENT OF AGRICULTURE - NATIONAL LIVESTOCK PROGRAM

SHEET CONTENT	SHEET NO.
WELL-MOUNTED COOLING PAD SYSTEM DETAILS	AU-1
DATE	4 of 4