GENERAL NOTES AND SPECIFICATIONS

- 1. ALL WORKS HEREIN INCLUDED SHALL BE EXECUTED IN ACCORDANCE WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE RULES AND REGULATIONS OF THE LOCALITY AND THE REQUIREMENTS OF THE CLIENT/OWNER.
- ALL WORKS HEREN INCLUDED SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL TIME LICENSED ELECTRONICS AND COMMUNICATIONS ENGINEER (ECS). ALL WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERTY FINISHED.
- MATERIALS SHALL BE NEW AND SHALL CONFORM WITH THE STANDARD AMERICAN UNDERWRITER'S LABORATORIES, INC., IN EVERY CASE WERE SUCH STANDARD HAS BEEN ESTABLISHED FOR THE PARTICULAR TYPE OF MATERIAL IN QUESTION. ALL EQUIPMENT SHALL BE PURCHASED ACCORDING TO
- 4. ALL EXPOSED & CELING CONCEALED CONDUITS SHALL BE OF INTERMEDIATE METALLIC CONDUIT ON HIGH STRENGTH AND GALVANIZED WITH AN ADDITIONAL INTERIOR PROTECTIVE COATING SHALL BE USED OR AS INDICATED IN THE PLANS, ALL EMBEDDED CONDUITS SHALL BE OF POLYMYL CHLORIDE. ALL EXPOSED AND NOT PROME TO DMARGE CONDUITS SHALL BE OF ELECTRICAL METALLIC TUBRICS.
- VOICE AND DATA WIRING SHALL BE SEPARATED FROM ANY OTHER BUILDING OR POWER WIRING, TO PREVENT HUMMING AND ELECTROMAGNETI INTERFERENCE (EM.), TO MEET OR DICEED THE EM/TIA 568A CABLING STANDARD.
- ALL CONDUITS AND WIRE WAYS SHALL BE PROTECTED AGAINST DAMAGES BY THE ENTRANCE OF WATER AND FOREIGN MATTER DURING CONSTRUCTION. ALL ENDS OF CONDUITS SHALL BE PROPERLY PLUGGED TO EXCLUDE MOISTURE AND DUST MANEDATELY AFTER THE CONDUITS ARE PLACED.
- 7. ALL CONDUIT BENDS SHALL BE FIELD-MADE USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS SHALL BE IN ACCORDANCE WITH THE CODE.
- 8. ALL PIPES AND FITTINGS ON EXPOSED WORK SHALL BE SUPPORTED AND SECURED BY MEANS OF C-CHANNELS AND CLAMPS

- ALL ELECTRONCS EQUIPMENT AND DEVICES LOCATIONS SHOWN ARE INDICATIVE ONLY AND THE ELECTRICAL CONTRACTOR MUST COORDINATE WITH THE ARCHITECT AND OR THE INTERIOR DESIGNER, AS WELL AS EQUIPMENT SUPPLIERS.
- 12. ALL ELECTRONICS EQUIPMENT & ACCESSORIES THAT ARE EXPOSED OR LESS THAN 2.0m AWAY FROM WATER SOURCES SHALL BE OF WATERPROOF TYPE.
- 13. COLOR FOR ALL TELECOMMUNICATION FACE PLATES SHALL BE AS PER ARCHITECT'S/INTERIOR DESIGNER'S SELECTION.
- 14. SIZING OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. LOCATION OF PULLBOXES SHALL BE AS APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REPLECTED ON THE "AS-BUILL" PLAYS.
- 15. MOUNTING HEIGHTS OF DEVICES (RJ-45 JACKS) SHALL BE AS APPROVED BY THE ARCHITECT OR AS FOLLOWS:

- 16. ALL ITEMS OF MATERIAL NOT FURNISHED BY REQUISITION AND REQUIRED TO COMPLETE THE INSTALLATION IN A GOOD, WORKMANLIKE MANNER SHALL BE PROVIDED BY THE IT CABLING CONTRACTOR.
- 17. THE PLANS AS DRAWN ARE BASED UPON THE ARCHITECTURAL PLANS AND THE DETAILS AND SHOWN CONDITIONS AS ACCURATELY AS IT IS POSSIBLE TO INDICATE THEM IN SCALE. THE PLANS ARE DAGRAMMATICAL AND DO NOT NECESSARILY SHOW ALL FITTINGS NECESSARY TO FIT TO THE BUILDING CONDITIONS. THE LOCATIONS OF OUTLETS, APPARATUS AND APPLIANCE SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEM PROPER LOCATION IN ORDER TO MAKE THEM FIT WITH THE ARCHITECTURAL DETAILS AND INSTRUCTIONS FROM THE ENGINEER'S REPRESENTATIVE AT THE SITE.
- 18. UPON COMPLETION OF IT CABLING WORKS, THE FOLLOWING TESTS SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS AND IN FORMS APPROVED BY THE OWNERS REPRESENTATIVE;

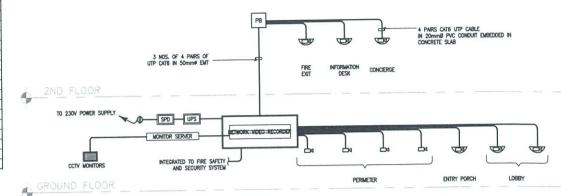
A. SIGNAL ATTENUATION TEST C. NEAR-END CROSSTALK TEST

ARREFUIATIONS

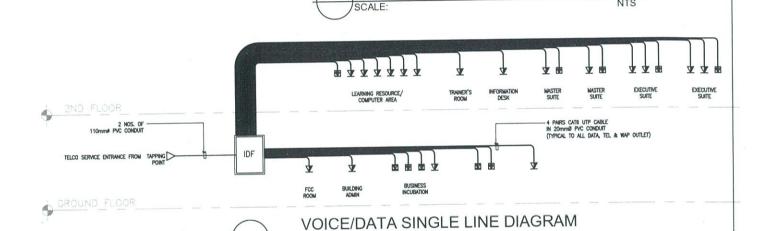
ACP	ACCESS CONTROL PANEL			
ACS	ACCESS CONTROL SYSTEM			
BGM	BACKGROUND MUSIC			
С	CONDUIT			
CAT	CATEGORY			
COP	COMMUNICATION DISTRIBUTION PANEL			
CATV	COMMUNITY ANTENNA TELEVISION			
CCTV	CLOSED CIRCUIT TELEVISION			
DC	DOOR CONTACT			
DOL.	DIRECT ON LINE			
EMT	ELECTROMETALLIC TUBING			
ELV	EXTRA LOW VOLTAGE			
EVAC	EMERGENCY VOICE ALARM COMMUNICATION			
FA	FIRE ALARM			
FR	FIRE RATED			
NVR	NETWORK VIDEO RECORDER			
PVC	POLYVINYL CHLORIDE			
PATB	PUBLIC ASDRESS TERMINAL BOARD			
TEL	TELEPHONE			
ттс	TELEPHONE TERMINAL CABINET			
THIN	THERMOPLASTIC HEAT RESISTANT (90°C) WITH NYLON JACKET			
FCC	FIRE COMMAND CENTER			
FACP	FIRE ALARM CONTROL PANEL			
FATB	FIRE ALARM TERMINAL BOARD			
FDAS	FIRE ALARM AND DETECTION SYSTEM			
IDF	INTERMEDIATE DISTRIBUTION FRAME			
IMC	INTERMEDIATE METALLIC CONDUIT			
NAP	NETWORK ACCESS POINT			
00F	OPTICAL DISTRIBUTION FRAME			
PA	PUBLIC ASDRESS			
RD	RISER DOWN			
RU	RISER UP			
RSC	RIGID STEEL CONDUIT			
SMS	SECURITY MANAGEMENT SYSTEM			
TX	TRANSFORMER			
THW	THERMOPLASTIC HEAT AND MOISTURE RESISTAN			
TYP	TYPICAL			
UPS	UNINTERRUPTIBLE POWER SUPPLY			
WP	WEATHER PROOF			
FD8	FIBER DISTRIBUTION BOARD			

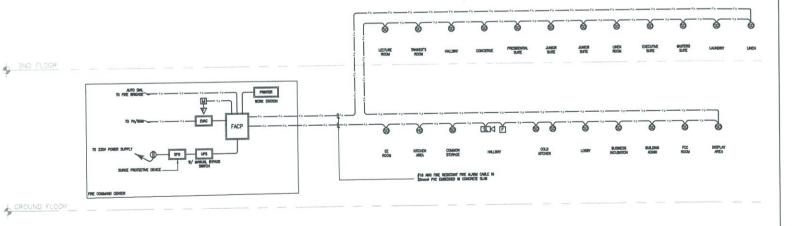
AUXILIARY SYSTEMS LEGEND AND SYMBOL

YMBOLS	DESCRIPTION
	DOME-TYPE, IP-BASED CCTV CAMERA
	IP BASED CAMERA, FIXED TYPE, WEATHER PROOF
¥	VOICE/DATA OUTLET
-	FLOOR MOUNTED VOICE/DATA OUTLET
	INPUT MODULE
TT	GROUND BAR
0	SMOKE DETECTOR
0	HEAT DETECTOR
0004	STROBE LIGHT WITH SOUNDER
7	MANUAL PULL STATION
₩	FIREMAN'S TELEPHONE JACK
D4	HORN TYPE SPEAKER
5	CEILING-MOUNTED SPEAKER
100	INTERCOM UNIT
1702	FIRE ALARM CONTROL PANEL
RU/RD	RISER UP/DOWN
HB	PA MICROPHONE



CCTV SINGLE LINE DIAGRAM





FDAS SINGLE LINE DIAGRAM

PROJECT DIRECTOR



MULT PLATE (I) (S) Peter Stellard VICINITY MAP

FOR APPROVAL PLANS OF **REGIONAL TVET INNOVATION**

CENTERS (RTICs) 2023



TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY

PROPOSED TESDA PPSAT INNOVATION CENTER

NTS

PROJECT TITLE:

ENGR. JOHN ADRIAN C. SANTOS ENGINEERING SECTION

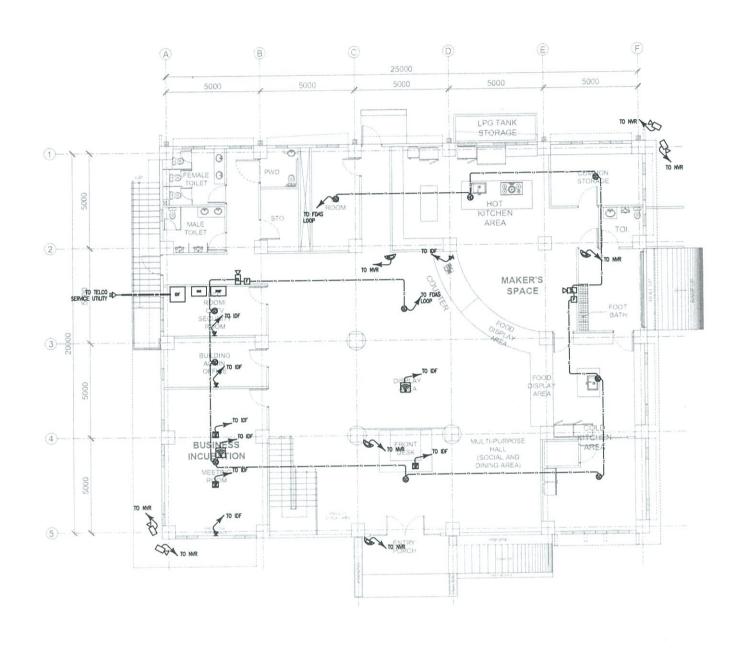


SEC. SUHARTO T. MANGUDADATU, Ph.D.

SHEET CONTENTS ABBREVIATION LOCATION & VICINITY MAP CCTV SINGLE LINE DIAGRAM VOICE/DATA SINGLE LINE DIAGRAM

EC-0

LEGENDS AND SYM	BOLS			
®	SMOKE DETECTOR			
F	MANUAL PULL STATION			
<u> </u>	STROBE LIGHT			
₹	FIREMAN'S TELEPHONE JACK			
IM	INPUT MODULE			
DH.	OUTPUT MODULE			
8	CEILING MOUNTED SPEAKER			
0	PA MICROPHONE			
●RU/RD	RISER UP/DOWN			
	FIXED TYPE, IP-BASED CCTV CAMERA			
•	DOME TYPE, IP-BASED CCTV CAMERA			
¥	▼ WALL MOUNTED, VOICE/DATA OUTLET			
<u> </u>	FLOOR MOUNTED. VOICE/DATA OUTLET			
*	WIRELESS ACCESS POINT			







PROJECT TITLE: PROPOSED TESDA PPSAT INNOVATION CENTER

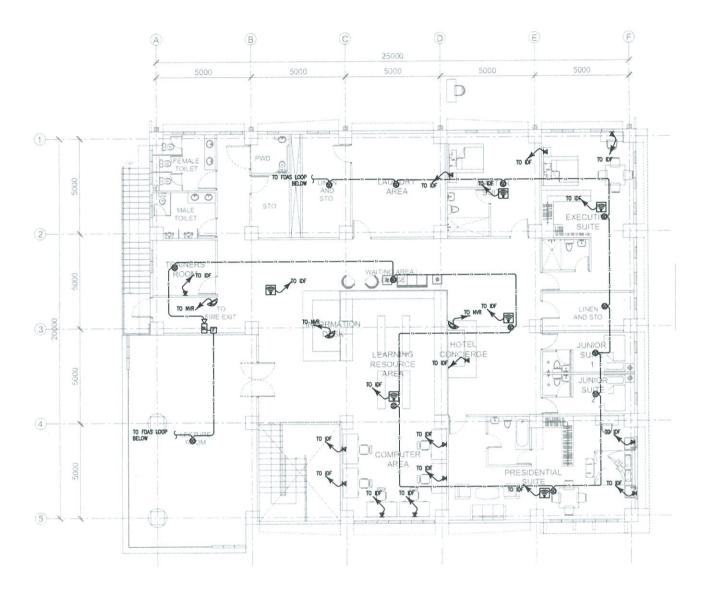
ENGR. JOHN ADRIAN C. SANTOS PMU-SIPTVETS ENGINEERING SECTION

DIR. ENRICO C. BANARIO PMU-SIPTVETS

SHEET NO. SHEET CONTENTS: GROUND FLOOR AUXILIARY LAYOUT EC-1

SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS

_S			
SMOKE DETECTOR			
MANUAL PULL STATION			
STROBE LIGHT			
FIREMAN'S TELEPHONE JACK			
INPUT MODULE			
OUTPUT MODULE			
CEILING MOUNTED SPEAKER			
PA MICROPHONE			
RISER UP/DOWN			
FIXED TYPE, IP-BASED CCTV CAMERA			
DOME TYPE, IP-BASED CCTV CAMERA			
WALL MOUNTED, VOICE/DATA OUTLET			
FLOOR MOUNTED. VOICE/DATA OUTLET			
WIRELESS ACCESS POINT			







PROPOSED TESDA PPSAT INNOVATION CENTER

ENGR. JOHN ADRIANC. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

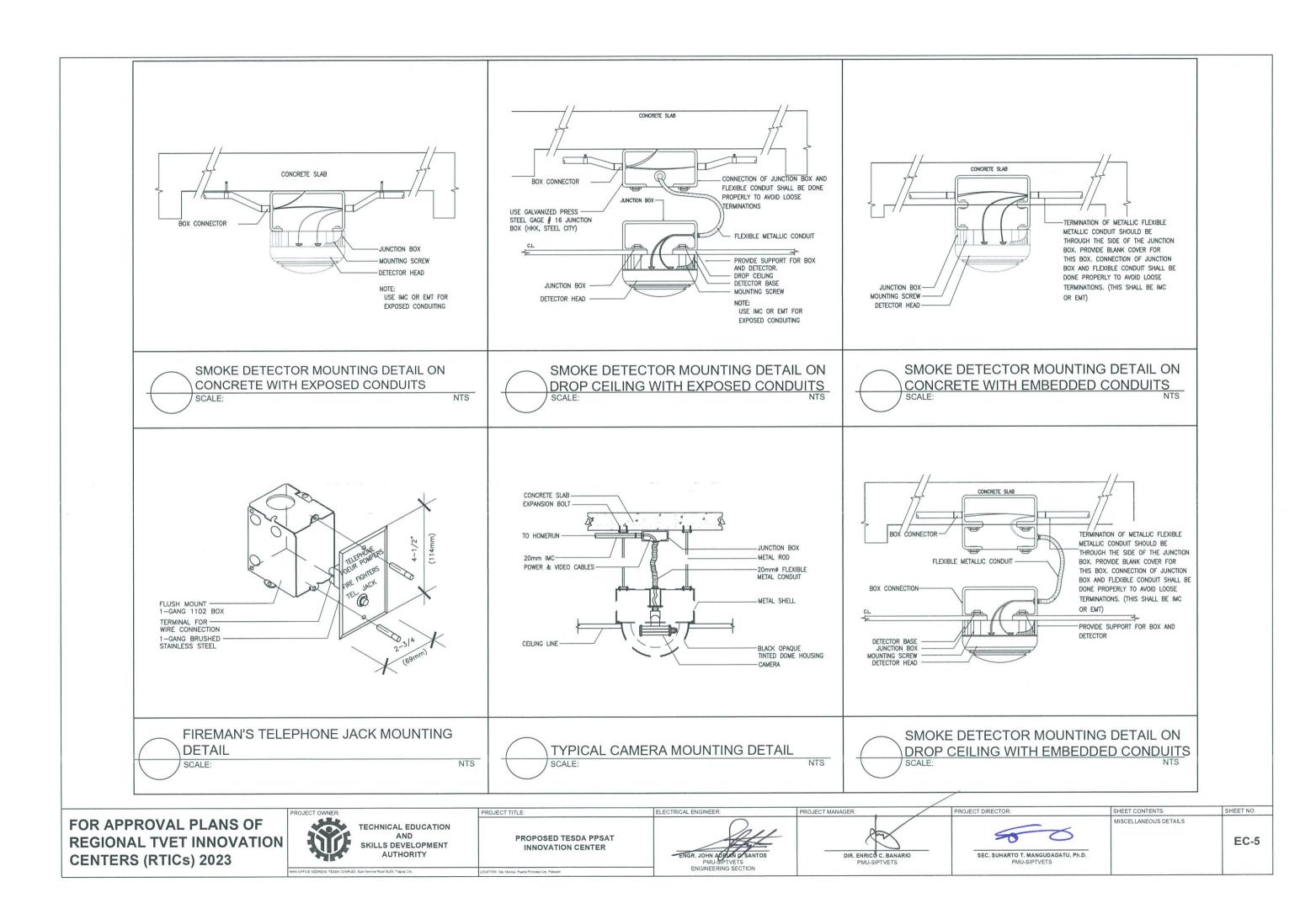
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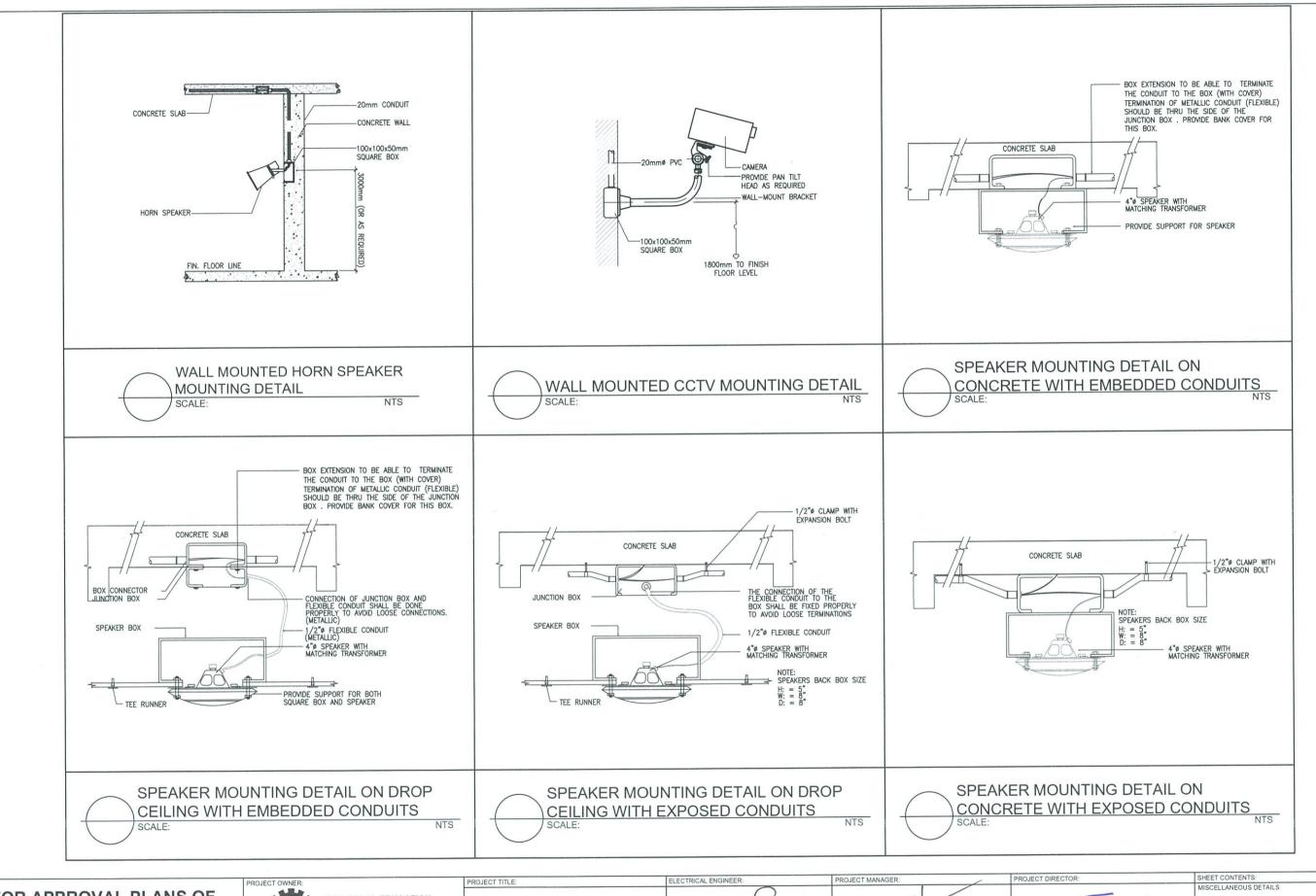
DIR. ENRICO C. BANARIO
PMU-SIPTVETS

SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS

SHEET CONTENTS: SHEET NO.
2ND FLOOR AUXILIARY LAYOUT

EC-2

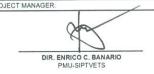






PROPOSED TESDA PPSAT INNOVATION CENTER

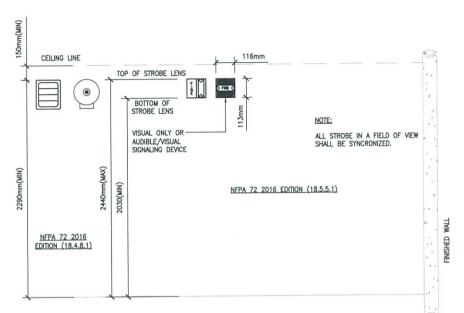




SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS: SHEET NO.
MISCELLANEOUS DETAILS

EC-6



NFPA 72 2016 EDITION (18.4): AUDIBLE CHARACTERISTICS

NFPA 72 2016 EDITION (18.4.8): LOCATION OF AUDIBLE NOTIFICATION APPLIANCES FOR BUILDING OR STRUCTURES.

NFPA 72 2016 EDITION (18.4.8.1): IF CEILING HEIGHTS ALLOW, AND UNLESS OTHERWISE PERMITTED BY 18.4.8.2 THROUGH 18.4.8.5, WALL—MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 2290mm(90in.) AND BELOW THE FINISHED CEILING AT DISTANCES OF NOT LESS THAN 150mm(6in.)

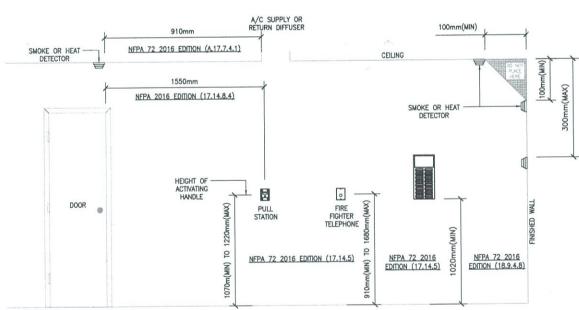
NFPA 72 2016 EDITION (18.4.8.3): IF COMBINATION AUDIBLE/NISIBLE APPLIANCES ARE INSTALLED, THE LOCATION OF THE APPLIANCE SHALL BE DETERMINED BY THE REQUIREMENTS OF 18.5.5

NFPA 72 2016 EDITION (18.5); VISIBLE CHARACTERISTICS PUBLIC MODE.

NFPA 72 2016 EDITION (18.5.5): APPLIANCES LOCATION.

NFPA 72 2016 EDITION (18.5.5.1): WALL MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 2030mm (80in) AND NOT GREATER THAN 2440mm (96in). ABOVE THE FINISHED FLOOR OR AT THE MOUNTING HEIGHT SPECIFIED USING THE PERFORMANCE BASED ALTERNATIVE. AT NFPA 2016 EDITION (A7.5.4.5).

NFPA 72 2016 EDITION (18.5.5.5.5): VISIBLE NOTIFICATION APPLIANCES SHALL BE LOCATED NOT MORE THAN 4570mm(15ft.) FROM THE END OF THE CORRIDOR WITH A SEPARATION NOT GREATER THAN 30500mm(100ft) BETWEEN APPLIANCES.



NFPA 72 2016 EDITION
17.6.3.1.3.1 HEAT — UNLESS OTHERWISE MODIFIED BY 17.6.3.2.2 OR
17.6.3.3.2 OR 17.6.3.7 SPOT—TYPE HEAT—SENSING FIRE DETECTORS
SHALL BE LOCATED ON THE CEILING NOT LESS THAN 100mm (4in)
FROM THE SIDEWALL OR ON THE SIDEWALLS BETWEEN 100mm AND
300mm (4in, AND 12 in.) FROM THE CEILING.

NFPA 72 2016 EDITION (A.17.7.4.1): DETECTORS SHOULD NOT BE LOCATED IN A DIRECT AIRFLOW OR CLOSER THAN 910mm(35in.) FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. SUPPLY OR RETURN SOURCES LARGER THAN THOSE COMMONLY FOUND IN RESIDENTIAL AND SMALL COMMERCIAL ESTABLISHMENT CAN BE REQUIRE GREATER CLEARANCE TO SMOKE DETECTORS.

NFPA 72 2016 EDITION (17.14.8.4): MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 1.5m (5ft.) OF EACH EXIT DOORWAY ON EACH FLOOR.

NFPA 72 2016 EDITION (17.14.5): THE OPERABLE PART OF A MANUALLY ACTIVATED ALARM INITIATING DEVICE SHALL BE NOT LESS THAN 42in. (1070mm) AND NOT MORE THAN 48in. (1220mm) FROM THE FINISHED FLOOR.

NFPA 72 2016 EDITION (17.7.3.2.1): SPOT-TYPE SMOKE DETECTORS SHALL BE LOCATED ON THE CEILING OR, IF ON A SIDEWALL, BETWEEN THE CEILING AND 12in. (300mm) DOWN FROM THE CEILING TO THE TOP OF DETECTOR.

NFPA 72 2016 FORTION (24.8.17); WALL MOUNTED TELEPHONE APPLIANCES OR RELATED JACKS SHALL BE NOT LESS THAN 910mm(36in.) AND NOT MORE THAN 1680mm(66in.) ABOVE FLOOR LEVEL WITH CLEAR ACCESS TO THE APPLIANCE THAT IS AT LEAST 760mm(30in.) WIDE.

NFPA 72 2016 EDITION (18.9.4.8*): ALL CHARACTERS AND GRAPHICAL VISIBLE NOTIFICATION APPLIANCES SHALL BE A MINIMUM OF 1020mm(40in.) ABOVE THE GROUND OR FINISHED FLOOR.

NFPA 72 2016 EDITION (18.11); STANDARD EMERGENCY SERVICE INTERFACE. WHERE REQUIRED BY THE ENFORCING AUTHORITY; GOVERNING LAWS, CODES, OR STANDARDS; OR OTHER PARTS OF THIS CODE, ANNUNCATORS, INFORMATION DISPLAY SYSTEMS, AND CONTROL FOR PORTIONS OF A SYSTEM PROVIDED FOR USE BY EMERGENCY SERVICE PERSONNEL SHALL BE DESIGNED, ARRANGED, AND LOCATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ORGANIZATIONS INTENDED TO USE THE EQUIPMENT.

FIRE ALARM SYSTEM DEVICE MOUNTING HEIGHTS AND LIMITATIONS

NTS

FOR APPROVAL PLANS OF REGIONAL TVET INNOVATION CENTERS (RTICs) 2023



PROPOSED TESDA PPSAT INNOVATION CENTER

PROJECT TITLE:





SEC. SUHARTO T. MANGUDADATU, Ph.D.

PMU-SIPTVETS

FIRE ALARM SYSTEM DEVICE MOUNTING HEIGHTS AND LIMITATIONS

EC-5

GENERAL PLUMBING NOTES:

- GENERAL NOTES ARE APPLICABLE TO ALL PLUMBING WORKING DRAWINGS
- THE WORK SHALL BE EXECUTED IN STRICT CONFORMITY WITH BASE BUILDING SPECIFICATION AND WITH THE LATEST EDITION OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND COVERING CODE OR ORDINANCE THE MORE STRINGENT STANDARD SHALL APPLY.
- 3. ALL PLUMBING WORK SHALL BE COORDINATED WITH ALL OTHER TRADES BEFORE PROCEEDING WITH INSTALLATION.
- NO CHARGES ARE TO BE MADE IN PLUMBING LAYOUT WITHOUT WRITTEN PERMISSION BY THE ENGINEER OR RECORDS/MASTER PLUMBER.
- 5. NO PIPING SHALL RUN EXPOSED IN SALES OR FINISHED AREA.
- 6. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR PAYING RELATED FEES.
- 7. ROUGH-IN DIMENSIONS OF TOILET FIXTURES MUST BE COORDINATED WITH GENERAL CONTRACTOR AND FIELD SUPERVISOR.
- 8. INSTALL GATE VALVES/ BALL VALVES ON ALL BRANCH SUPPLY LINES.
- 9. PROVIDE ACCESS PANELS ON ALL INACCESSIBLE VALVES AND CLEANOUTS ACCESS PANELS SHALL BE PROVIDED BY GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR LOCATION.
- 10. ALL WORK SHALL BE PROPERLY TESTED, BALANCED AND CLEANED. PROVIDE ONE YEAR WARRANTY FROM DATE OF FINAL INSPECTION ON ALL PARTS AND LABOR.
- 11. ALL FIXTURES TO BE SUPPLIED & INSTALLED BY PLUMBING CONTRACTOR.
- GENERAL CONTRACTOR SHALL COORDINATE WATER METER LOCATION AND INSTALLATION WITH LOCAL AUTHORITIES AND CIVIL DRAWINGS.
- TRAP SEAL PRIMERS ARE TO BE PROVIDED AT NO ADDITIONAL COST TO OWNER/ CLIENT, IF REQUIRED BY LOCAL BUILDING CODE OFFICIALS.
- 14. ALL VENT PIPE SHALL BE EXHAUST OVER THE CEILING OF ROOF OVERHANG. NO VENT SHALL EXTENDED THRU ROOF.
- APPLY A BEAD OF SEALANT AROUND ALL FIXTURES WHERE THEY MEET FLOORS, WALLS, ETC. PROVIDE PIPE SLEEVES AT ANY WALL/ FLOOR
- 16. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND REPRESENT ONLY THE GENERAL AND APPROXIMATE LOCATIONS OF FIXTURES, PIPING, ETC. REFER TO THE ARCHITECTURAL PLANS AND ACTUAL CONDITIONS FOR LOCATING FIXTURES, ETC.
- THAT ALL WATER SUPPLIES TO FIXTURES ARE ANCHORED TO PREVENT ANY LATERAL MOVEMENT.
- 18 SUPPORT ALL PIPING EQUIPMENT, ETC AS PER CODE REQUIREMENTS
- 19. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS OF PLUMBING
- 20. FURNISH AS REQUIRED FOR ALL FIXTURES, INCLUDING ONES FURNISHED BY OTHERS, P-TRAPS, ANGLE STOPS, RISERS, ESCUTCHEONS, ETC.
- 21. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE PRIOR TO BIDDING IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
- 22. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING RIGHT OR LEFT
- 23. ALL PENETRATIONS OF CONCRETE FOUNDATIONS & FOOTINGS SHALL BE MINIMUM OF 50MM DIAMETER.
- ALL SANITARY SEWER PIPING UNDER CONCRETE SLAB SHALL BE MINIMUM OF 50MM DIAMETER.
- REFER TO ARCHITECTURAL SPECIFICATIONS FOR SOIL COMPACTING, CONCRETE AND ASPHALT REPAIR.
- 26. SUBMIT SHOP DRAWINGS ON ALL PLUMBING FIXTURES, SEE ARCHITECTURAL
- 27. USE POLYPROPYLENE FOR ALL WATER SUPPLY LINES.
- 28. USE, POLYVINYL CHLORIDE (PVC) SERIES 1000 FOR ALL DRAINAGE LINE OBSERVE SLOPE OF 1% FOR LONG RUNNING DRAINAGE LINE AND SLOPE OF 2% FOR SHORT RUN DRAINAGE LINE, VERIFY.

GENERAL PLUMBING NOTES:

- ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE REQUIREMENTS OF THE PHILIPPINE PLUMBING CODE AND RULES AND REGULATIONS OF THE GOVERNMENT.
- COORDINATE DRAWINGS WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS.
- 3. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN
- FOUND THEREIN.
 PIPES SHALL BE INSTALLED AS INDICATED, ANY RELOCATION REQUIRED FOR
 PROPER EXECUTION OF OTHER TRADES SHALL BE PIPE STRUCTURE.
 ALL HORIZONTAL BRANCHES SHALL MAINTAIN 1% AS MINIMUM UNLESS
- NOTED OTHERWISE.
- ALL FIXTURES SHALL VENTED, UNLESS INDICATED.
 ALL INDIVIDUAL BRANCHES TO FIXTURES OR GROUP OF FIXTURES OR EQUIPMENT SHALL BE PROVIDED WITH AIR CHAMBER.

MATERIAL SPECIFICATIONS:

COLD WATER LINE (INTERIOR) - SHALL BE POLYPROPYLENE RANDOM (TYPE 3). HIGH RESISTANCE TO PRESSURE AND TEMPERATURE, CONFORMING TO EN ISO 15874, SIMILAR TO GEORGE FISCHER PP-R PIPE, UNITEC PP-R PIPE OR APPROVED

COLD WATER LINE (EXPOSED) - SHALL BE GALVANIZED STEEL PIPE, SCHEDULE 40, CONFORMING TO ASTM A 53 A 120. SIMILAR TO APO PIPE SCHEDULE 40 OR APPROVED EQUAL.

SOIL, WASTE AND VENT LINES- SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (UPVC) PIPE ON APPROVED EQUAL.

DOWNSPOUTS- SHALL BE UNPLASTICIZED POLYVINYL, CHLORIDE (UPVC) PIPE CONFORMING TO ASTM D2729. SIMILAR TO NELTEX/ EMERALD/ MOLDEX SERIES 100 UPVC PIPE OR APPROVED EQUAL.

DRAINAGE LINE- SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (UPVC) PIPE CONFORMING TO ASTM D2729, SIMILAR TO NELTEX/EMERALD/ MOLDEX SERIES 1000 UPVC PIPE OR APPROVED EQUAL.



LEGEND		ABBREVIATION		
	SANITARY LINE	LAV	LAVATORY	
	WATER LINE	KS	KITCHEN SINK	
	DRAINAGE LINE	VAC	VENT ABOVE CEILING	
	VENT PIPE	VP	VENT PIPE	
	GATE VALVE	VTR/VTC	VENT THRU ROOF/VENT THRU CEILING	
	CHECK VALVE	SS	SOIL STACK/ WASTE PIPE	
	WATER METER	AAV	AIR ADMITTANCE VALVE	
co+	FLOOR CLEANOUT	PVC	POLYVINYL CHLORIDE	
Ø	DIAMETER	CWL	COLD WATER LINE	
		FD	FLOOR DRAIN	
ABBREVIATION		SH	SHOWER HEAD	
AC	AIR CHAMBER	DD	DECK DRAIN	
WC	WATER CLOSET	BD	BALCONY DRAIN	
URI	URINAL	mm	MILLIMETER	

		MIN. PIPE CONNECTION SIZE MM DIAMETER				DEMARKS
EGEND	SYMBOL	WASTE/ SOIL	VENT	STORM	COLD WATER	REMARKS
wc	WATER CLOSET	100	50	-	20	TANK TYPE
LAV	LAVATORY	50	50	-	20	-
KS	KITCHEN SINK	50	50	-	20	-
SHO/ SD	SHOWER/ SHOWER DRAIN	50	50	-	20	-
FD	FLOOR DRAIN	50	50	-	-	WITH P-TRAP
НВ	HOSE BIBB	-	1-1	-	20	

SPECIFICATION

ITEMS	MATERIAL	THICKNESS	
WASTE/ SEWAGE LINE	POLYVINYL CHLORIDE (PVC)	SERIES 1000	
VENT PIPES	POLYVINYL CHLORIDE (PVC)	SERIES 1000	
STORM DRAINAGE LINE (DS)	POLYVINYL CHLORIDE (PVC)	SERIES 1000	
RAINWATER COLLECTOR	POLYVINYL CHLORIDE (PVC)	SERIES 1000	
WATERLINE (HOT/COLD)	PPR-C	PN 10	

FOR APPROVAL PLANS OF **REGIONAL TVET INNOVATION CENTERS (RTICs) 2023**



PROPOSED TESDA PPSAT INNOVATION CENTER

PREPARED & CADD BY

ENGR. FRANCISCO B. NARAG

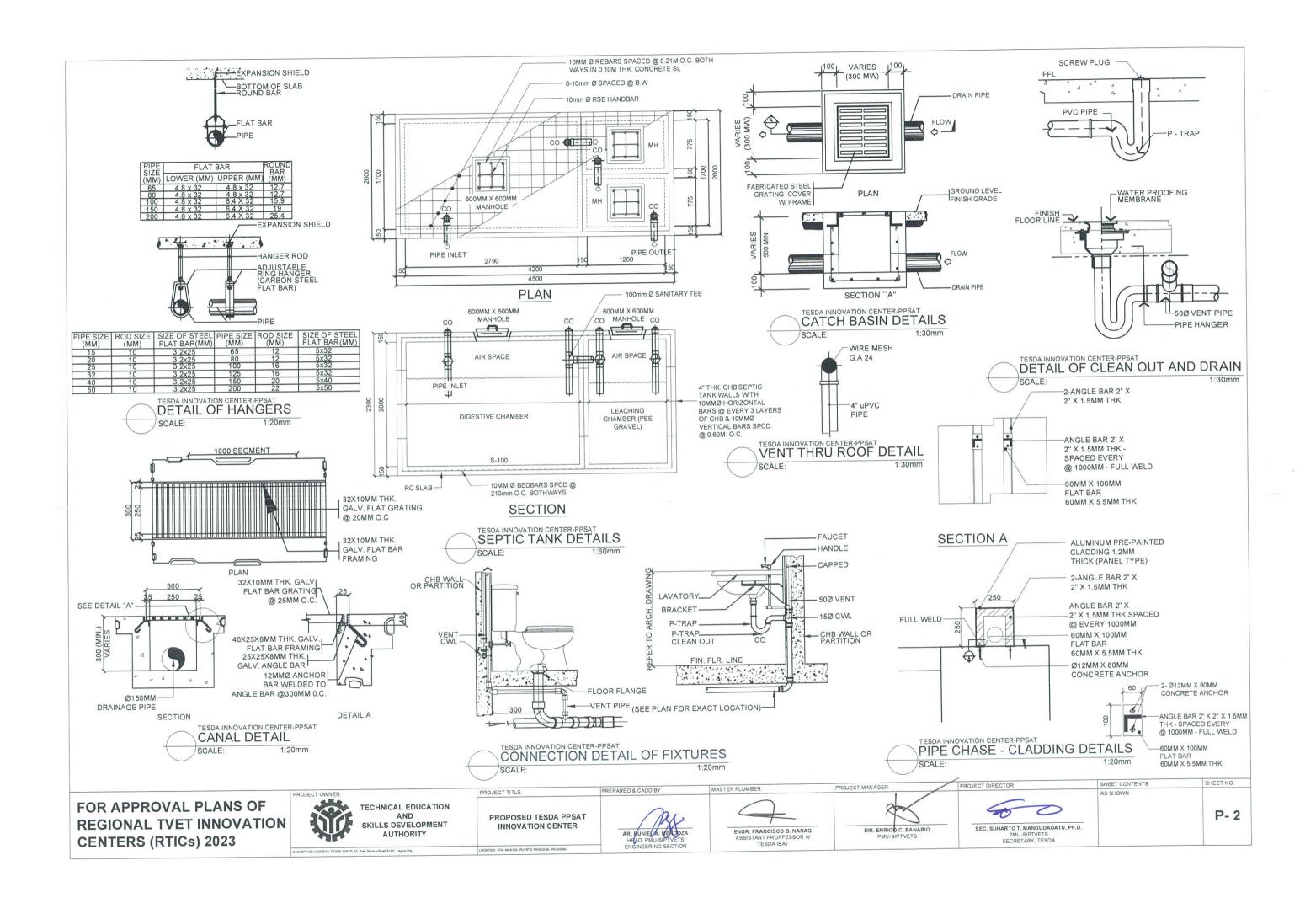
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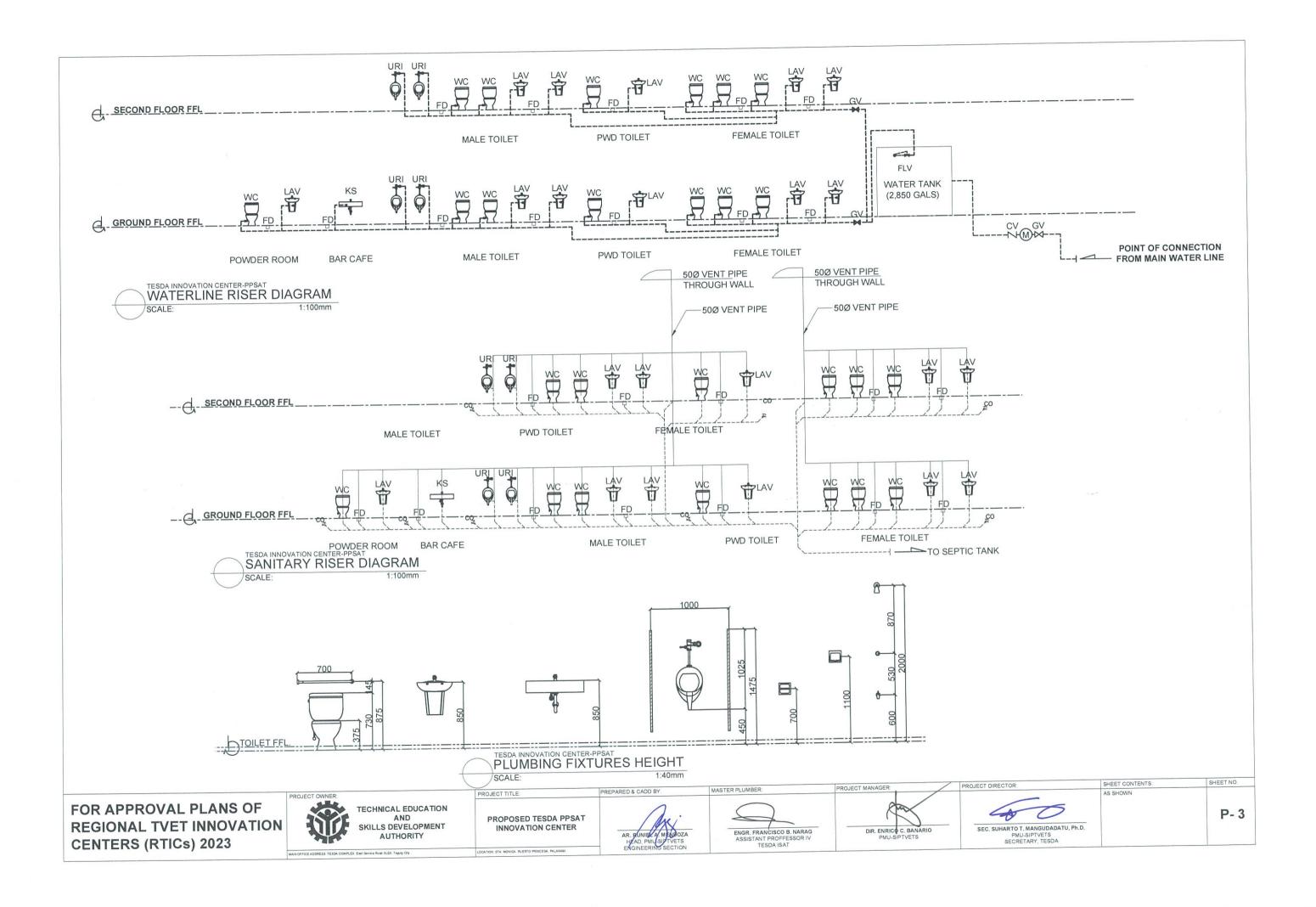
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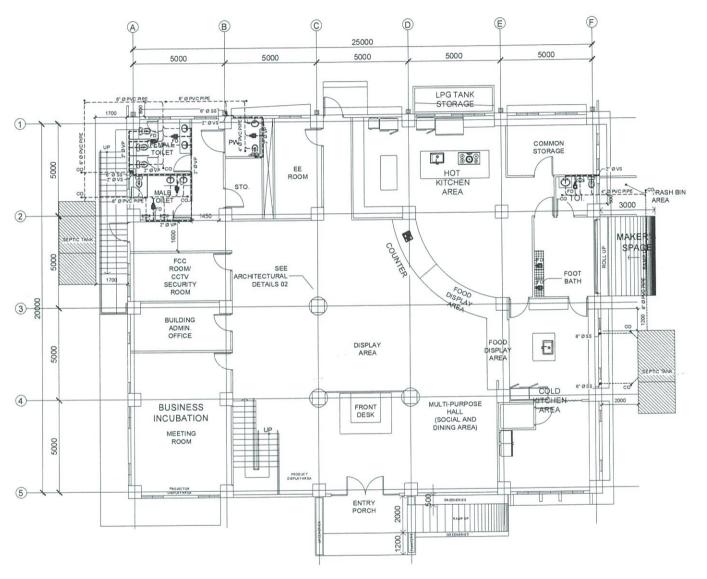
SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS SECRETARY, TESDA

AS SHOWN P-1

SHEET CONTENTS







TESDA INNOVATION CENTER-PPSAT
GROUND FLOOR SANITARY LAYOUT
SCALE 1:200MTS

FOR APPROVAL PLANS OF **REGIONAL TVET INNOVATION CENTERS (RTICs) 2023**



PROPOSED TESDA PPSAT INNOVATION CENTER

PROJECT TITLE:

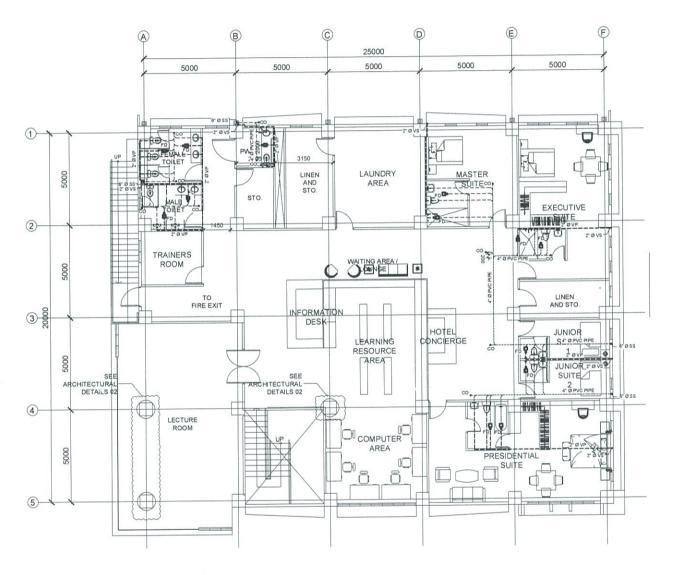
PREPARED & CADD BY

MASTER PLUMBER:

DIR. ENRICO C. BANARIO PMU-SIPTVETS

SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS SECRETARY, TESDA

SHEET CONTENTS: AS SHOWN P-4







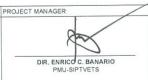
PROPOSED TESDA PPSAT INNOVATION CENTER

PROJECT TITLE:



PREPARED & CADD BY



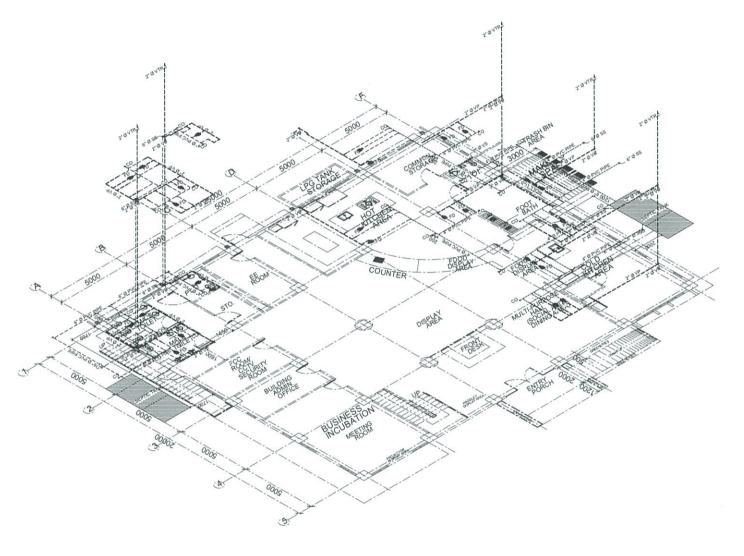


SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS: SHEET NO.

AS SHOWN

P- 5



TESDA INNOVATION CENTER-PPSAT SANITARY ISOMETRIC LAYOUT

FOR APPROVAL PLANS OF REGIONAL TVET INNOVATION **CENTERS (RTICs) 2023**

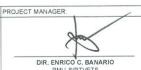


PROJECT TITLE: PROPOSED TESDA PPSAT INNOVATION CENTER



PREPARED & CADD BY

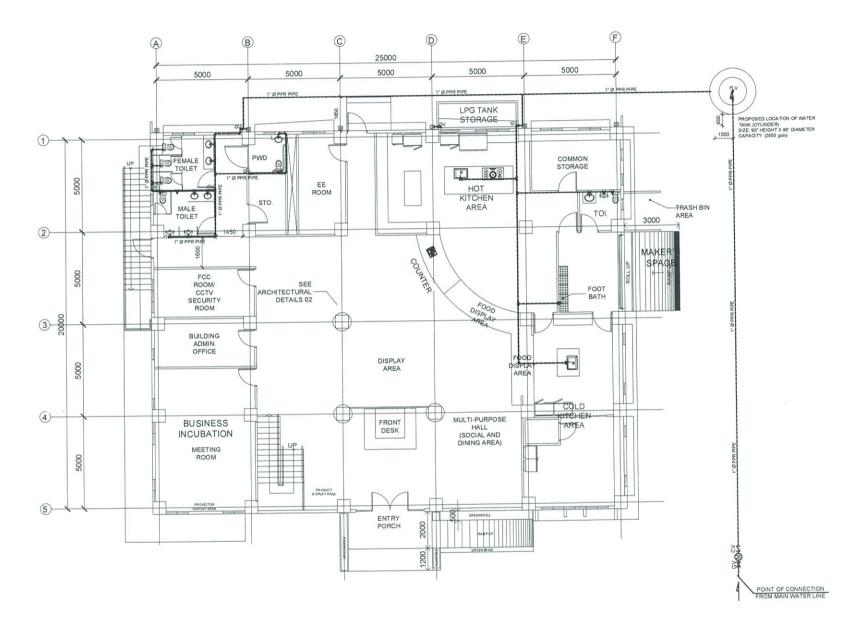




PROJECT DIRECTOR:
SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET NO. SHEET CONTENTS: P-6

SECRETARY, TESDA



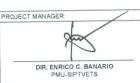




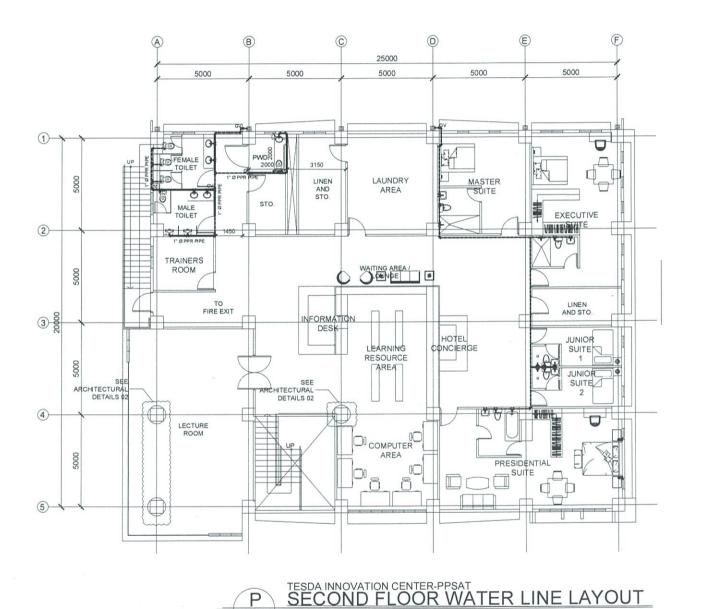
PROPOSED TESDA PPSAT INNOVATION CENTER



MASTER PLUMBER: ENGR. FRANCISCO B. NARAG ASSISTANT PROFFESSOR IV TESDA ISAT



SHEET CONTENTS: P-7





PROPOSED TESDA PPSAT INNOVATION CENTER



PREPARED & CADD BY:

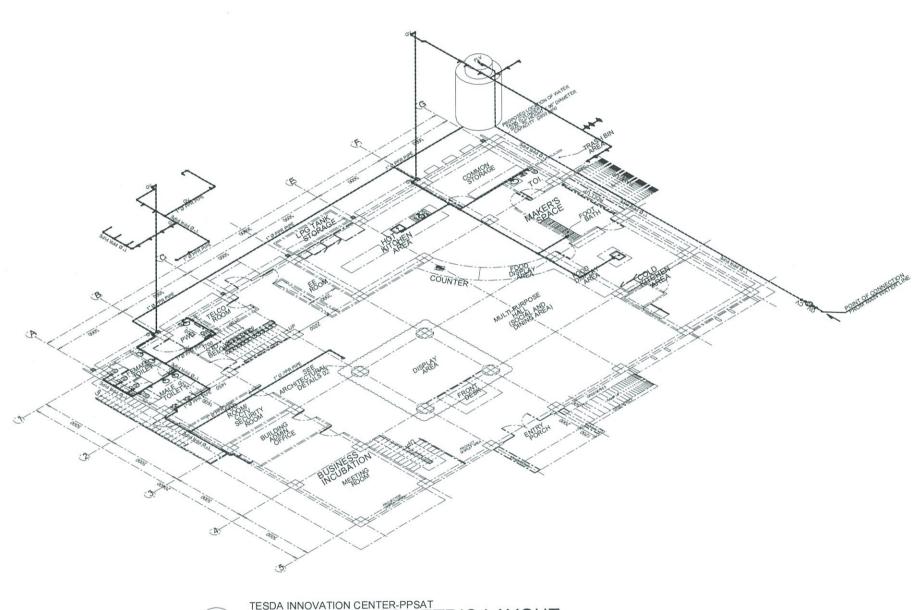




SEC. SUHARTO T. MANGUDADATU, Ph.D. PMU-SIPTVETS SECRETARY, TESDA

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SHEET CONTENTS:

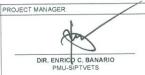


P WATER LINE ISOMETRIC LAYOUT
SCALE 1:200MTS

FOR APPROVAL PLANS OF REGIONAL TVET INNOVATION CENTERS (RTICs) 2023

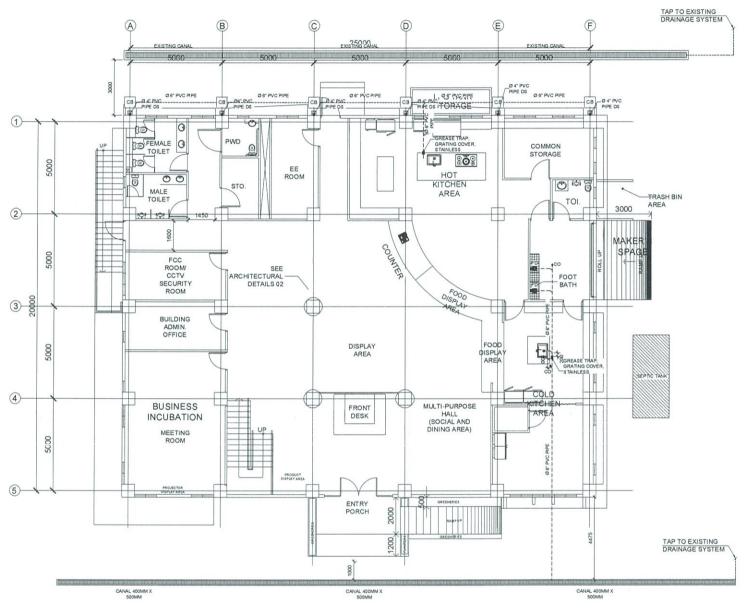


PROPOSED TESDA PPSAT INNOVATION CENTER AR, RUNIELA, MENDOZA HEAD, PMU-SETIES ENGINEERING SECTION ENGR. FRANCISCO B. NARAG ASSISTANT PROFFESSOR IV TESDA ISAT



SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

AS SHOWN SHEET NO.



P GROUND FLOOR STORM WATER DRAINAGE LAYOUT
SCALE 1:200MTS

FOR APPROVAL PLANS OF REGIONAL TVET INNOVATION CENTERS (RTICs) 2023



PROPOSED TESDA PPSAT INNOVATION CENTER

PROJECT TITLE:

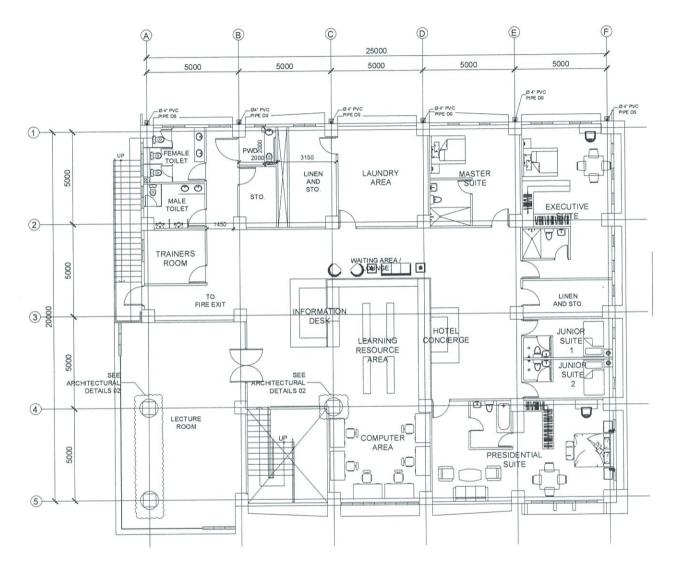
AR/RUMEL A. MENIOZA
MEAD. PM.J. SIPTVETS
ENGINEER NO SESSION

ENGR. FRANCISCO B. NARAG ASSISTANT PROFFESSOR IV TESDA ISAT PROJECT MANAGER

DIR. ENRICO C, BANARIO PMU-SIPTVETS

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

AS SHOWN SHEET NO.



P SECOND FLOOR STORM WATER DRAINAGE LAYOUT

SCALE 1:200MTS

FOR APPROVAL PLANS OF REGIONAL TVET INNOVATION CENTERS (RTICs) 2023



PROPOSED TESDA PPSAT INNOVATION CENTER

PROJECT TITLE:

AR/RUNJELA MENDOZA HEAZ PINJUSTIS ENGINEERING SECTION

PREPARED & CADD BY

ENGR, FRANCISCO B. NARAG ASSISTANT PROFFESSOR IV PROJECT MANAGER.

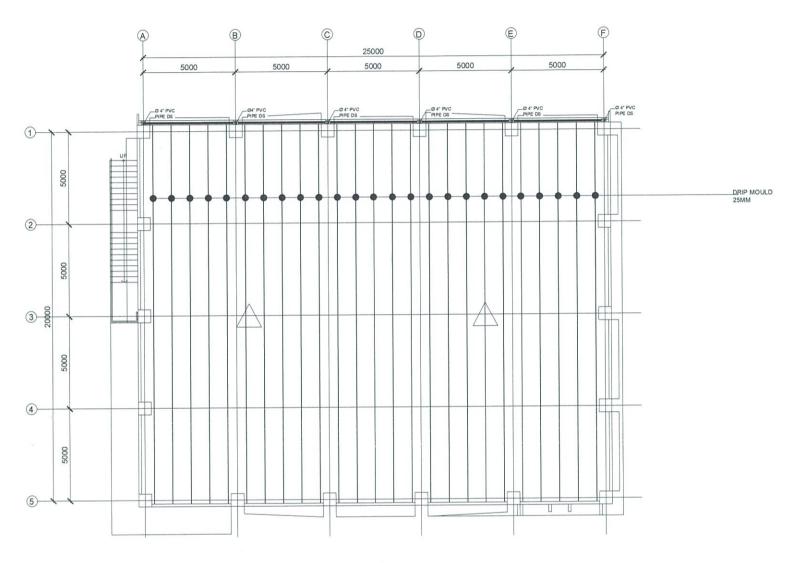
DIR. ENRICO C. BANARIO

DIR. ENRICO C. BANARIO

SEC, SUHARTO T, MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS
AS SHOWN

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PROPOSED TESDA PPSAT INNOVATION CENTER

AR RUMEL A MENDOZA HEAD MU SUTTKETS ENGINEERING SECTION

PREPARED & CADD BY:

ENGR, FRANCISCO B. NARAG ASSISTANT PROFFESSOR IV TESDA ISAT

PROJECT MANAGER

DIR. ENRICO C. BANARIO
DIM LISUPTUETS

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

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