

# ANNEX A

RECOMMENDING APPROVAL:

APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_

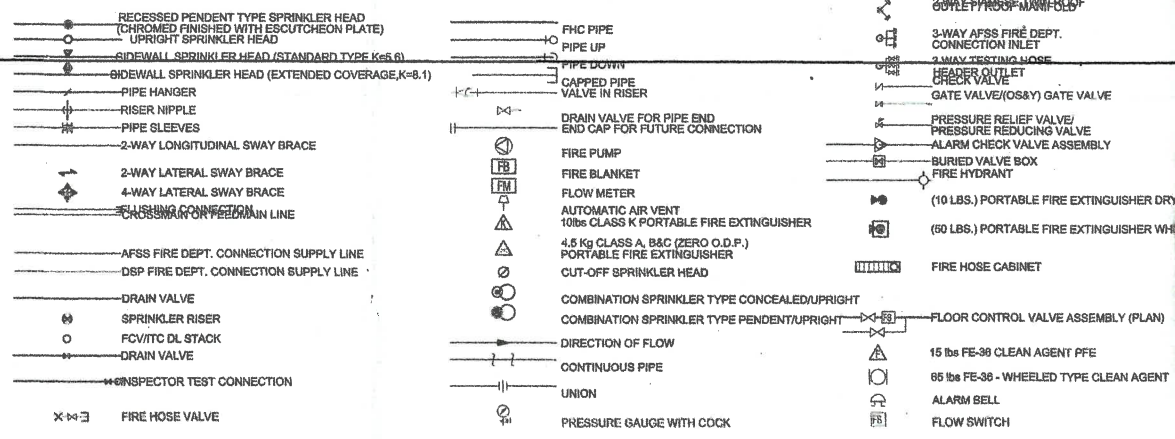
BUILDING OFFICIAL \_\_\_\_\_ DATE \_\_\_\_\_

RECOMMENDING APPROVAL:

**FIRE PROTECTION**

HEAD \_\_\_\_\_ DATE \_\_\_\_\_

**LEGEND :**



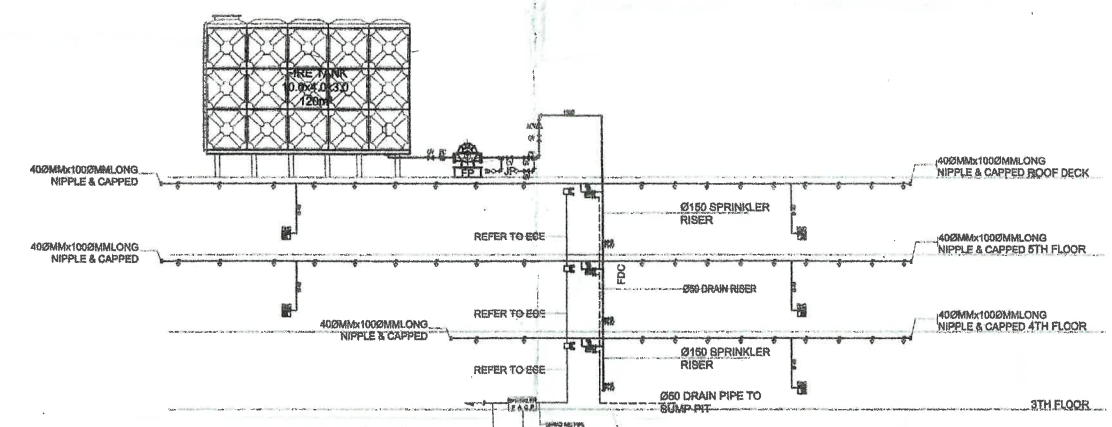
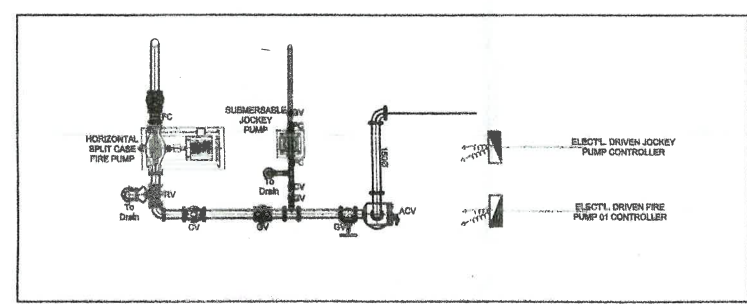
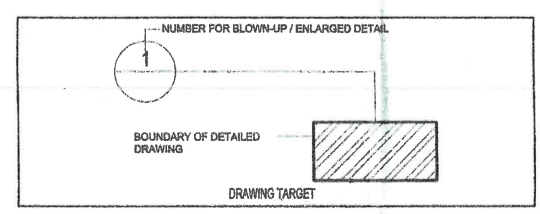
**GENERAL NOTES:**

- SPRINKLER SYSTEM**
- THE FIRE PROTECTION SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES & REGULATIONS:
    - THE FIRE CODE OF THE PHILIPPINES & REGULATIONS
    - NATIONAL BUILDING CODE OF THE PHILIPPINES
    - PMC - PHILIPPINE MECHANICAL CODE 2003
    - NFPA 10 - STANDARD FOR PORTABLE FIRE EXTINGUISHER
    - NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEM
    - NFPA 14 - STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEM
    - NFPA 20 - STANDARD FOR THE INSTALLATION OF CENTRIFUGAL FIRE PUMP
    - NFPA 101 - LIFE SAFETY CODE
    - NFPA 5000 - BUILDING CONSTRUCTION AND SAFETY CODE
    - FACTORY MUTUAL (FM)
    - ASTM - AMERICAN SOCIETY FOR TESTING AND MATERIALS
    - NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
  - DESIGN CRITERIA:
    - A. TYPE OF OCCUPANCY : LIGHT HAZARD
    - SYSTEM CLASS : RESIDENTIAL AREA
    - DESIGN DENSITY : 0.10 GPM/FT (4.10 LPM/m)
    - AREA OF SPRINKLER OPERATION : 1500 FT (140 M<sup>2</sup>)
    - MIN. DURATION OF WATER SUPPLY : 30 MINUTES
    - SPRINKLER TEMPERATURE : 155 °F (GLASS BULB) (QUICK RESPONSE)
    - ORIFICE K-FACTOR (SPRINKLER) : 5.8 (8.1)
    - COMBINED IN/OUT HOSE STREAM ALLOWANCE : 100 GPM
    - B. TYPE OF OCCUPANCY : ORDINARY HAZARD I
    - SYSTEM CLASS : PARKING AREA
    - DESIGN DENSITY : 0.15 GPM/FT (6.10 LPM/m)
    - AREA OF SPRINKLER OPERATION : 1500 FT (140 M<sup>2</sup>)
- MIN. DURATION OF WATER SUPPLY : 30 MINUTES  
SPRINKLER TEMPERATURE : 155 °F (GLASS BULB) (STANDARD RESPONSE)  
ORIFICE K-FACTOR (SPRINKLER) : 5.8 (8.1)  
COMBINED IN/OUT HOSE STREAM ALLOWANCE : 350 GPM
- WATER FLOW DEVICES SHALL BE OF THE APPROVED TYPE.
  - ALL VALVES SHALL BE SECURED BY A PADLOCK AND STRAP IN THE CORRECT OPERATIONAL POSITION.
  - ALL ISOLATING VALVES FOR THE SYSTEM SHALL BE:
    - a) INDIVIDUALLY SUPERVISED AND MONITORED SUCH THAT THE CLOSING OF ANY PARTICULAR VALVE WILL RAISE A VISUAL AND AUDIO ALARM IN THE MAIN FIRE ALARM PANEL LOCATED IN THE COMMAND AND CONTROL CENTER PINPOINTING THE VALVE INVOLVED.
    - b) LOCATED IN AREAS SUCH THAT THEY ARE EASILY ACCESSIBLE TO AUTHORIZED PERSONNEL FOR MAINTENANCE AND EMERGENCY OPERATION.
  - PROVIDE PIPE FLEXIBLE CONNECTORS/EXPANSION JOINTS FOR ALL SERVICES PASSING THRU TO ALL BUILDING EXPANSION JOINTS.
  - ALL PIPE PENETRATIONS THRU FIRE RATED WALLS SHALL BE PROVIDED WITH FIRE STOPPING MATERIALS.
  - PROVIDE VICTAULIC CONNECTION FOR EVERY LENGTH OF PIPE ABOVE 650 mm
  - PIPING TO BE SCH# 40 BLACK IRON PIPE, FITTINGS 50mm AND SMALLER SHALL BE SCREWED TYPE, 65mm AND LARGER SHALL BE VICTAULIC TYPE.
  - ALL FIRE PROTECTION WORKS AND INSTALLATION SHALL BE SUPERVISED BY A LICENSED MECHANICAL ENGINEER.
  - ALL PIPE PASSING THRU SLAB, BEAM & WALL SHALL BE PROVIDED W/ FIRE RATED SEALANT.
  - FINAL LOCATION OF SPRINKLER SHALL BE COORDINATED WITH ARCHITECTURAL CEILING TILES AND ID DESIGN LAYOUT.
  - IF WELDING PIPES ARE EXPECTED, PIPES SHALL BE SHOPWELDED AT THE APPROVED LOCATION THEN MECHANICALLY JOINED BY USING VICTAULIC COUPLINGS AS PER NFPA 13.

EQUIPMENT SCHEDULE														
SERVICE	PUMP NO.	TYPE	LOCATION	CAPACITY GPM(LPM)	APPROX. HEAD FT (PSI)	MOTOR (HP)	ELECTRICAL CHARACTERISTIC			REMARKS	OPERATION	CUT-IN	CUT-OFF	PRV SETTING
							VOLTS	PHASE	HERTZ					
COMBINED AUTOMATIC SPRINKLER SYSTEM & STANDPIPE / HOSE SYSTEM	FP-1	HORIZONTAL SPLIT CASE	ROOF DECK FIRE PUMP ROOM	500(1000)	139(110)	75	380	3	60	ELECTRIC MOTOR DRIVEN	DUTY	30	MANUAL OFF	80
COMBINED AUTOMATIC SPRINKLER SYSTEM & STANDPIPE / HOSE SYSTEM	JP	VERTICAL IN-LINE	ROOF DECK FIRE PUMP ROOM	40(100)	162(120)	5	380	1	60	ELECTRIC MOTOR DRIVEN	DUTY	80	70	80

DRAWING INDEX	
SHEET NO.	CONTENTS
	<b>GENERAL DRAWINGS</b>
FP-VM-01	DRAWING INDEX, VICINITY MAP, GENERAL NOTES, ABBREVIATIONS, LEGEND & SYMBOLS, EQUIPMENT SCHEDULE & SCHEMATIC DIAGRAM
FP-3F-02	FIRE PROTECTION LAYOUT @ THIRD FLOOR PLAN
FP-4F-03	FIRE PROTECTION LAYOUT @ FOURTH FLOOR PLAN
FP-5F-04	FIRE PROTECTION LAYOUT @ FIFTH FLOOR PLAN
FP-DT-01-5	MISCELLANEOUS DETAILS 01
FP-DT-02-6	MISCELLANEOUS DETAILS 02

ABBREVIATION:	
DSP	DRY STAND PIPE
AFSS	AUTOMATIC FIRE SPRINKLER SYSTEM
GV	GATE VALVE
CV	CHECK VALVE
FCV	FLOOR CONTROL VALVE
WFS	WATER FLOW SWITCH
(OS&Y) GV	DRAIN VALVE (OUT SIDE/YOKE) GATE VALVE
FHV	FIRE HOSE VALVE
FHC	FIRE HOSE CABINET
FCVC	FLEXIBLE CONNECTOR/VICTAULIC COUPLING
PFE	PORTABLE FIRE EXTINGUISHER
RN	RISER NIPPLE
FHV	FIRE HOSE VALVE
DN	DOWN
FMD	FLOW MEASURING DEVICE
AAV	AUTOMATIC AIR VENT
FDC	FIRE DEPARTMENT CONNECTION
F/A	FROM ABOVE
F/B	FROM BELOW
GPM	GALLONS PER MINUTE
LPM	LITERS PER MINUTES
LPS	LITERS PER SECOND
PRV	PRESSURE REDUCING/ RESTRICTING RELIEF VALVE
R/A	RISER NIPPLE TO ABOVE
T/B	TO BELOW
WFS	WATER FLOW SWITCH
ACV	ALARM CHECK VALVE
PRV	PRESSURE RELIEF VALVE
ITC	INSPECTOR TEST CONNECTION
DL	DRAIN LINE



**01 SCHEMATIC DIAGRAM**  
FP-01 NOT TO SCALE

FROM THE OFFICE OF: <b>ENGR. LEONIDA M. PARAGSA</b> PROFESSIONAL MECHANICAL ENGINEER	R.A. 9266 (Art. IV, Sec.33) Ownership and specifications & other contract documents duly signed, stamped or sealed, as instruments of service are intellectual property & documents of the Architect, whether the object for w/o they are made executed or not it shall be unlawful for any person to duplicate or to make copies of the said documents for the use in the repetition of & for other projects or buildings, whether executed partly or in a whole w/o the written consent of architect or author of said docs.	REG. NO. 4065 DATE: 11-11-2004 PTR NO. 177070 DATE: 01-03-2018 T I N: 902-443-011	SEAL	PROJECT NO. REVISION NO.: DRAWN BY: AMIL DATE CHECKED BY	PROJECT TITLE: PROPOSED: <b>PROPOSED CONSTRUCTION OF ADMINISTRATION BUILDING</b> LOCATION: BRGY. COGON, DILPOLOG CITY	APPROVED AS TO PLAN: OWNER: <b>ENGR. LOUIE C. HANCRA PAE, M.S.C.</b> OWNER	SHEET CONTENTS: <b>GENERAL NOTES SCHEDULE OF EQUIPMENT LEGENDS ABBREVIATIONS</b>	SHEET NO. FP 01 01
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ASSIGNMENT

DOORING- 600mm X 600mm RUSTIC/MATTE CERAMIC TILES  
 FLOORING- 4MM THK. CEMENT FIBER BOARD

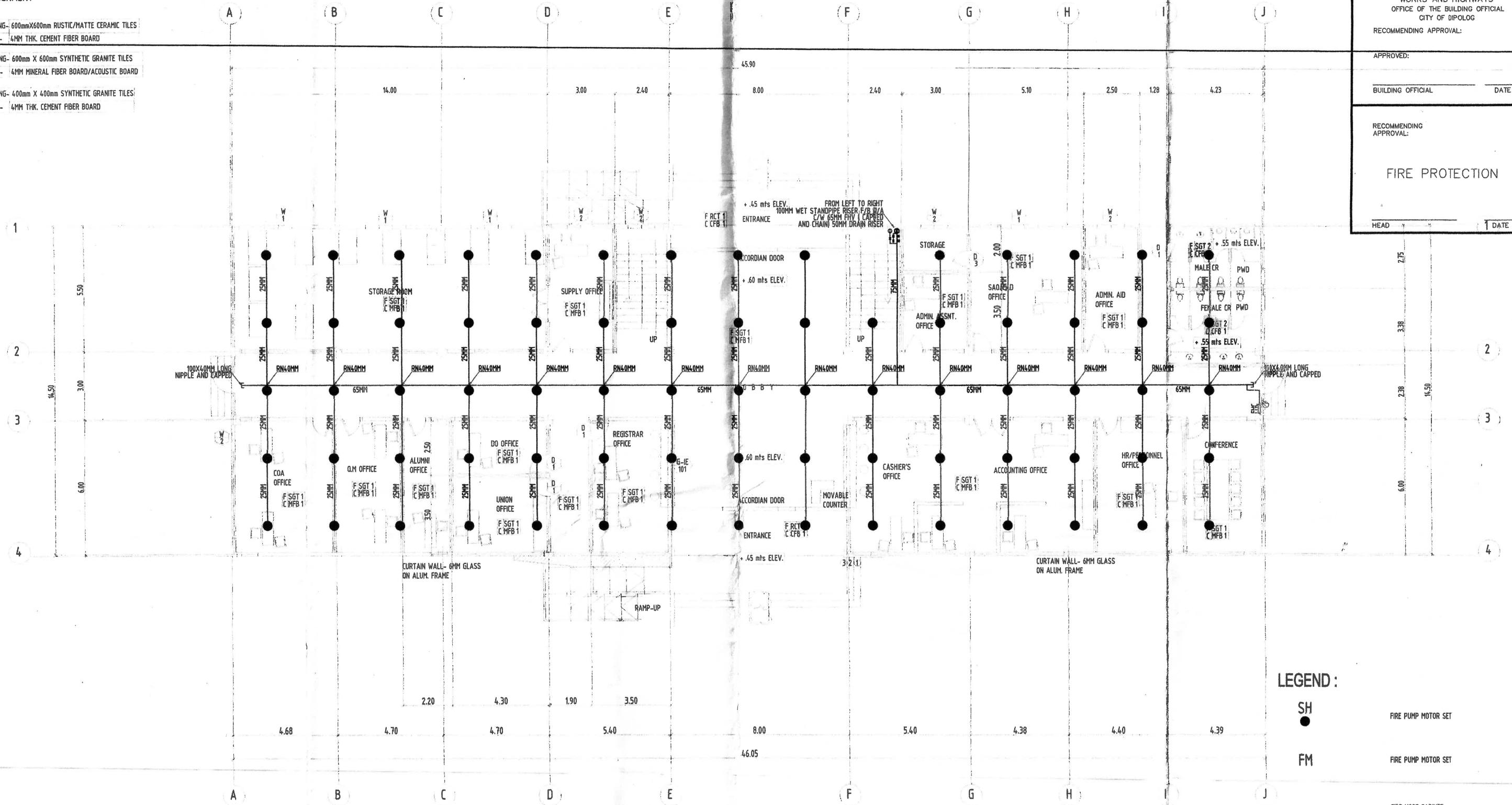
DOORING- 600mm X 600mm SYNTHETIC GRANITE TILES  
 FLOORING- 4MM MINERAL FIBER BOARD/ACOUSTIC BOARD

DOORING- 400mm X 400mm SYNTHETIC GRANITE TILES  
 FLOORING- 4MM THK. CEMENT FIBER BOARD

REPUBLIC OF THE PHILIPPINES  
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
 OFFICE OF THE BUILDING OFFICIAL  
 CITY OF DIPOLOG

RECOMMENDING APPROVAL:  
 APPROVED:  
 BUILDING OFFICIAL DATE

RECOMMENDING APPROVAL:  
 FIRE PROTECTION  
 HEAD DATE



LEGEND:  
 SH ● FIRE PUMP MOTOR SET  
 FM ● FIRE PUMP MOTOR SET  
 FHC ● FIRE HOSE CABINET

# GROUND FLOOR FIRE PROTECTION PLAN

SCALE 1:100 MTS

FROM THE OFFICE OF: <b>ENGR. LEONIDES M. PARAGSA</b> PROFESSIONAL MECHANICAL ENGINEER	R.A. 9266 (Art. IV, Sec.33) Drawings and specifications & other contract documents duly signed, stamped or sealed, as instruments of service are intellectual property & documents of the Architect, whether the object for w/o they are made in executed or not it shall be unlawful for any person to duplicate or to make copies of the said documents for the use in the repetition of & for other projects or buildings, whether executed partly or in a whole w/o the written consent of architect or author of said docs.	REG. NO. 4065 DATE: 11-11-2004 PTR NO. 177070 DATE: 01-03-2018 T I N: 002-443-011	SEAL	PROJECT NO. REVISION NO.: DRAWN BY: AMIL DATE CHECKED BY	PROJECT TITLE: PROPOSED: <b>PROPOSED CONSTRUCTION OF ADMINISTRATION BUILDING</b> LOCATION: BRGY. COGON, DIPOLOG CITY	APPROVED AS TO PLAN: OWNER: <b>ENGR. LOUIE C. JAMORA PAE, M.Sc.</b> OWNER ADDRESS: DIPOLOG CITY	SHEET CONTENTS: <b>GROUND FLOOR PLAN</b>	SHEET NO. FP 01 01
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APPROVED:

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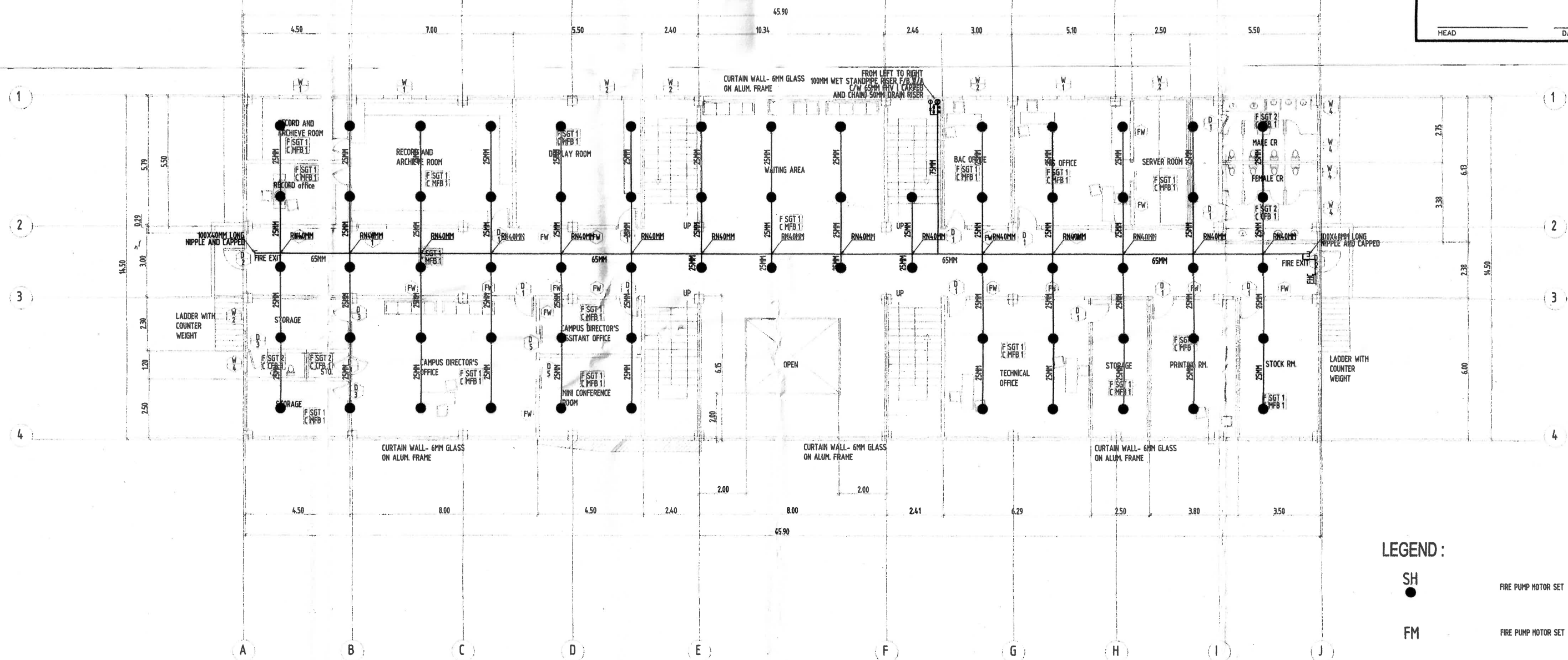
RECOMMENDING APPROVAL:

FIRE PROTECTION

HEAD DATE

ATERIAL ASSIGNMENT

GEN	FLOORING- 600mmX600mm RUSTIC/MATTE CERAMIC TILES
RCT 1	CEILING- 4MM THK. CEMENT FIBER BOARD
SGT 1	FLOORING- 600mm X 600mm SYNTHETIC GRANITE TILES
MFB 1	CEILING- 4MM MINERAL FIBER BOARD/ACOUSTIC BOARD
SGT 2	FLOORING- 400mm X 400mm SYNTHETIC GRANITE TILES
CFB 1	CEILING- 4MM THK. CEMENT FIBER BOARD



# SECOND FLOOR FIRE PROTECTION PLAN

SCALE 1:100 MTS

LEGEND:

SH	FIRE PUMP MOTOR SET
●	FIRE PUMP MOTOR SET
○	FIRE PUMP MOTOR SET
FM	FIRE PUMP MOTOR SET
○	FIRE HOSE CABINET

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