

## CHAPTER 7 CONCLUSION AND RECOMMENDATIONS



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### 7-1 Conclusion

This project is of vital importance to the revitalization and reconstruction of Ghana's radio and television broadcasting service, and is also indispensable for the national stability and economic rehabilitation which is given top priority by the Ghanaian Government.

Reconstruction of radio studios under the project, to be carried out in combination with the rehabilitation plan of radio transmission facilities currently pushed forward by Ghana's own self-help efforts, will bring into being again the brilliant mass radio communication network which the country had years ago and will also invigorate the information service in Ghana.

The commencement of the new colourcast to be realized by the project will open up a new era of advanced infrastructure in the area of information service, and the combined development of radio and television broadcasting services will contribute immensely to the improvement of Ghanaian people's cultural and living standards and to the revitalization of Ghana's economy.

These future developments envisaged under the project can never be realized with the existing superannuated broadcasting facilities, nor by Ghana's single-handed efforts to rehabilitate such facilities. It can therefore be said in conclusion that the reconstruction of principal superannuated facilities with the Grand Aid from Japan is highly justifiable.

### 7-2 Recommendations

In order for the project to be implemented smoothly as planned and produce the expected development effects, the Ghanaian Government is urged to pay due attention to the following recommendations.

- (1) The Accra, Cape Coast and Kumasi regions will be covered by the television service after completion of the project, and a new television transmitter station will also be built at Bolgatanga under a micro route construction project. However,

the Tamale region and the relatively densely populated regions of Sunyani and Amedzofe will be left out of the revived television service area. It is therefore recommended that the television service network should be expanded at the earliest possible date to cover these regions.

It is recommended that suitable sites should be selected for installation of public colour television receiver sets, and that an adequate operation and maintenance system should be established for assurance of longeval service of such public receiver sets.

- (3) For the purpose of lasting service of all rehabilitated facilities, it is recommended that an appropriate training system should be instituted and operated to enable GBC's technical staff to acquire the advanced broadcasting technology using transistors, ICs, etc. and to introduce the latest know-how and technological data from overseas countries.

**CHAPTER 8 APPENDIX**



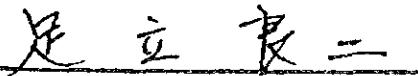
Minutes of Discussion  
on  
The Rehabilitation Project  
for  
Radio and Television Broadcasting System  
in  
The Republic of Ghana

In response to the request by the Government of Ghana, the Government of Japan has sent, through the Japan International Cooperation Agency, a team headed by Mr. Ryoji Adachi (Deputy Director, Cablecast Division, Broadcasting Administration Bureau, Ministry of Posts & Telecommunications) to conduct a Basic Design Study on the Rehabilitation Project for Radio and Television Broadcasting System (hereinafter referred to as "the Project"), from July 28 to August 30, 1984.

The Team has conducted the field survey, held a series of discussions and exchanged views with the Ghana Broadcasting Corporation and other authorities of the Government of Ghana.

As a result of the survey and discussions, both sides have agreed to recommend to their respective Governments to examine the result of the study attached herewith towards the realization of the Project.

Accra, August 10, 1984.



Ryoji Adachi  
Team Leader  
Japanese Study Team



Mr. L.W. Fifi-Eesse  
Director-General  
Ghana Broadcasting Corporation

MINUTES

1. The objective of the Project is to provide facilities and equipment for the Radio and Television Studios and the Television Broadcasting Transmitting Stations in order to rehabilitate the broadcasting system with a view to promoting educational and cultural activities.
2. The Ghana Broadcasting Corporation is responsible for the implementation of the Project on the Ghana side.
3. According to priority, facilities and equipment to be rehabilitated are as follows :
  - 1) Radio Studio Equipment for Accra Broadcasting Station
  - 2) Television Studio Equipment for Accra Broadcasting Station
  - 3) Television Transmitting Facilities for Adjangote Station
  - 4) - ditto- for Jamasi Station
  - 5) - ditto- for Kissi Station
4. The Japanese Study Team will convey to the Government of Japan the intention of the Government of Ghana that the former takes the necessary measures to cooperate in implementing the Project and providing the facilities and equipment listed in Annex I within the scope of Japanese Economic Cooperation in Grant form.
5. The Government of Ghana will take the necessary measures listed in Annex II on condition that the Grant Assistance by the Government of Japan is extended to the Project.
6. Both sides confirmed that the Japanese Study Team explained the Japanese Grant Aid Programme and Ghana side understood it.

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ANNEX I

1. Radio Studio Equipment for Accra Broadcasting Station
  - Studio equipment for several studios
  - Related continuity Studio and Control Room facilities
  - Radio C.B. Van with facilities
  
2. TV production studio equipment for Accra Broadcasting Station
  - Video production equipment
  - Audio production equipment
  - Monitoring equipment
  - Colour cameras
  - Lighting equipment
  - 1 inch VTR's and  $\frac{1}{2}$  inch U-matics
  - 1 set Telecine Chain
  - Other necessary facilities
  
3. Necessary Power Supply System for Accra Broadcasting Station
  
4. TV transmitter systems
  - Adjangote Transmitter Station
  - Jamasi Transmitter Station
  - Kissi Transmitter Station
  
5. TV sets for the diffusion of educational TV programme in rural communities and schools.

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ANNEX II

1. To provide data and information necessary for basic design.
2. To ensure prompt unloading, tax exemption, customs clearance<sup>c</sup> at the ports of disembarkation in Ghana and prompt internal transportation of the products purchased under the Grant.
3. To exempt the Japanese nationals concerned from customs duties, internal taxes and other fiscal levies imposed in Ghana with respect to the supply of the products and services for the Project.
4. To provide necessary permissions, licences and other authorizations for carrying out the Project.
5. To bear all expenses other than those to be borne by the Grant, necessary for the execution of the project.
6. To maintain and use properly and effectively the facilities and equipment purchased under the Grant.

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12/1/84

MEMBERS OF THE BASIC DESIGN STUDY TEAM

<u>Name</u>	<u>Duty-in-charge</u>	<u>Title</u>
Mr. Ryoji ADACHI	Team Leader	Deputy Director, Cablecast division, Broadcasting Administration Bureau, Ministry of Posts & Telecommunications.
Mr. Yoshihide TERANISHI	Project Coordinator	Basic Design Division, Grant Aid Department, Japan International Cooperation Agency. (JICA).
Mr. Hiroaki OTSUKA	Broadcasting System Planning	Manager of International Division, All Japan Radio & Television Engineering Services Co., Ltd.
Mr. Masami DOUCHI	Transmitting Facilities Planning	Chief Engineer of International Division, All Japan Radio & Television Engineering Services Co., Ltd.
Mr. Yoshihiro KOSUGI	Transmitting Tower Building	Chief Engineer of Architectural Division, All Japan Radio & Television Engineering Services Co., Ltd.

LIST OF CONCERNED PERSONS MET BY THE BASIC DESIGN TERM

Ministry of Information

H.E. Joyce ARYEE,	Secretary
Mr. Kofi Totobi QUAKYI,	Deputy Secretary

Ministry of Finance and Economic Planning

Mr. SECHIAMA,	Acting Chief Director of International Economic Affair Department
Mrs. Ayisi-O-KYERE	

King of Ashanti State

H.H. Nana Opoku-WARE-II,	King of Ashanti Region
--------------------------	------------------------

Regional Secretary of Sunyani

Mr. C.S. GECHIE,	Regional Secretary
------------------	--------------------

GBC (Ghana Broadcasting Corporation Accra)

Mr. L.W. Fifi HESSE,	Director-General
Mr. Owusu PREMPEH,	Deputy director-General
Mr. D.M. QUAICOE,	Director of Administration
Mr. Peter HALL CHINERY,	Ag. Director of Tech. Services
Mr. T.N.L. BONSO-BRUCE,	Ag. Director of Engineering
Mr. Oscar A. KWAWUKUME,	Chief Engineer Plan & Development
Dr B.A. OPPONG,	Principal Engineer (Sound)
Mr. I.A.K. QUARTEY,	Ag. Asst. Director of Engineering
Mr. K.B. HAIZEL,	Chief Engineer (Sound)
Mr. K.D. FRIMPONG,	Ag. Chief Engineer (TV)
Mr. F.O. DIOGO,	Chief Tech. Co-ord.

Mr. P.H. CHINERY,

Ag. Director of Tech.  
Services

Mr. J. QUARSHIE,

Snr. Tech. Co-ord.

Mr. R.D. LARYEA,

Chief Tech. Co-ord. (TX)

Mr. J.E. SOLOMON,

Chief Engineer (Transmission)

Mr. E. Nat. ANI,

Ag. CTC (TV)

Mr. E.A. AMARH,

Chief Public Relations

Miss LOKKO,

Engineer

GBC (Cape Coast Region)

Mr. S.A.F. AMISSAH,

Regional Manager

Mr. M.C. YALLEY,

Asst. Tech. Cord.

GBC (Kumasi Ashanti Region)

NANA B. AKYEAMPONG II

Regional Manager

Mr. P.O. AFFUL

Snr. Tech. Co-ord.

Mr. I.A. PREMPONG,

Technical Co-ord.

GBC (Jamasi TV Station)

Mr. N.A. AMMAH,

Technical co-ordinator

Mr. B.D. APPIAH,

Chief Technical Supt.

GBC (Sunyani Regional Station)

Mr. George C. ADJEL,

Senior Editor

Tema Port Office

Mr. S.O. ASAH,

Transport Officer

Mr. Joseph K.A. BAIDOO

Port Operation Manager

GHANA SANYO ELECTRICAL MFG. CORP. LTD. (Tema)

Mr. Hiorohisa Hirano,

General Manager

Mr. Jordan KWASHIE,

Principal Supervisor

Mr. Samuel M. TETTEH,

Factory Manager

Mr. Jacob E. G. DENTU,	Manager
Mr. Seth K. ADANE,	Asst. Factory Manager
Mr. Samuel K. TSAHEY,	Chief Accountant
Mr. Enout LAOZTEY,	Factory Manager

Embassy of Japan (Accra Ghana)

H.E. Naoki NAKANO,	Ambassador Extraordinary and Plenipotentiary
H.E. Akira HOSHINO,	Counsellor
Mr. Shigeru OKUMURA,	Second Secretary
Mr. Shigeru ONUMA,	Third Secretary
Mr. Shoujun Sunagawa,	Officer

## LIST OF COLLECTED DATA

1. Ghana in Retrospect (Some Aspects of Ghanaian Culture)  
(Ghana Publishing Corporation)
2. Basic Information on Ghana  
(Ghana Tourist Board, Marketing Department)
3. Social Structure of Ghana  
(Ghana Publishing Corporation)
4. Tropical Geography (H. R. Jarrett)  
(MACDONALD AND EVANS)
5. INDUSTRIAL STATISTICS 1979 - 1981  
(Central Bureau of Statistics)
6. QUARTERLY DIGEST OF STATISTICS December 1983  
(Central Bureau of Statistics Accra)
7. Broadcasting in Ghana  
(Published by GBC)
8. Ghana Broadcasting Corporation Decree 1968  
(N.L.C.D. 226)
9. GBC Handbook  
(GBC)
10. Ghana Bulletin  
(Prepared by Ghana Embassy - TOKYO)
11. Ghana 1977 (An official handbook)  
(Information Services Department)

12. The P.N.D.C. BUDGET STATEMENT and ECONOMIC POLICY FOR 1984  
(P.N.D.C. Secretary for Finance and Economic Planning)  
(MARCH 27, 1984)
13. ditto FOR 1983  
(APRIL 21, 1983)
14. Interpretation of Seismic Reflection Survey across the  
Continental Shelf South of Accra and its bearing on Earthquakes  
in the Area  
(Ministry of Land and Mineral Resources Geological Survey  
Department)
15. Map (scale: 200,000) x approx. 7 sheets
16. Map (scale: 62,500) x approx. 100 sheets
17. Map (Scale: 50,000) x approx. 80 sheets
18. Road Map of Southern Ghana (scale: 500,000)  
(The Survey of Ghana)
19. Road Map of Northern Ghana (Scale: 500,000)  
(The Survey of Ghana)
20. Republic of Ghana  
Report on Feasibility Survey  
for Television Network Expansion Project  
(Japan International Cooperation Agency, March 1973)

ADDRESS OF GHANA BROADCASTING CORPORATION

GHANA BROADCASTING CORPORATION

P.O. Box 1633 Accra

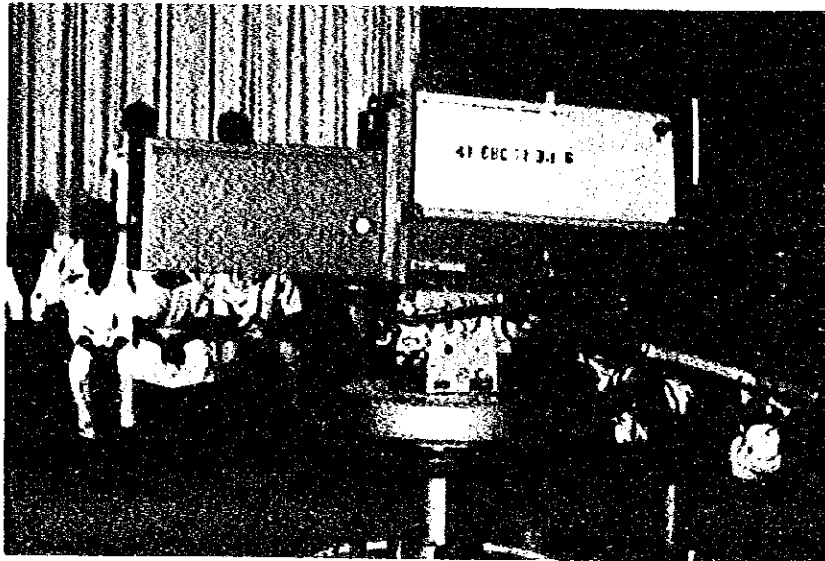
G H A N A

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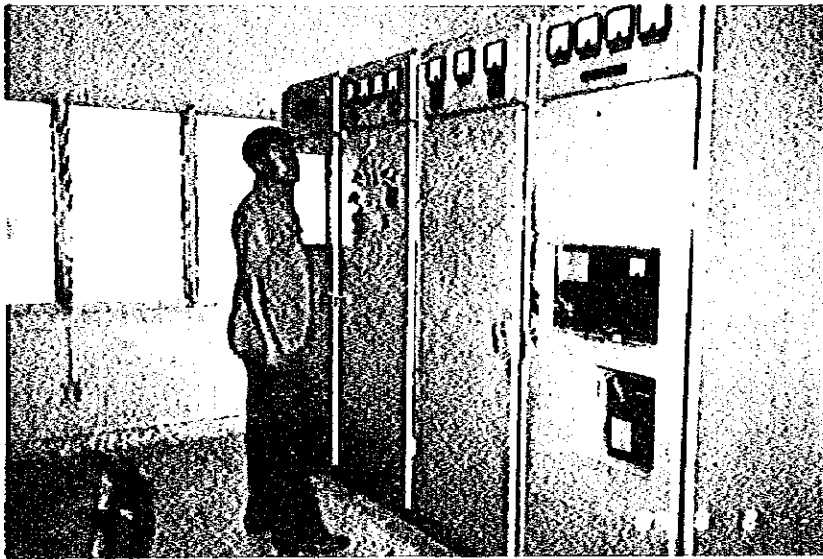
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Tel : 21161 (Accra)

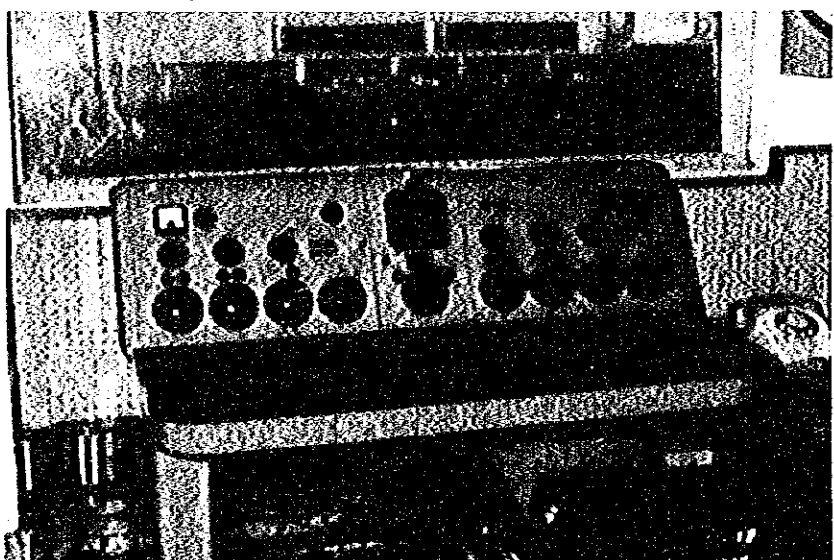




Programme Production in Existing Studio

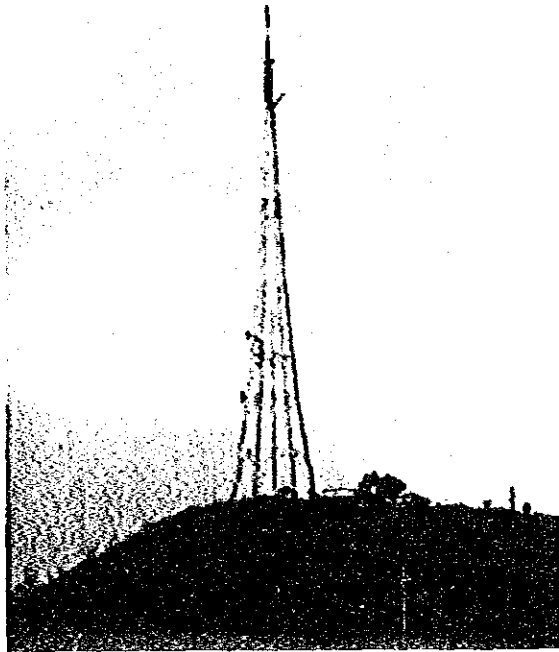


Existing Shortwave Transmitter (Accra)



Existing Radio Studio (Accra)





Existing Transmitting Station (Adjangote)

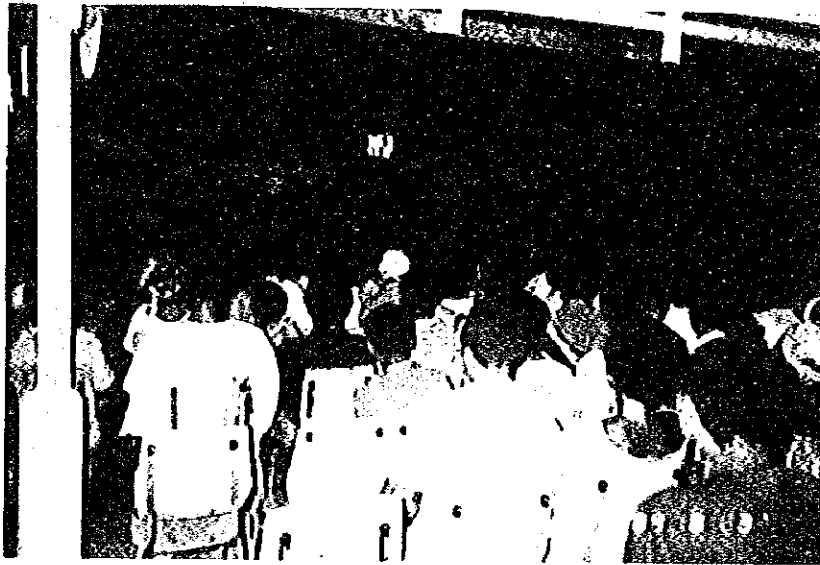


Existing Television Transmitter (Adjangote)

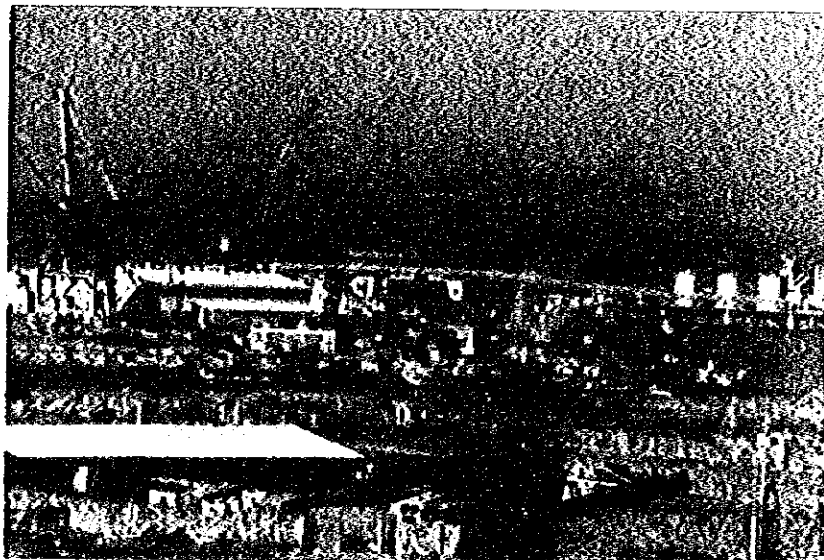




Address of Secretary at Ceremony



Public Television in Community Centre



Port Tema

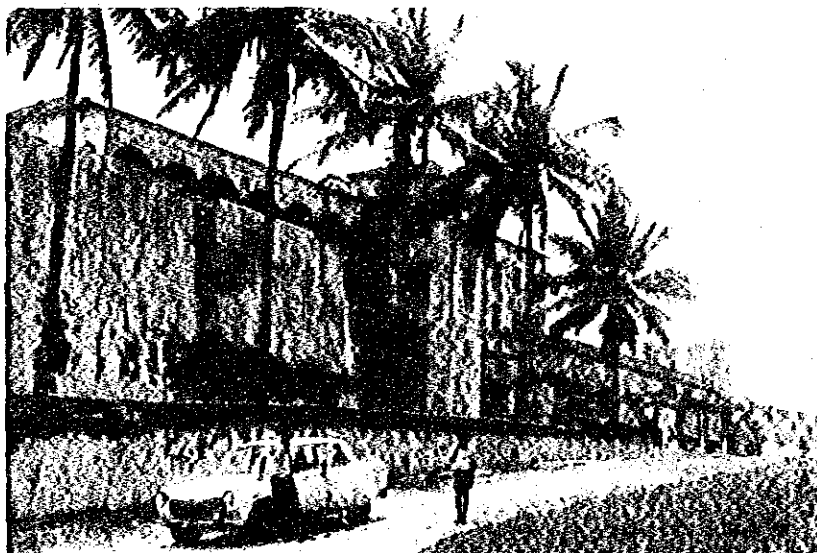




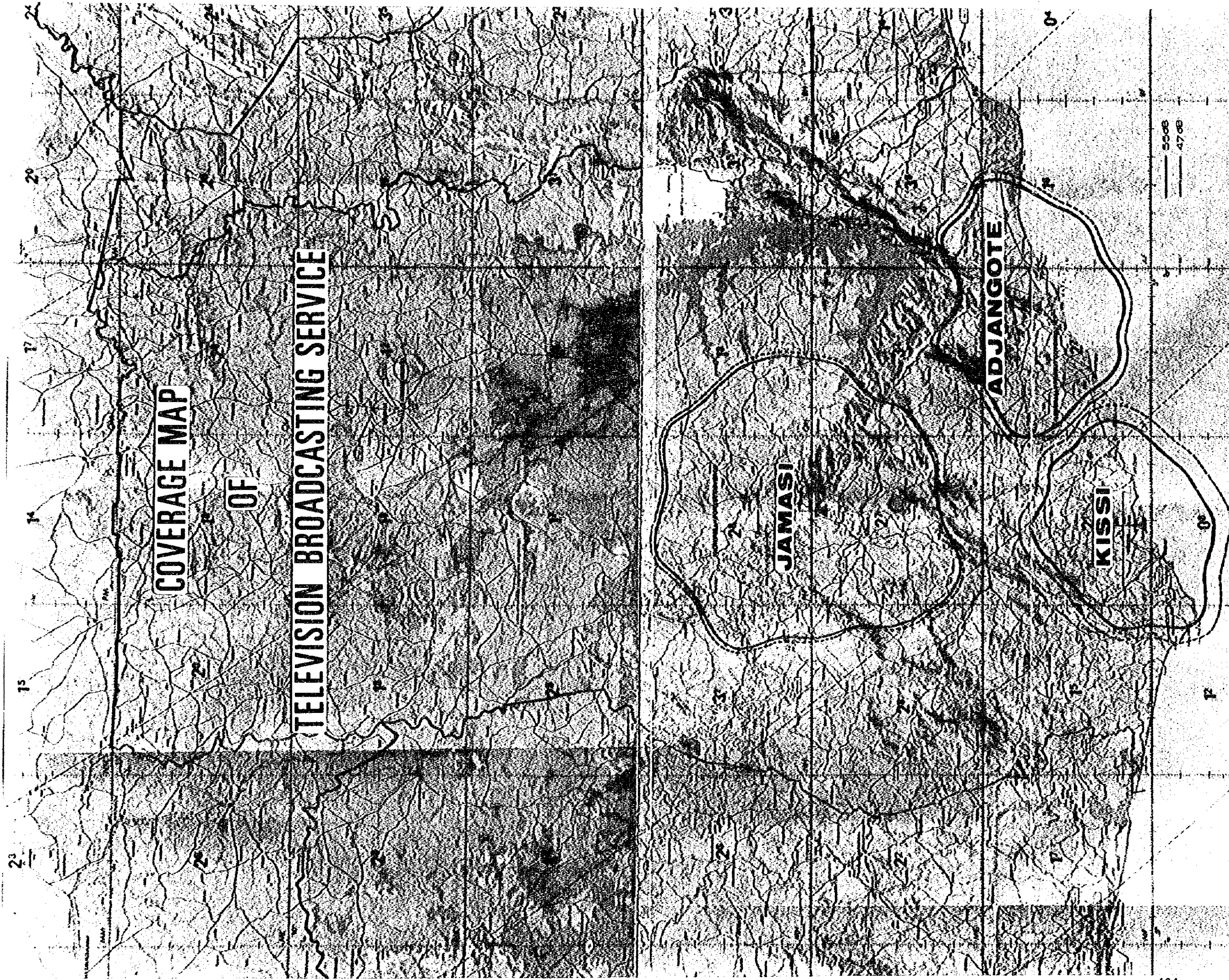
Meeting with GBC Staffs



Signing of Minutes of Discussion



Old Fort at Elmina



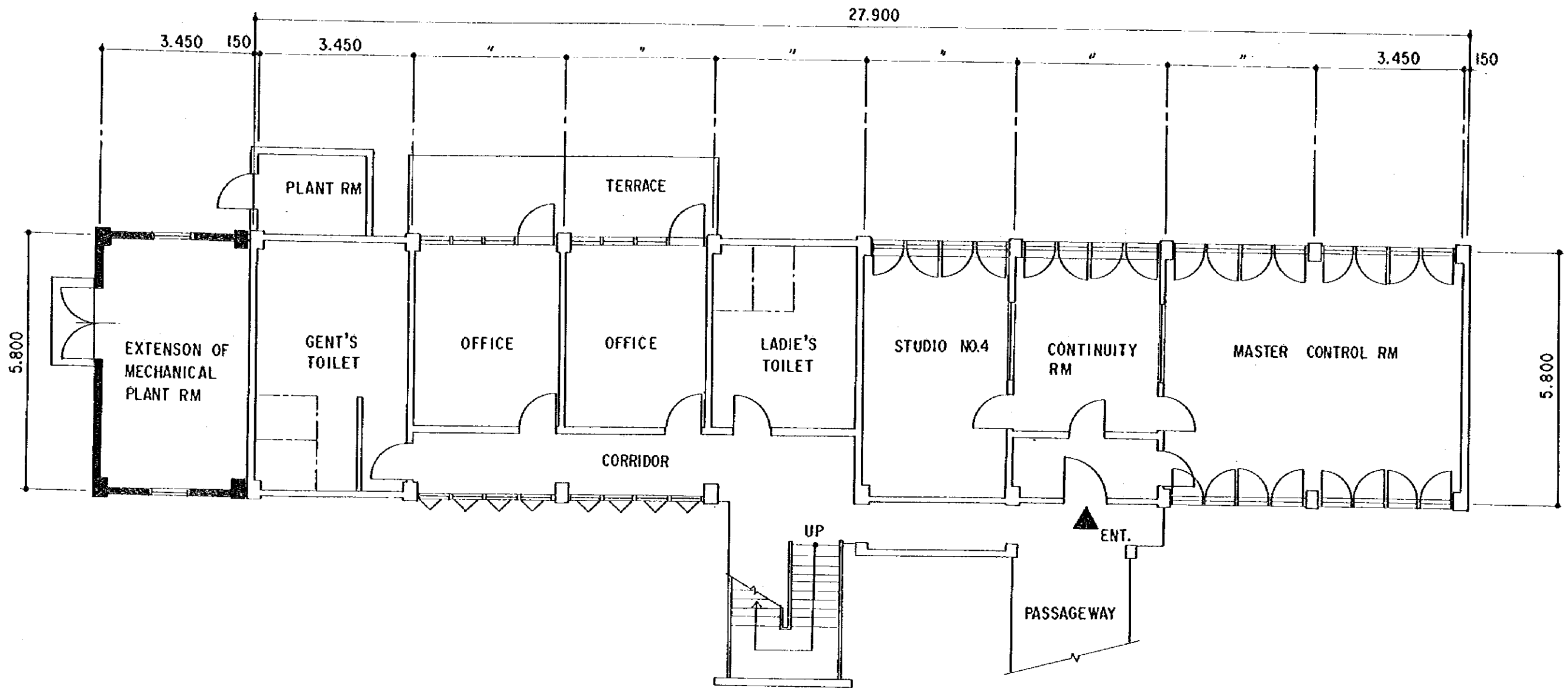
**COVER**  
**AGE**  
**MAP**  
**OF**  
**TELEVISION BROADCASTING SERVICE**

**THE REPUBLIC OF GHANA**

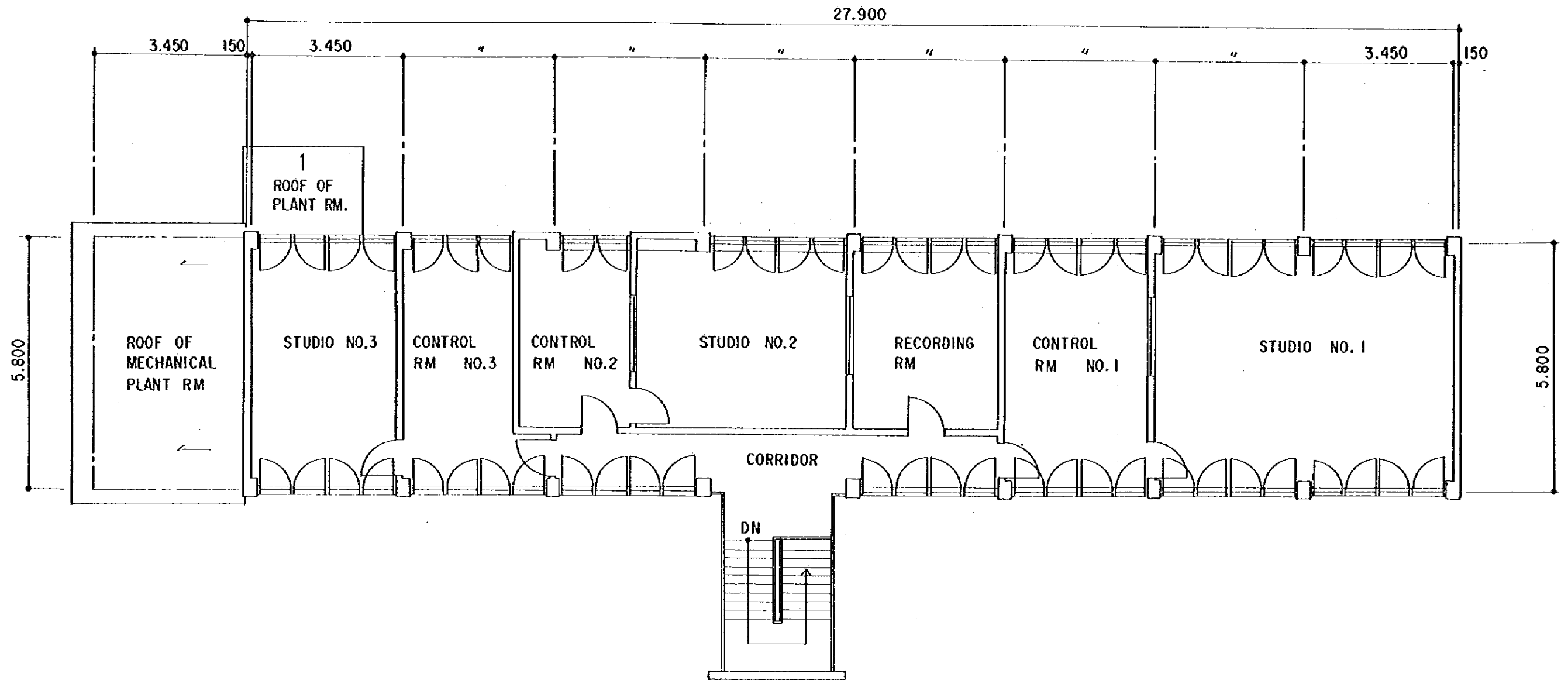




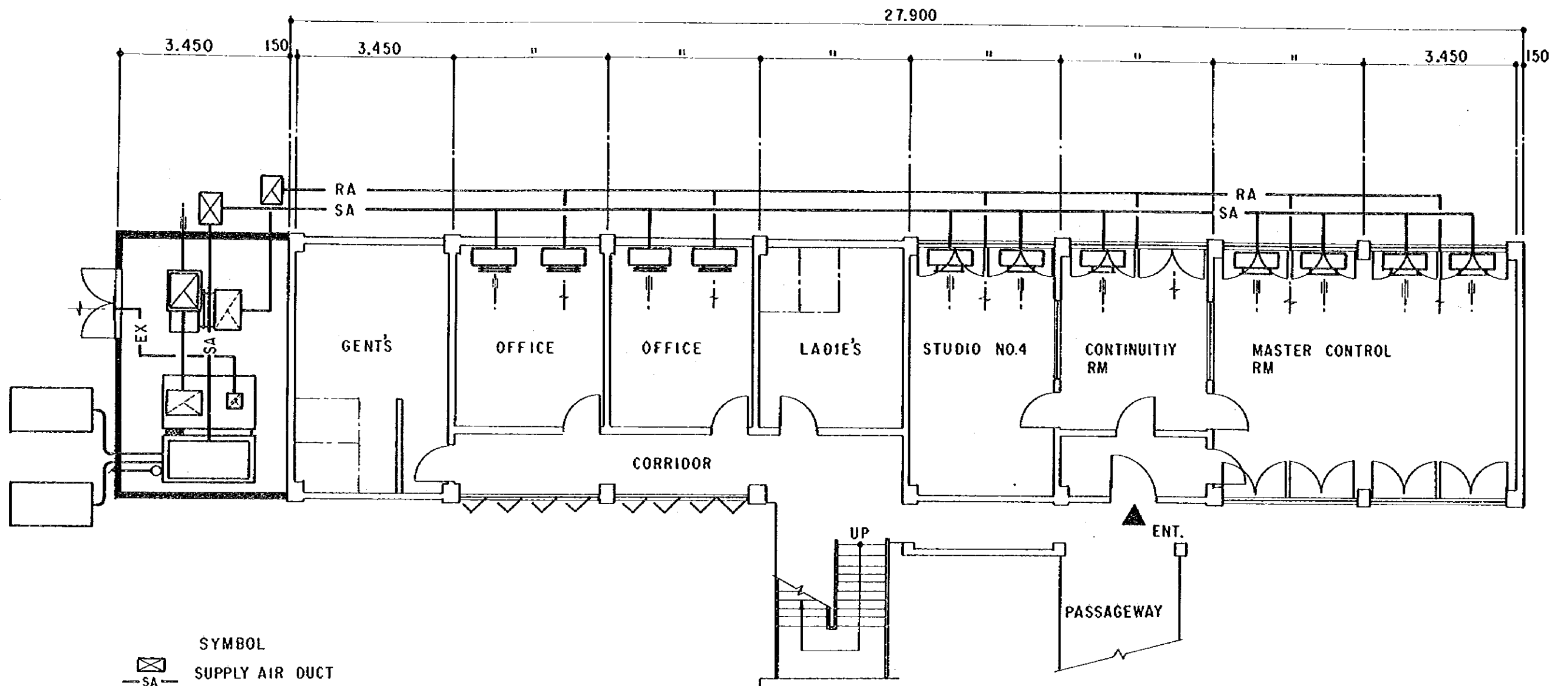
**CHAPTER 9 BASIC DESIGN DRAWINGS**









ARCHITECTURAL WORK  
 GBC NATIONAL RADIO STUDIO  
 GROUND FLOOR PLAN S = 1/100



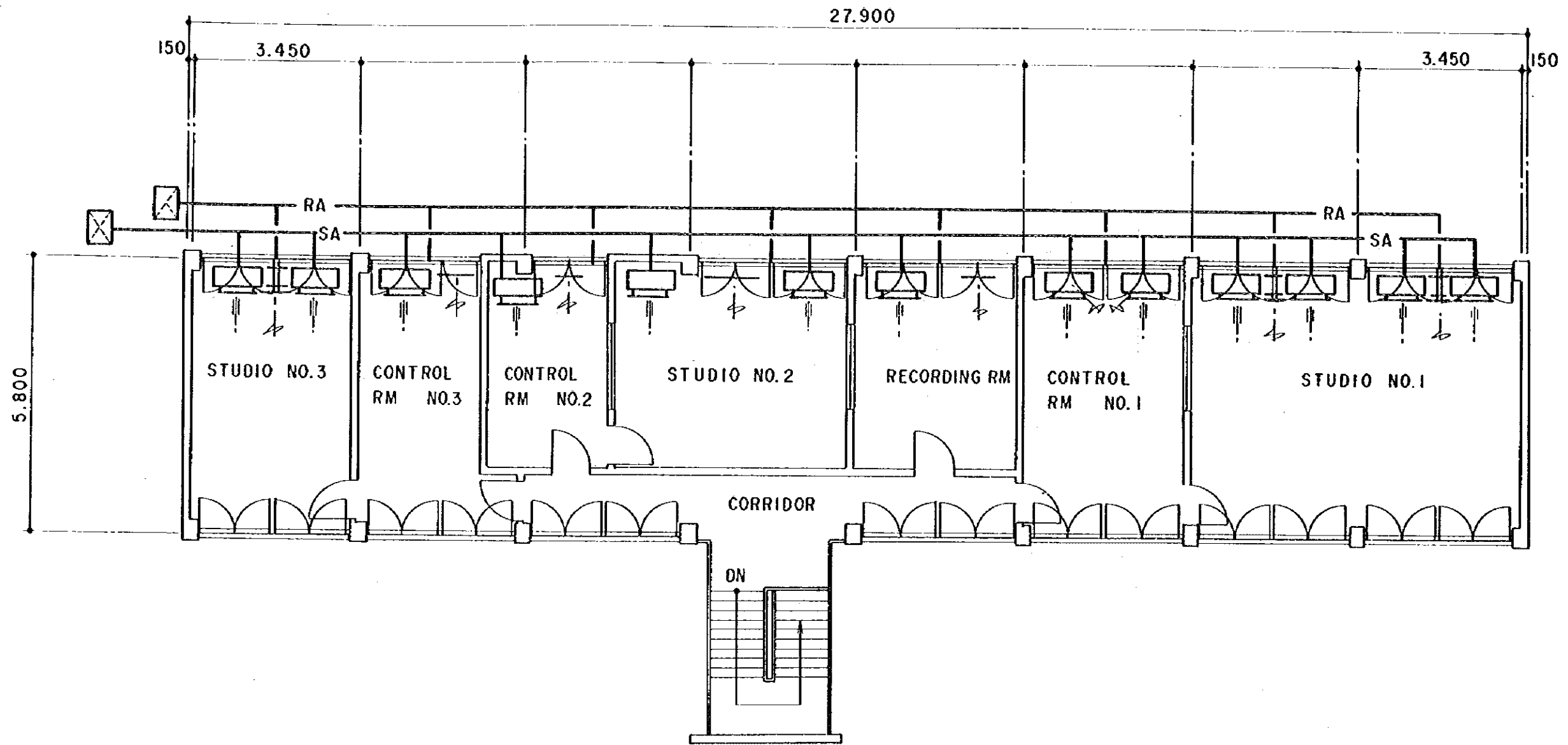
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 GBC NATIONAL RADIO STUDIO  
 FIRST FLOOR PLAN S = 1/100



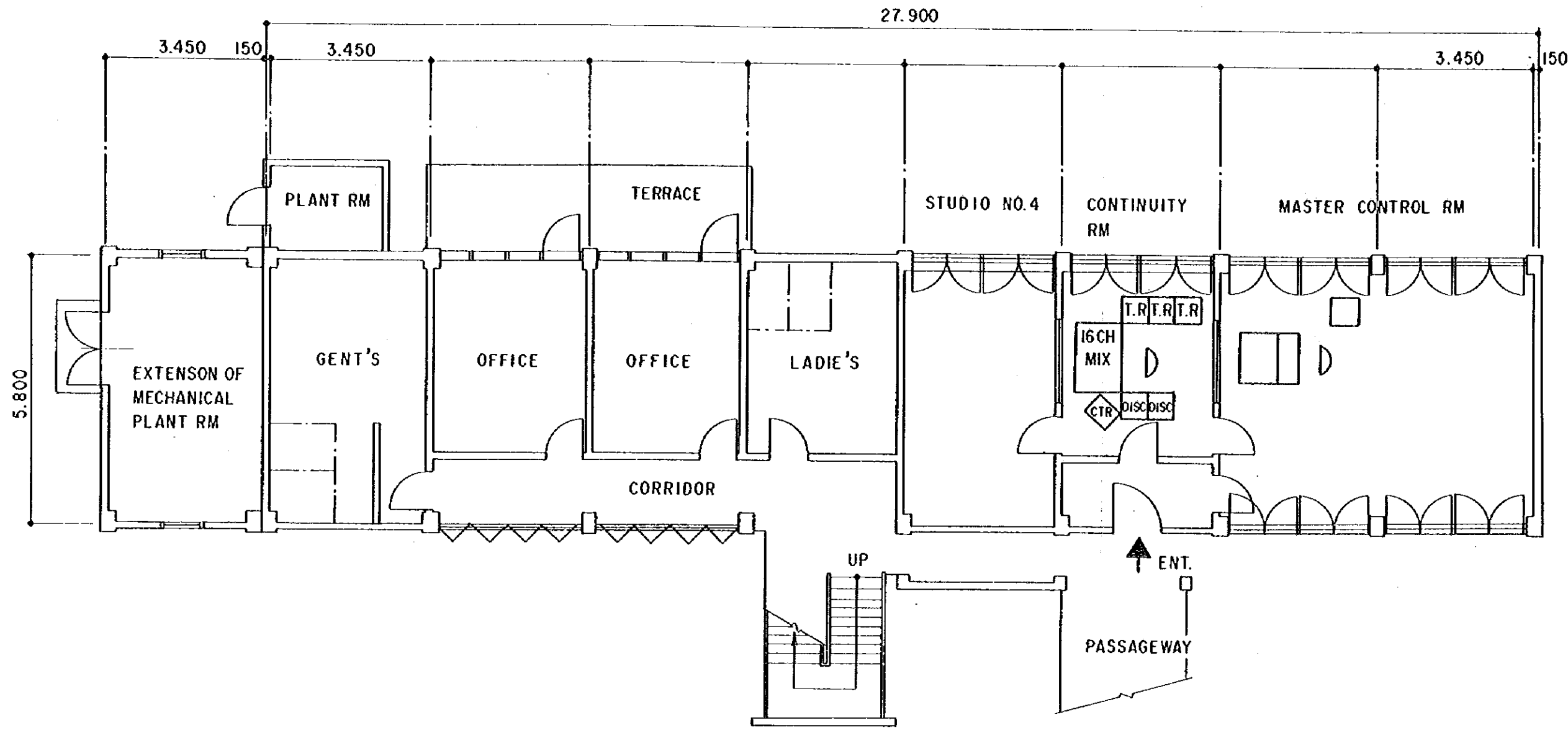
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-  SA SUPPLY AIR DUCT
  -  RA RETURN AIR DUCT
  -  OA FRESH AIR DUCT
  -  S-A-D SUPPLY AIR DIFFUSER
  -  R-A-G RETURN AIR GRILLE
  -  R REFRIGERANT PIPE
  - O-A-G: OUT DOOR AIRGRILLE
  - E-X-G: EXHAUST AIR GRILLE

AIR CONDITIONING WORK  
NBC NATIONAL RADIO STUDIO

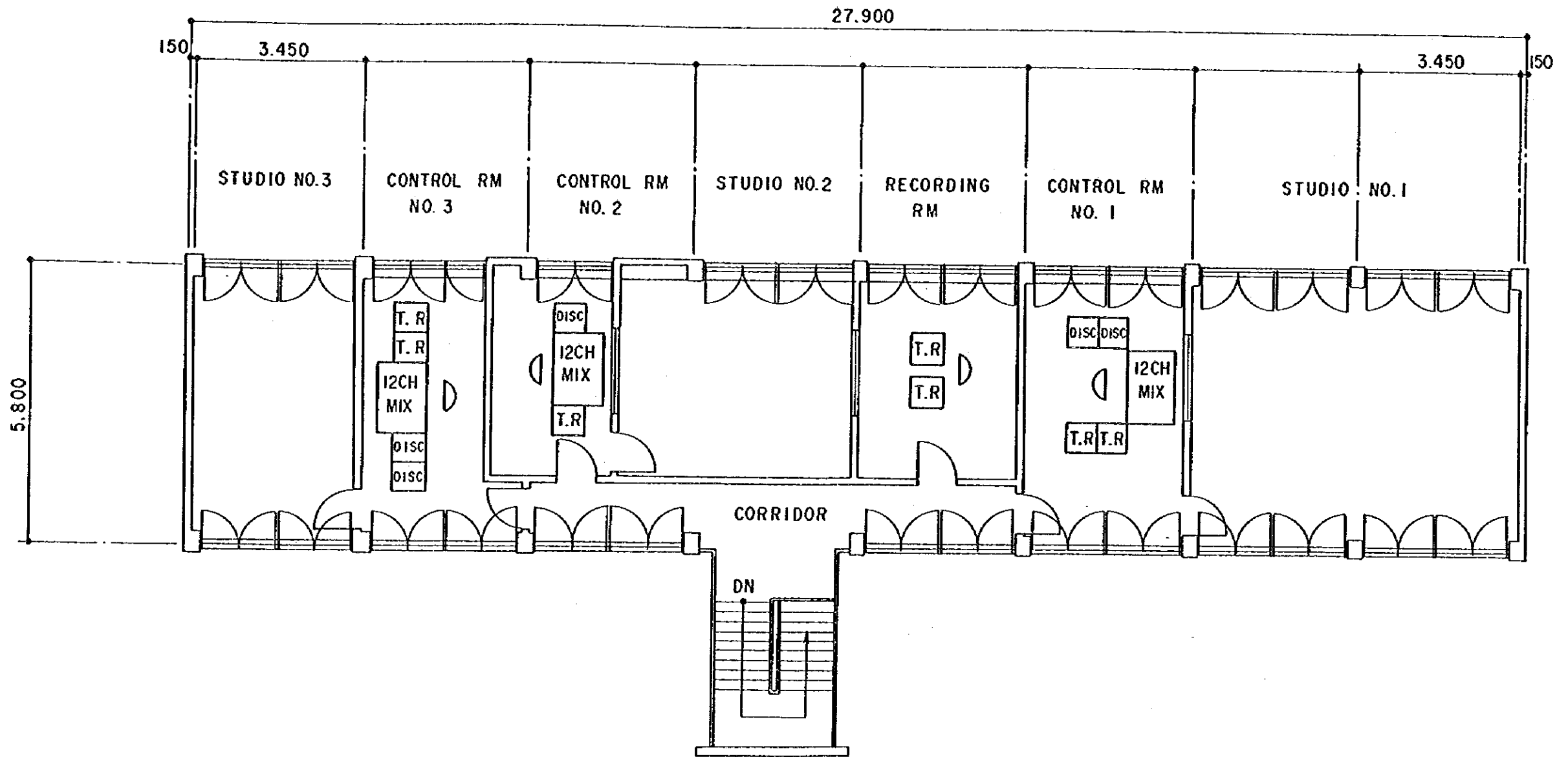
GROUND FLOOR PLAN S = 1/100



AIR CONDITIONING WORK  
 GBC NATIONAL RADIO STUDIO  
 FIRST FLOOR PLAN S=1/100

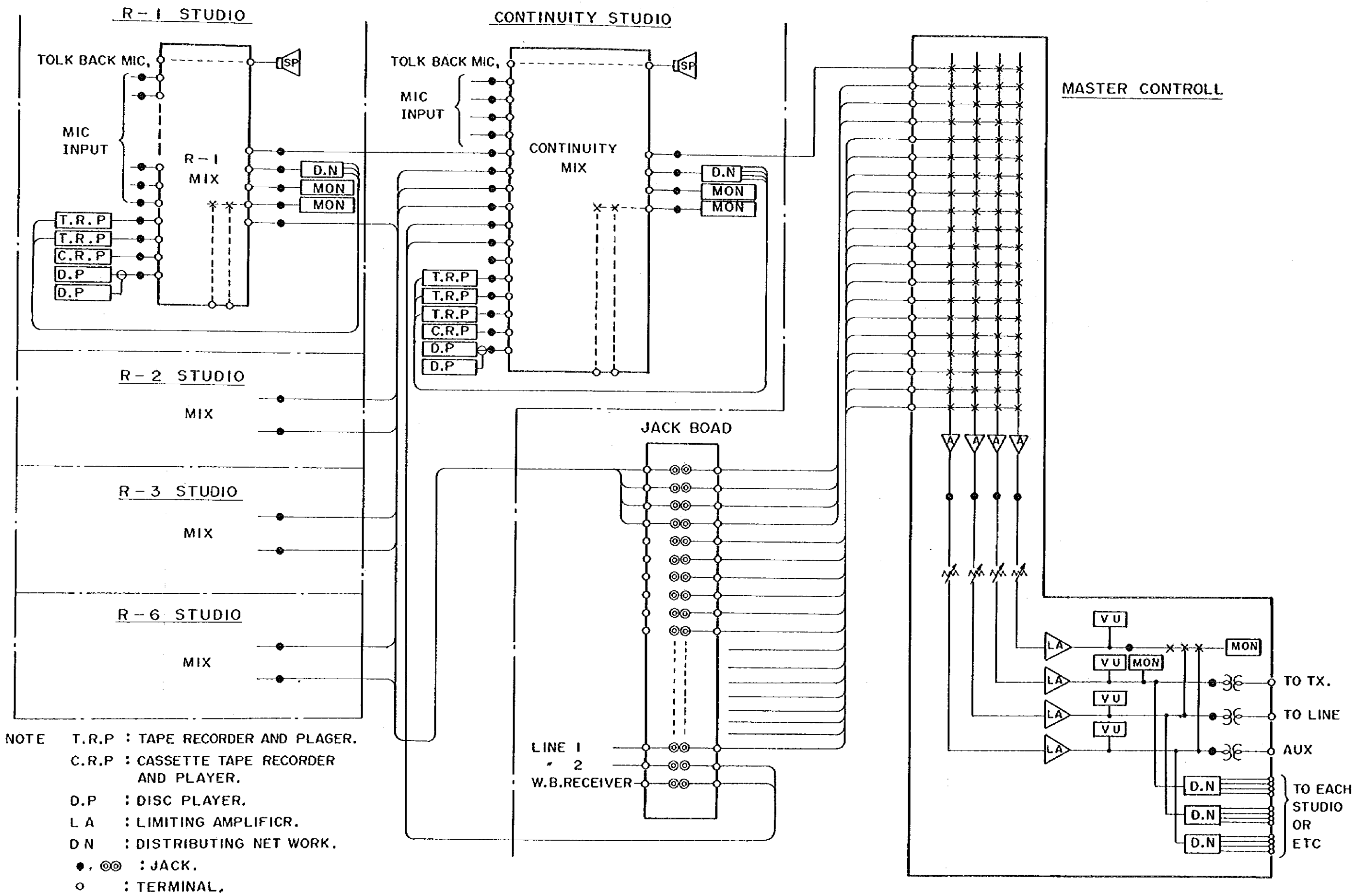


EQUIPMENT LAYOUT PLAN  
 GBC NATIONAL RADIO STUDIO  
 GROUND FLOOP PLAN S=1/200

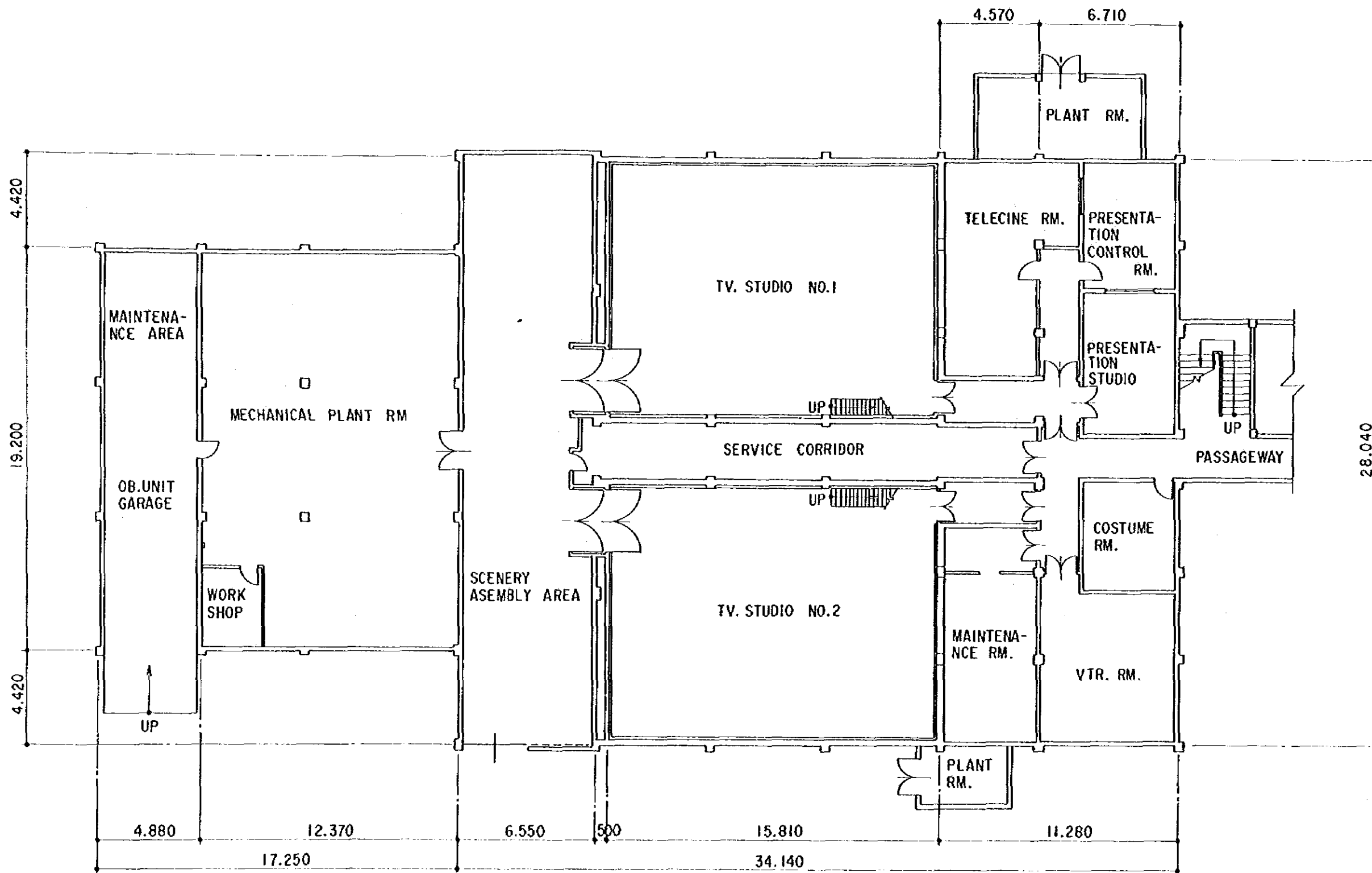


EQUIPMENT LAYOUT PLAN  
 GBC NATIONAL RADIO STUDIO  
 FIRST FLOOR PLAN S=1/200



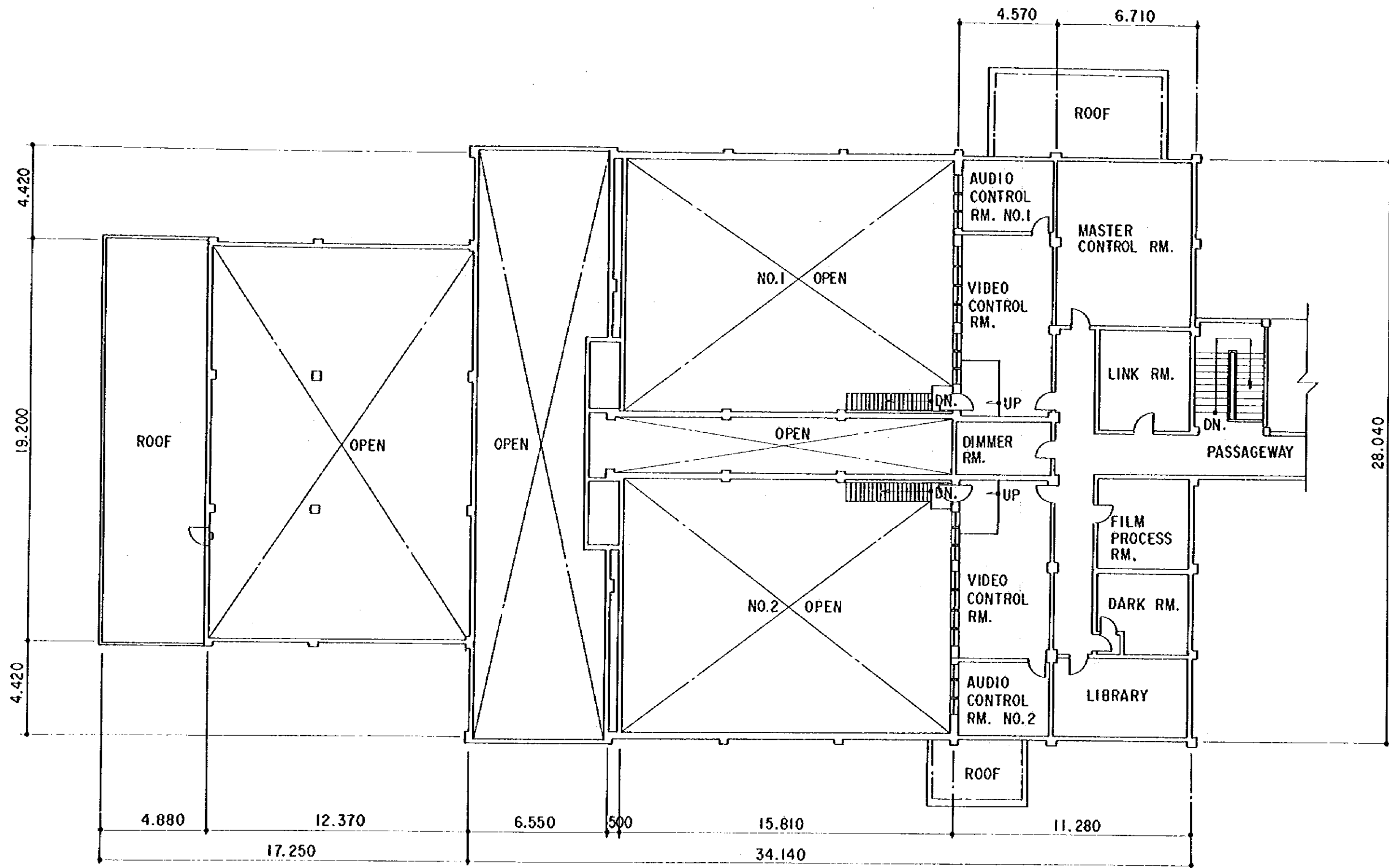


SYSTEM DIAGRAM  
GBC NATIONAL RADIO STUDIO



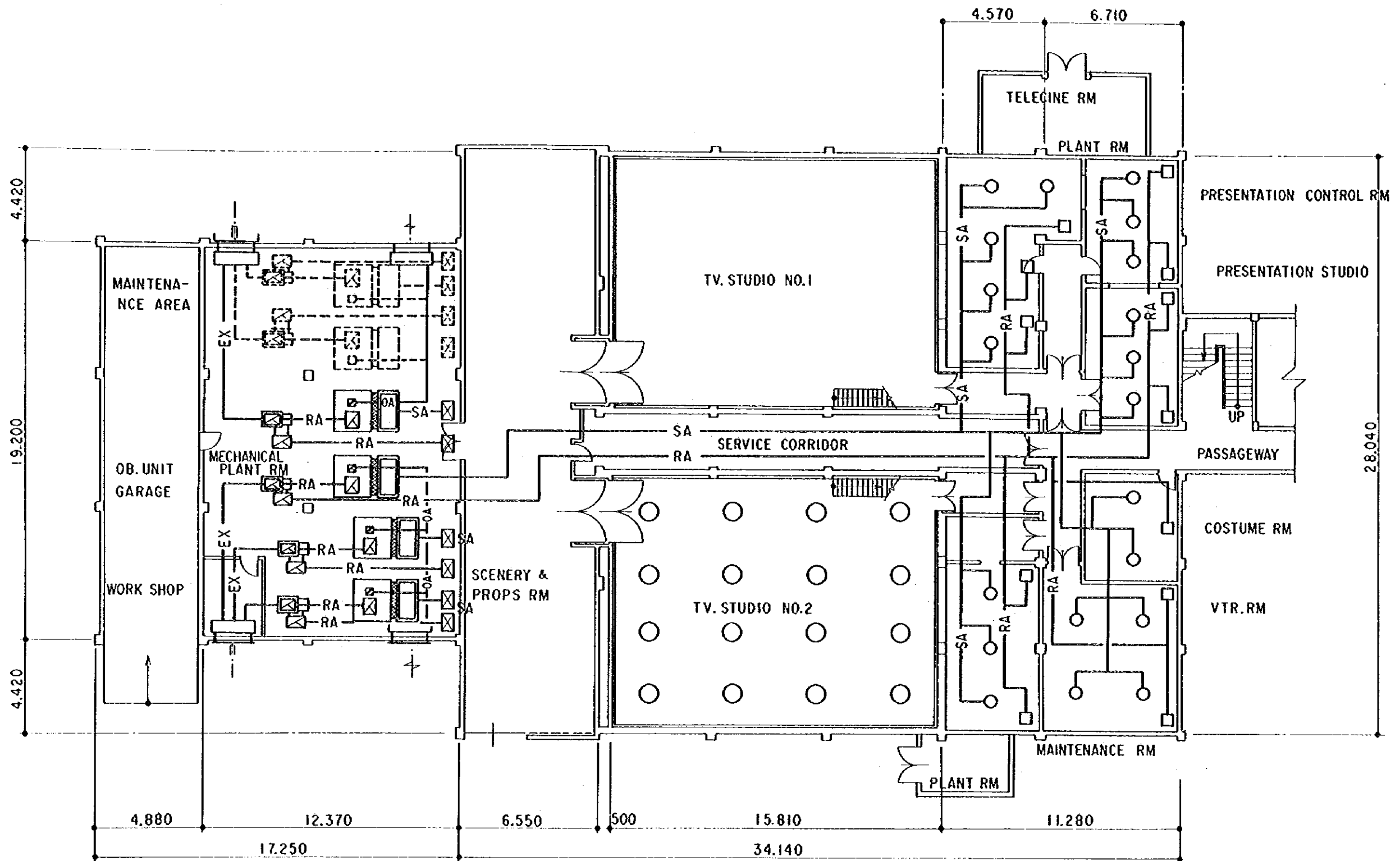
ARCHITECTURAL WORK  
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GROUND FLOOR PLAN S = 1/200



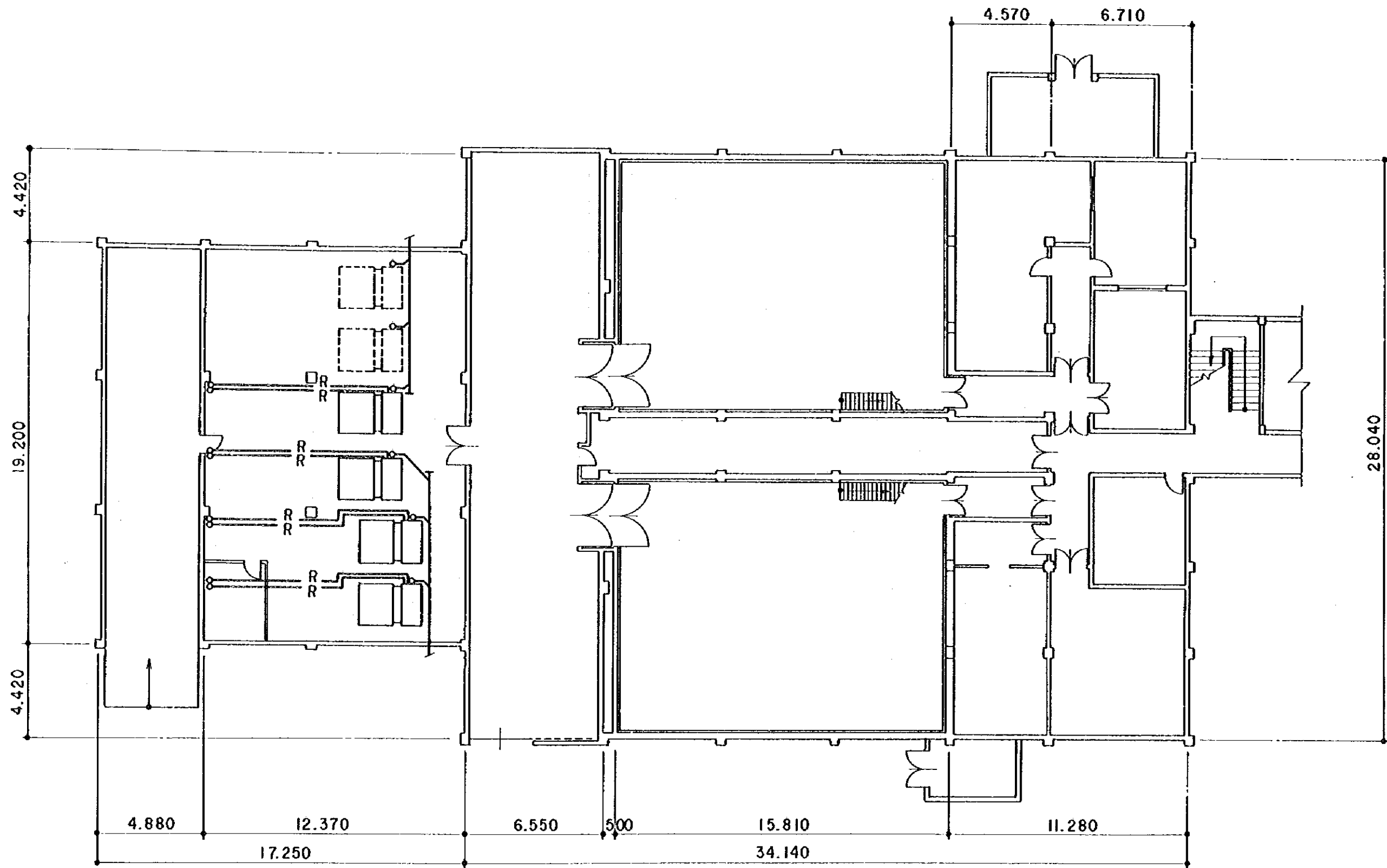
ARCHITECTURAL WORK  
 GBC TELEVISION STUDIO NO.2

FIRST FLOOR PLAN S = 1/200



- REMARK
- SUPPLY AIR DUCT
  - RETURN AIR DUCT
  - FRESH AIR DUCT
  - SUPPLY AIR DIFFUSER S·A·D
  - RETURN AIR GRILLE R·A·G
  - O·A·G: OUTDOOR AIR GRILLE
  - E·X·G: EXHAUST AIR GRILLE

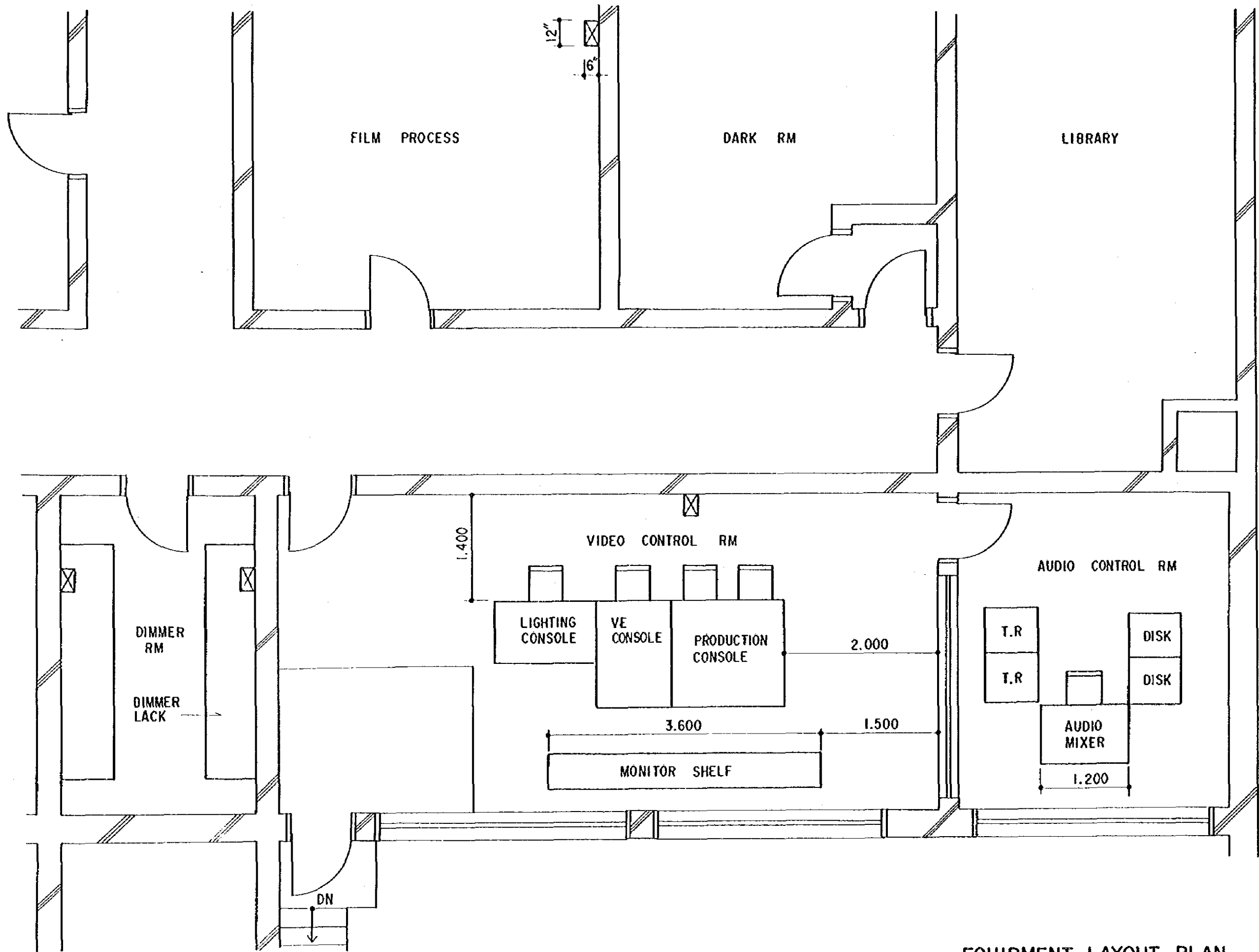
AIR CONDITIONING WORK  
 GBC TELEVISION STUDIO NO.2  
 GROUND FLOOR PLAN S = 1/200



AIR CONDITIONING WORK  
 GBC TELEVISION STUDIO NO. 2

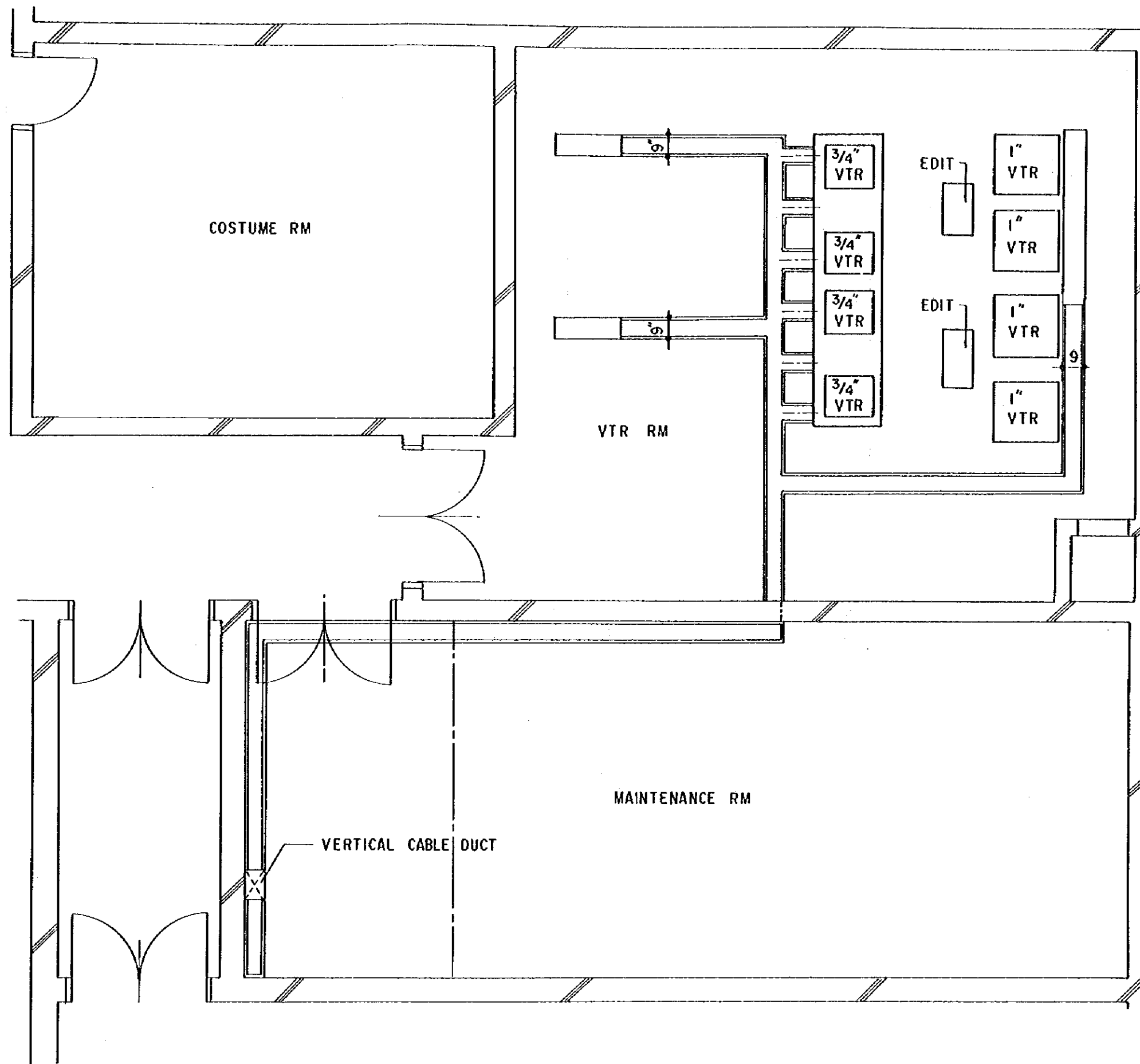
GROUND FLOOR PLAN FOR PIPING S=1/200





EQUIPMENT LAYOUT PLAN  
GBC TELEVISION STUDIO NO.2

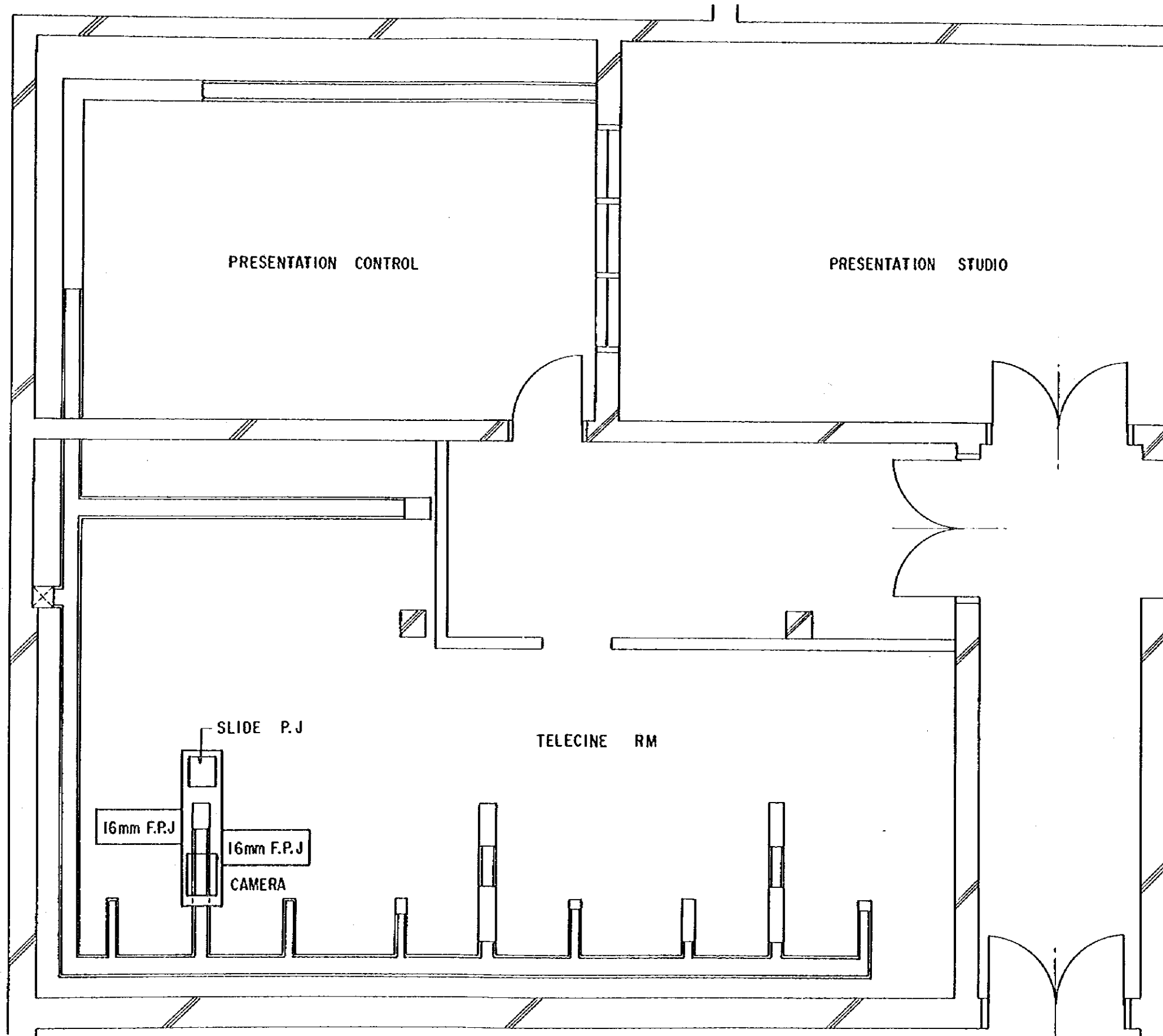
FIRST FLOOR PLAN S = 1/50



EQUIPMENT LAYOUT PLAN  
GBC VTR ROOM

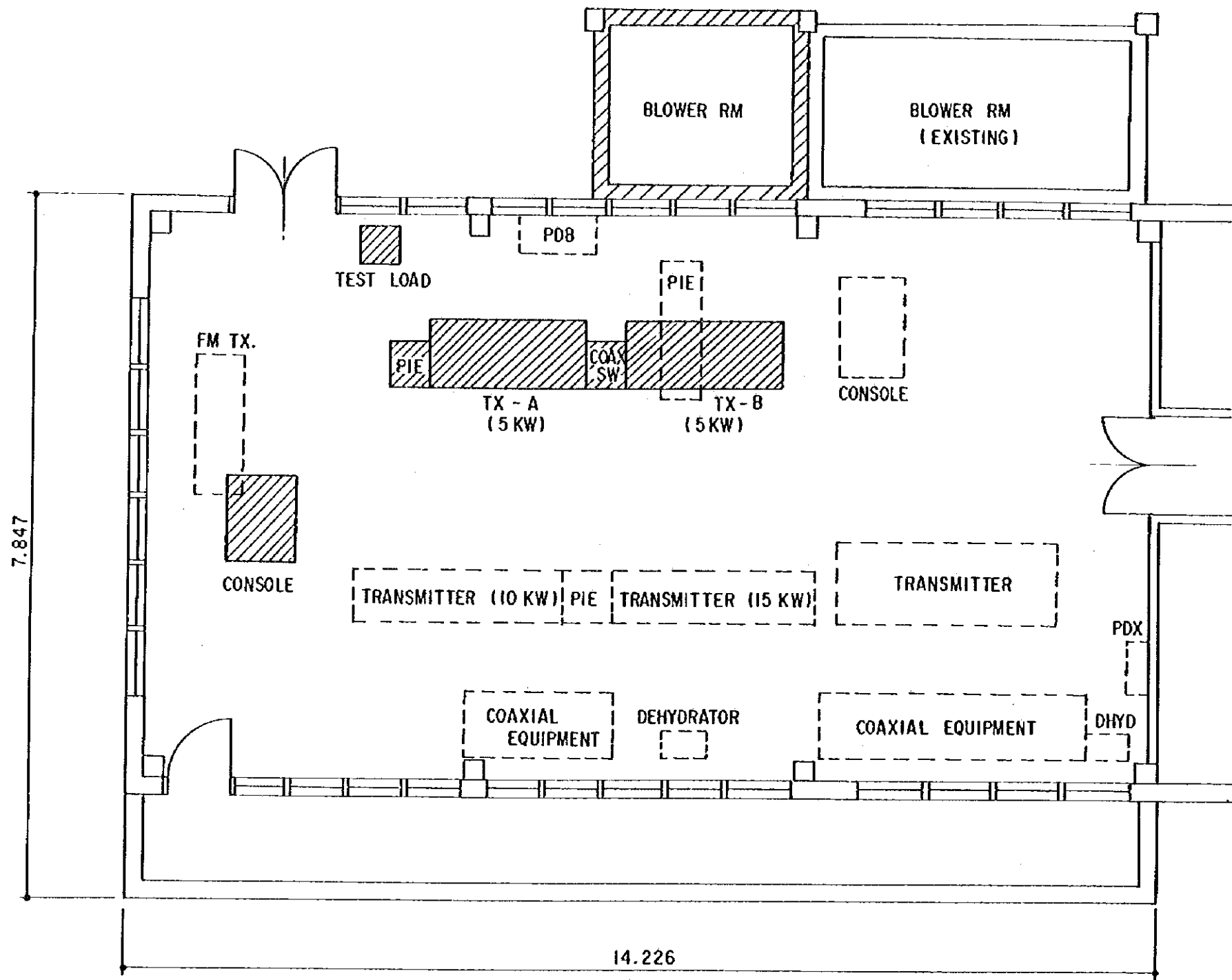
S = 1/50





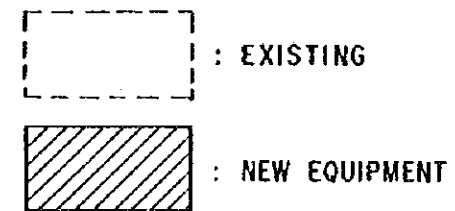
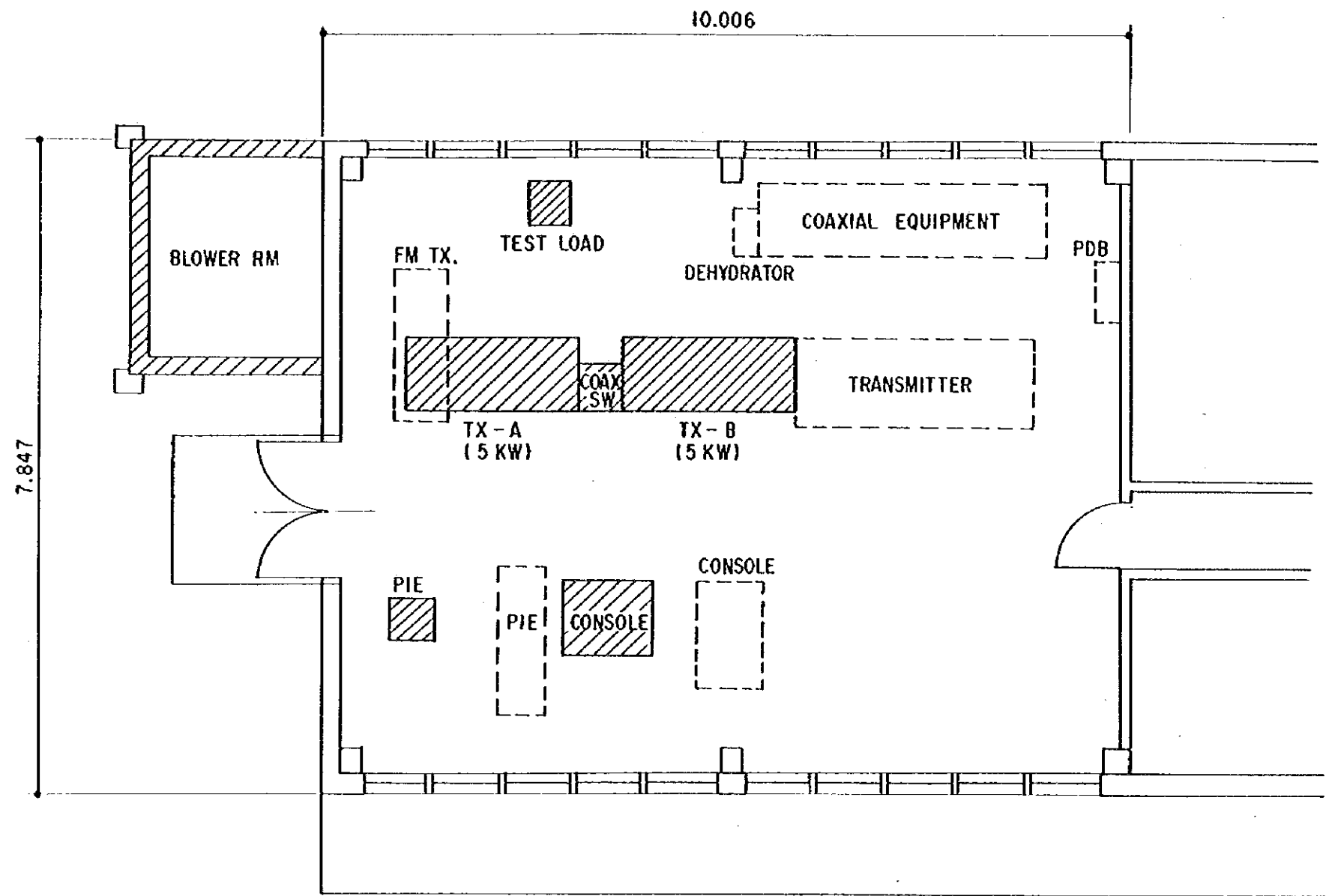
EQUIPMENT LAYOUT PLAN  
GBC TELECINE ROOM

S = 1/50

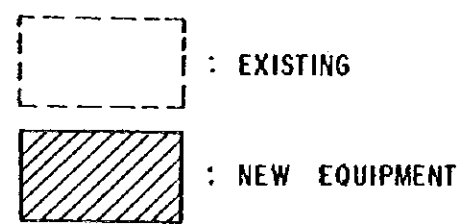
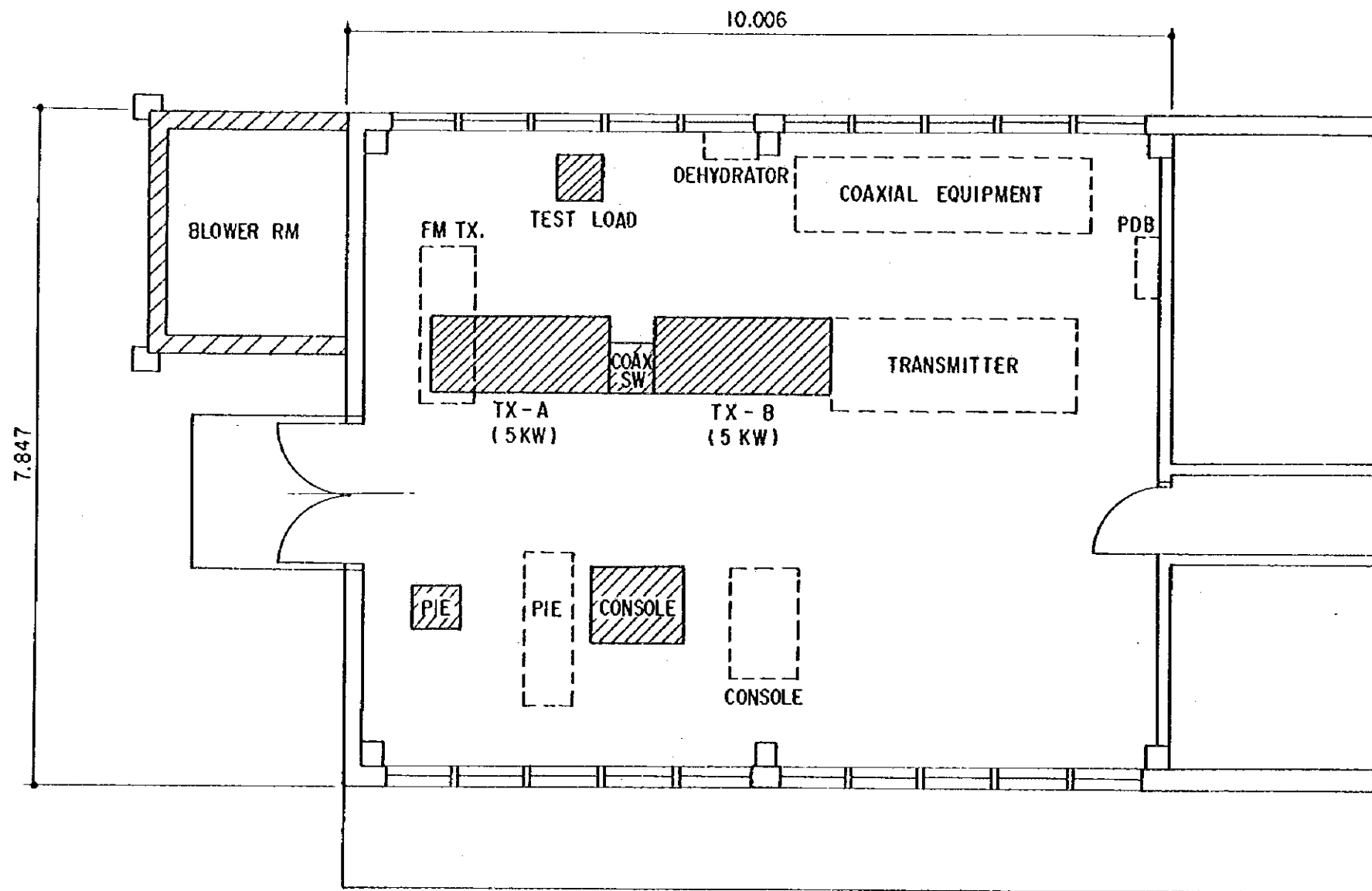


: EXISTING  
 : NEW EQUIPMENT

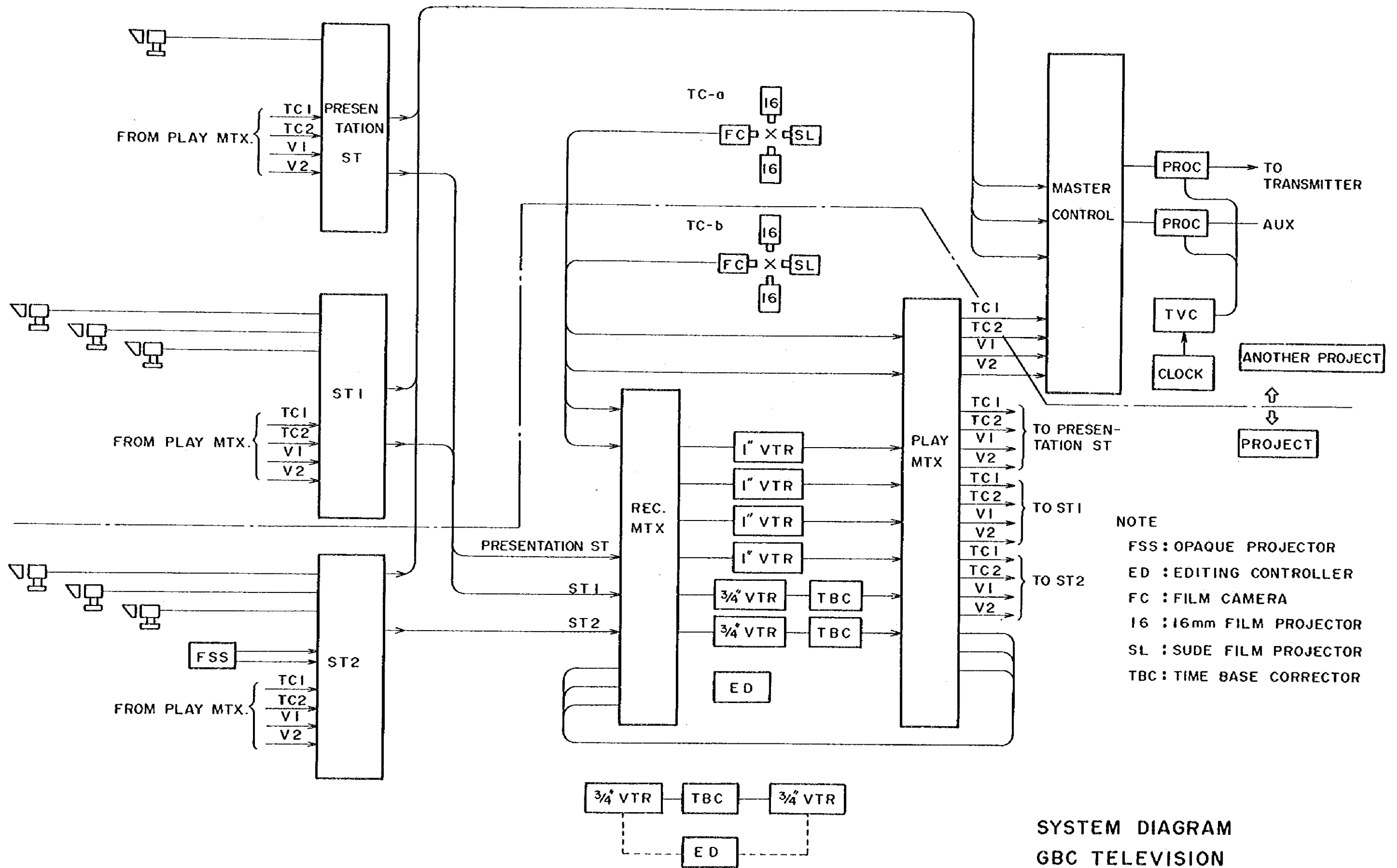
EQUIPMENT LAYOUT PLAN  
 ADJANGOTE TV TRANSMITTING STATION



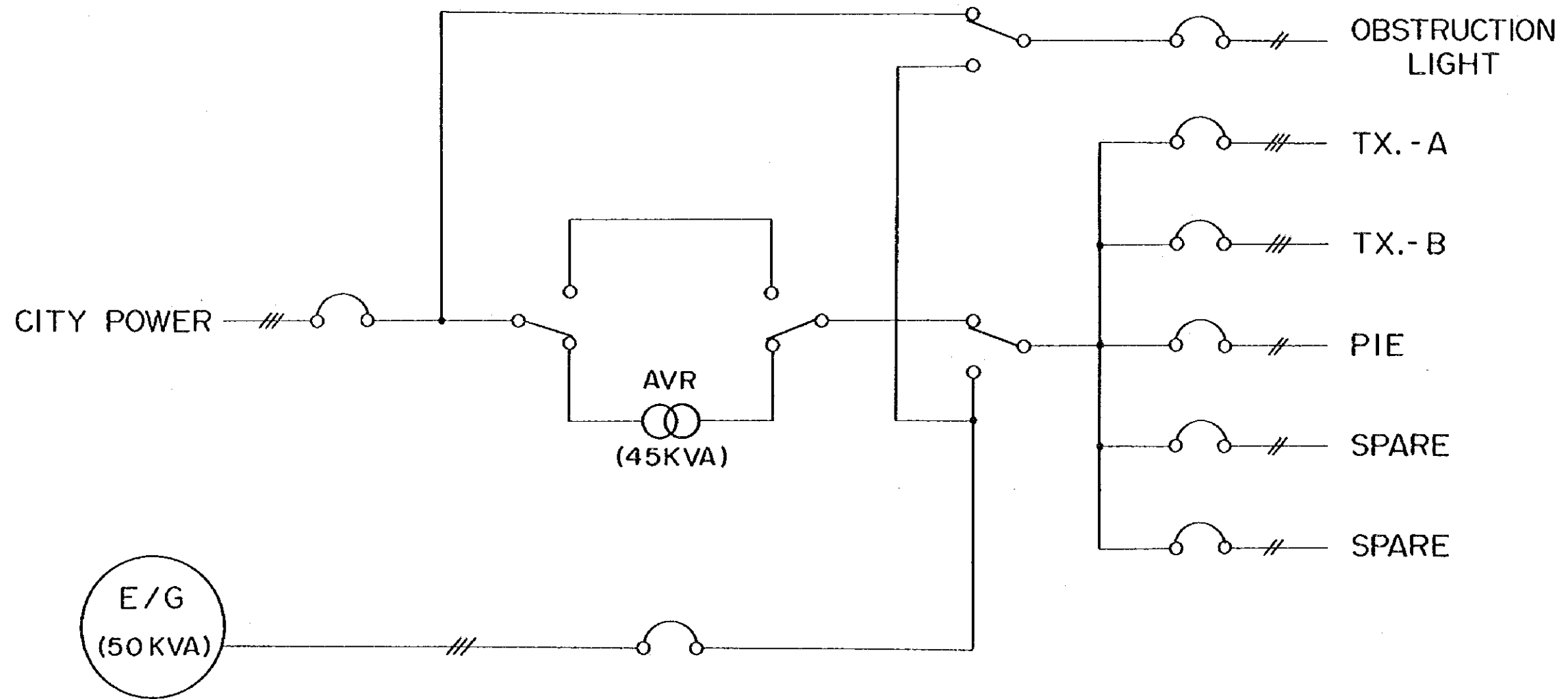
EQUIPMENT LAYOUT PLAN  
KISSI TV TRANSMITTING STATION



EQUIPMENT LAYOUT PLAN  
JAMASI TV TRANSMITTING STATION

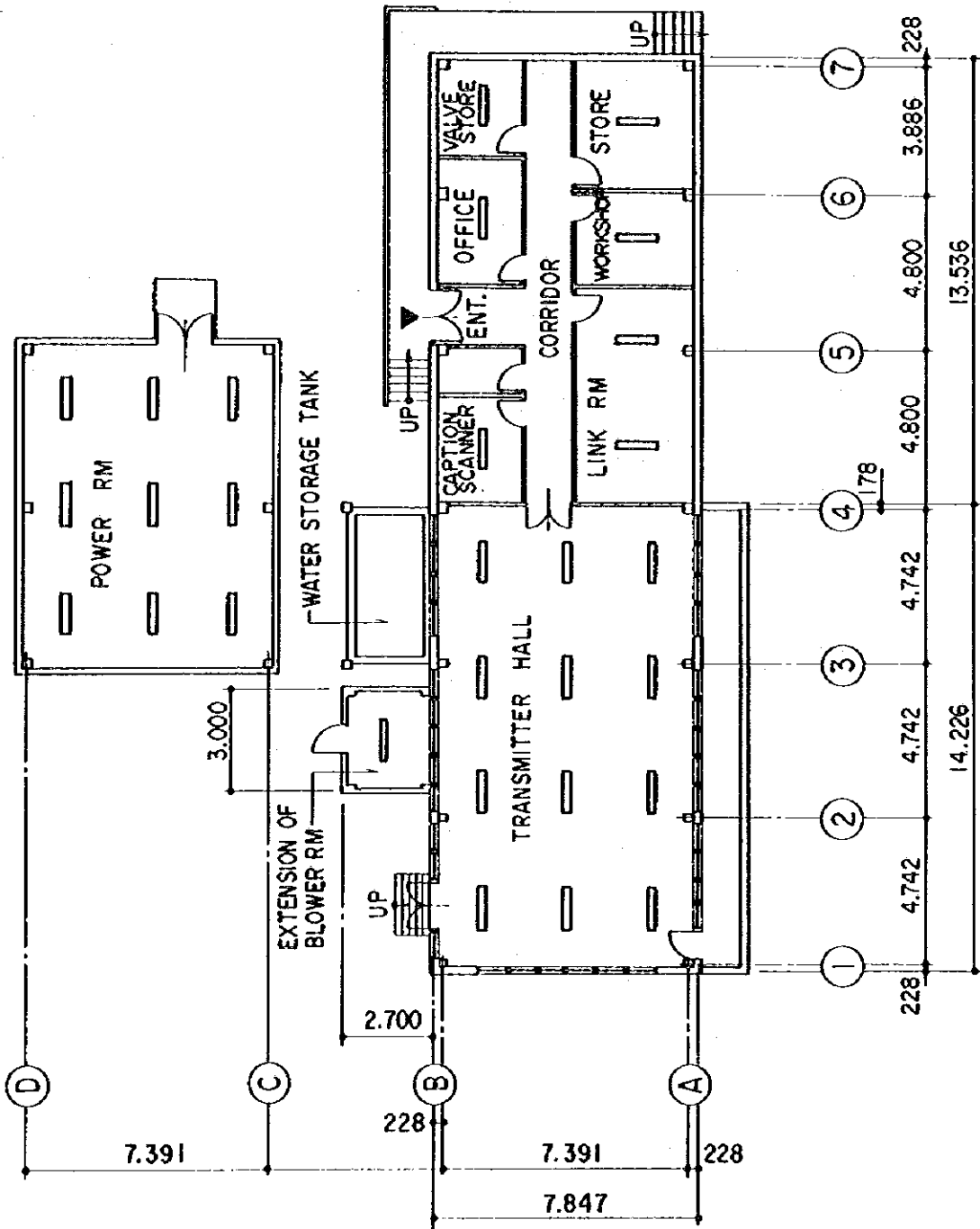


SYSTEM DIAGRAM  
 GBC TELEVISION  
 STUDIO NO. 2



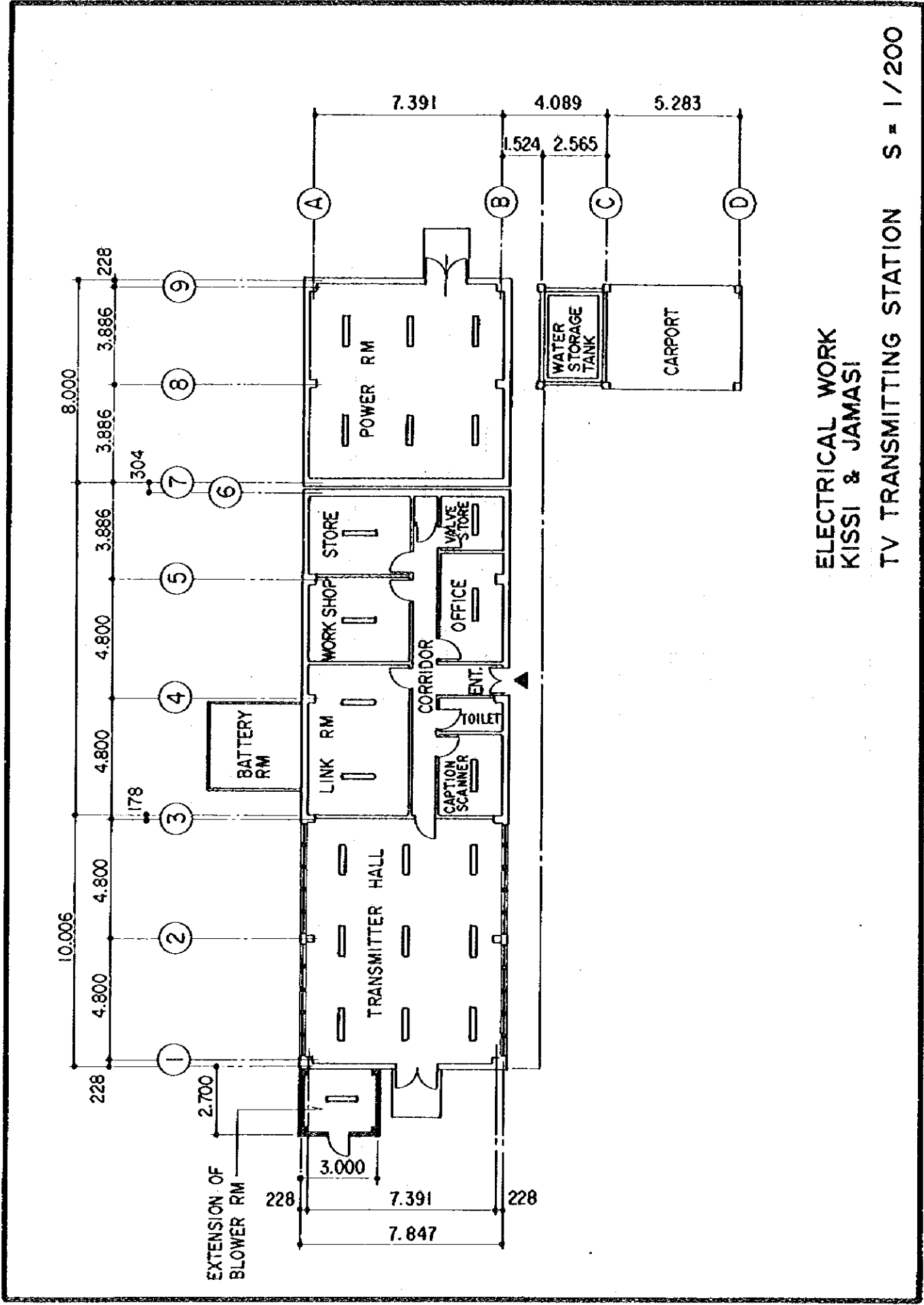
POWER SUPPLY SYSTEM DIAGRAM  
 ADJANGOTE KISSI,  
 JAMASI, TX STATION



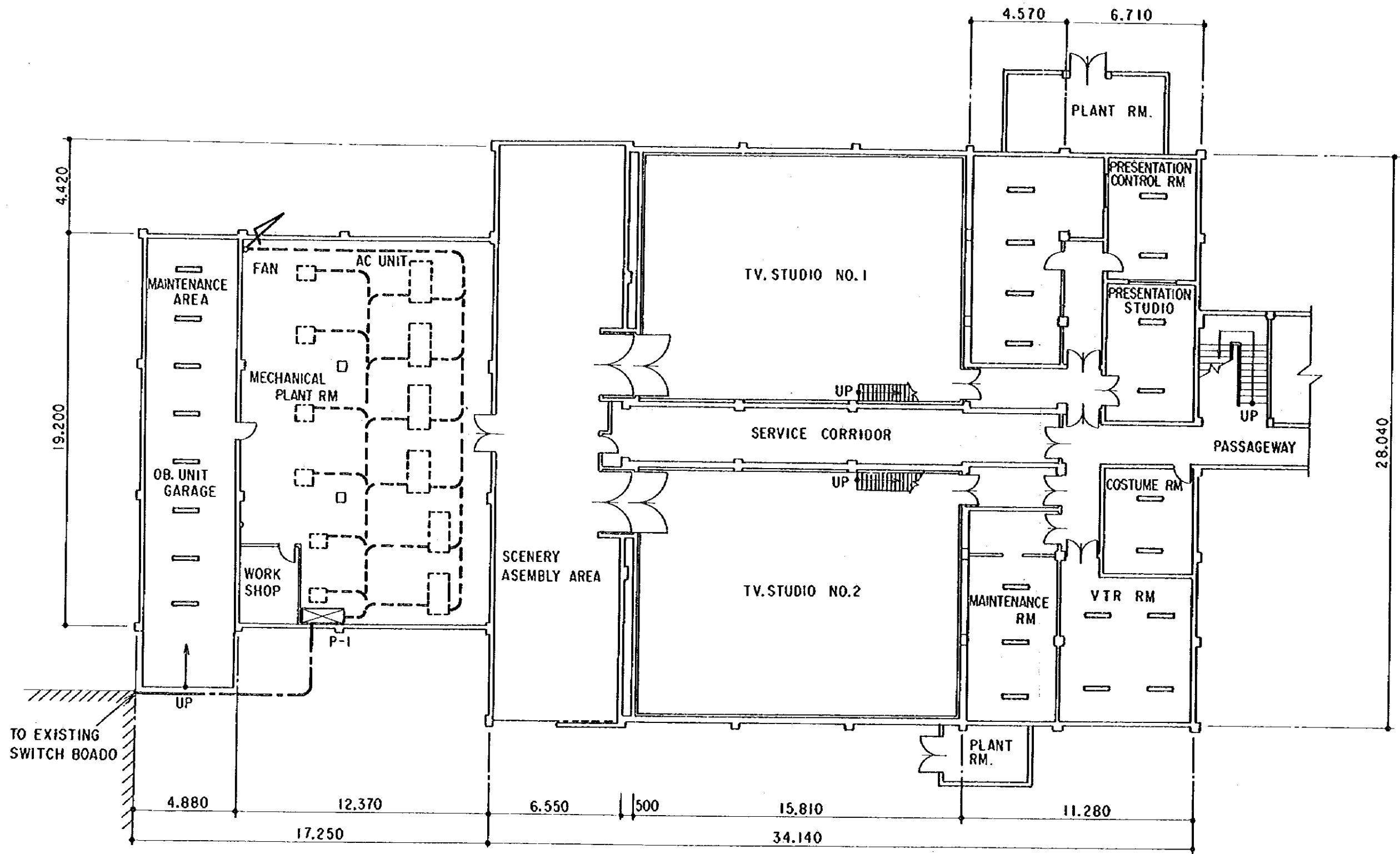


ELECTRICAL WORK  
 ADJANGOTE TV TRANSMITTING STATION S = 1 / 200



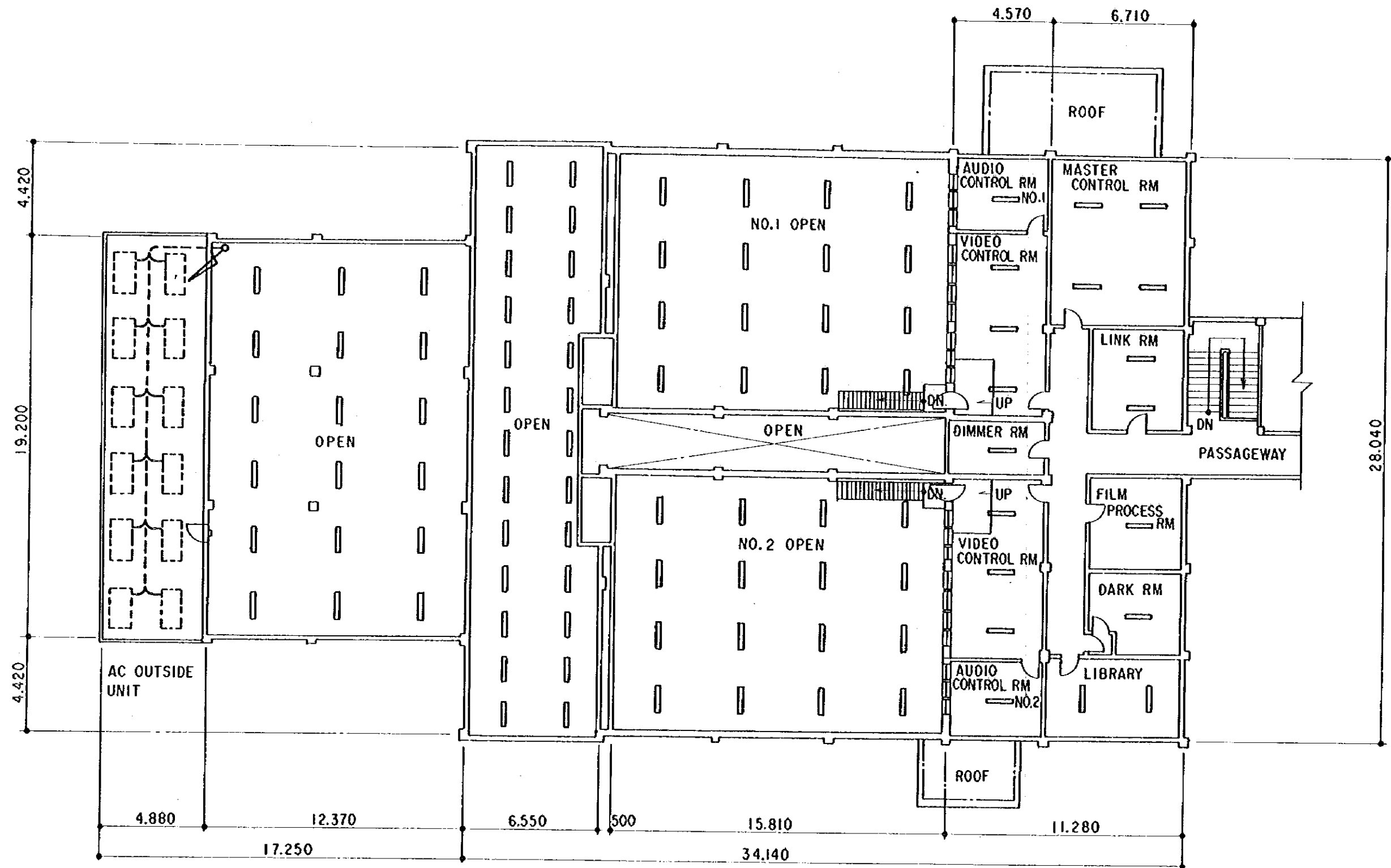


ELECTRICAL WORK  
 KISSI & JAMASI  
 TV TRANSMITTING STATION S = 1/200

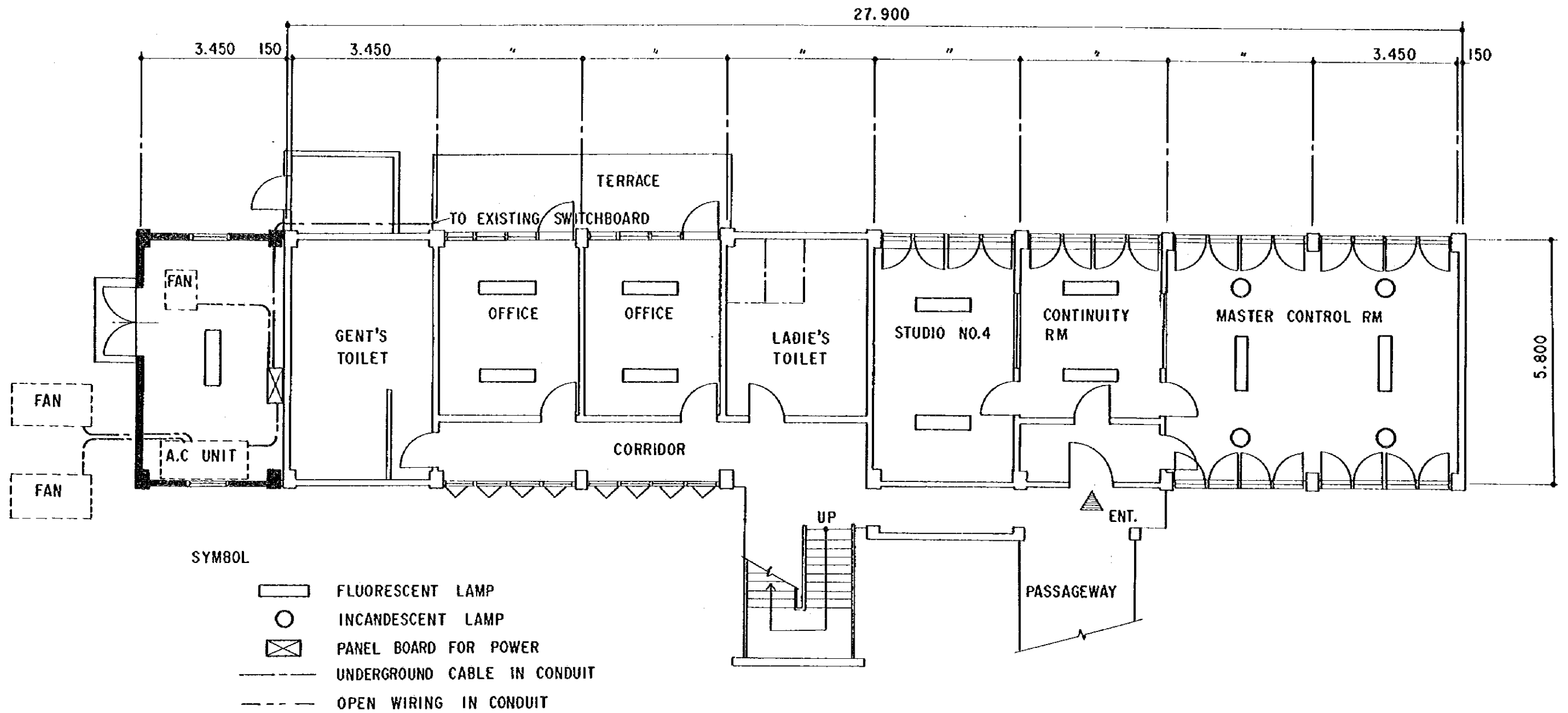


ELECTRICAL WORK  
GBC TELEVISION STUDIO NO.2

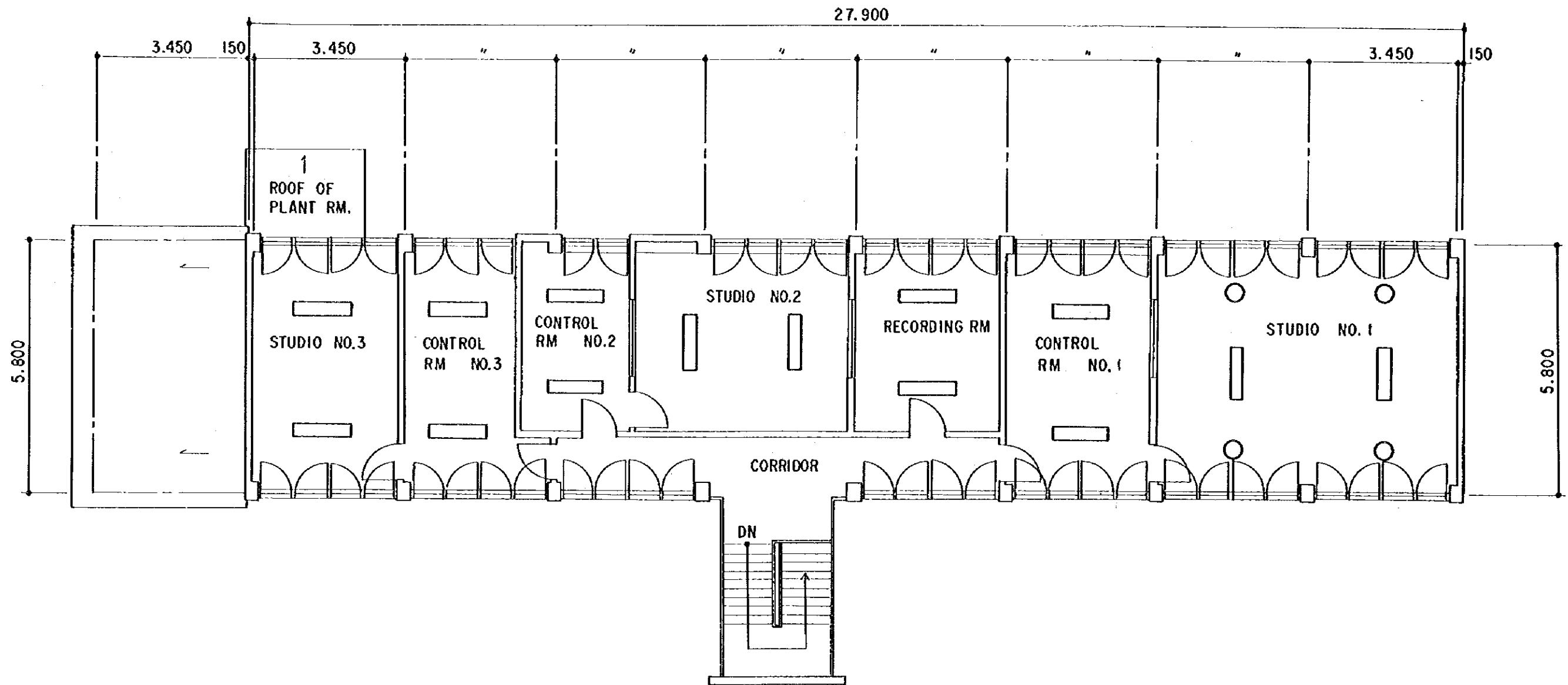
GROUND FLOOR PLAN S = 1/200



ELECTRICAL WORK  
 GBC TELEVISION STUDIO NO.2  
 FIRST FLOOR PLAN S = 1/200



ELECTRICAL WORK  
 GBC NATIONAL RADIO STUDIO  
 GROUND FLOOR PLAN S = 1/100



ELECTRICAL WORK  
 GBC NATIONAL RADIO STUDIO

FIRST FLOOR PLAN S = 1/100





JICA