

A CITY HALL  
FOR  
WELCH, WEST VIRGINIA

by

Richard Grant Brunschwiler

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APPROVED:

Louis A. Pardue  
Director of Graduate Studies

APPROVED:

Clinton H. Cowgill  
Head of Architectural Department

Earle B. Norris  
Dean of Engineering

Charles S. Worley  
Chief Design Critic

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<u>TABLE OF CONTENTS</u>		
<u>Section</u>		<u>Page</u>
I.	INTRODUCTION .....	6
II.	THESIS OBJECTIVES .....	9
III.	GENERAL INFORMATION ABOUT THE CITY OF WELCH, WEST VIRGINIA .....	10
	Economic Location .....	10
	Geographic Location .....	10
	General Layout .....	11
	Population Trends .....	11
	Type of Government .....	11
	Recent Improvements Within the City .....	12
	Other General Information .....	12
IV.	THE PRESENT CITY HALL .....	14
V.	OFFICES AND DEPARTMENTS OF PRESENT CITY GOVERNMENT AND THEIR FUNCTIONS .....	15
	Office of Mayor and City Manager .....	15
	City Clerk and Treasurer .....	16
	Police Judge .....	17
	City Attorney .....	18
	Superintendent of Streets and Garbage Disposal .....	19
	City Health Officer .....	20
	City Engineer .....	21
	Police Department .....	22
	Fire Department .....	23

<u>Section</u>	<u>Page</u>
VI. THE NEED FOR A NEW CITY HALL .....	25
VII. SITE SELECTION .....	27
VIII. THE PROGRAM .....	29
Specific Requirements for a City Hall for Welch, West Virginia .....	32
IX. POSSIBILITIES OF REMODELING THE EXISTING BOTTLING PLANT .....	36
X. DESIGN ANALYSIS OF PROPOSED CITY HALL .....	41
Size, Shape and Layout .....	41
Location and Orientation .....	41
Fenestration .....	42
Stairways and Corridors .....	42
Toilets .....	42
XI. CONSTRUCTION .....	52
The Substructure .....	52
The Superstructure .....	52
XII. MECHANICAL EQUIPMENT .....	57
XIII. CONCLUSION .....	58
XIV. BIBLIOGRAPHY .....	59
XV. VITA .....	61

LIST OF ILLUSTRATIONS

	Page
Aerial Photograph of the City Showing the Proposed Site .....	13
Map of the City .....	38
Undeveloped Site Plan .....	39
Remodeled Floor Plans Transforming Bottling Plant into Alternate Scheme for Proposed New City Hall .....	40
Developed Site Plan .....	43
Basement Plan .....	44
First Floor Plan .....	45
Second Floor Plan .....	46
Elevations .....	47
Elevations .....	48
Sections .....	49
Perspective of Proposed City Hall from Elkhorn Street .....	50
Aerial Perspective of Proposed City Hall from the North .....	51
Typical Wall Section .....	54
Window Details .....	55
Details of Typical Cell .....	56

## SECTION I - INTRODUCTION

## INTRODUCTION

"Architecture, like all art, is never static but is undergoing a continual process of change. This change is due not only to the development of new needs, new materials, and new methods of construction but also to the desire, inherent in successive generations of man, to produce something better and different from that accomplished by preceding generations."<sup>1</sup>

In preceding generations public and government building designs adhered mostly to the classic and renaissance forms of architecture which placed emphasis on monumentality and pompousness. Even during the past fifty years there has been a disregard of the possibilities for new designs offered by the introduction of steel and reinforced concrete construction. A good example of this disregard of new building techniques is the Triangle group of office buildings erected in Washington for the government of the United States in the year 1934. This group of buildings was designed and erected with pompous Roman classic facades which completely belied the fact that they were of modern steel construction.

"It is a fundamental principle of architecture that the best buildings are those which are planned and built to comply fully with the structure best suited to the needs of the project."<sup>2</sup> In

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<sup>1</sup> Short, C. W. and R. Stanley Brown: Public Buildings, p. 1  
(United States Government Printing Office, 1939)

<sup>2</sup> Ibid.

the past there have been many inefficiencies in regard to functional planning, lighting, acoustical treatment, and to the use of new building materials and building techniques. Extravagant use of decorative features and ornaments also has been evident. Excessive ornamentation is not only unnecessary, but in many cases it definitely detracts from the aesthetic value of the building.

The best designs for public and government buildings that have been produced in recent years indicate definite efforts to provide structures to fit our present civilization rather than to make our civilization fit into buildings that were designed for other ages. Efforts have been made to attain beauty and importance by intelligent planning, the use of new materials and new building techniques, and by the production of designs which possess a quiet dignity without being monumental, decorative or pompous. In the Fresno City Hall, Fresno, California, there may be seen an honest attempt to design a government building which not only has dignity but also a very functional plan and shows an intelligent use of building materials and building techniques. Efficient lighting and acoustical treatment, along with simplicity in design, are other good qualities which may be noted in this building. There are no excessive ornaments or decorative details; instead there are direct, clean lines which are even more effective from the viewpoint of aesthetics.

In this thesis the author has attempted to use modern building methods and techniques in arriving at an intelligent and appropriate design for a new local government building for Welch, West Virginia.

## SECTION II - THESIS OBJECTIVES

### THESIS OBJECTIVES

This thesis has five objectives. They are as follows:

(a) to present a study of the existing conditions of local government facilities within the city of Welch, West Virginia, showing the need for a new local government building and fire station;

(b) to present the findings of a study made to determine the facilities needed to fulfill the requirements of the city government and fire department;

(c) to present the findings of a study made to select the best available site;

(d) to present a study of the possibilities of remodeling an existing building for use as a city hall and fire department;

(e) to present a design of a new local government building which shall house the administrative and enforcement offices and departments of the city government, together with a fire department. This building shall be designated, "A City Hall for Welch, West Virginia."

SECTION III - GENERAL INFORMATION ABOUT  
THE CITY OF WELCH, WEST  
VIRGINIA

GENERAL INFORMATION ABOUT THE CITY  
OF WELCH, WEST VIRGINIA

Welch residents feel that they have a town with a future, and with the fabulous coal reserves in the surrounding "black hills" this belief certainly seems well founded. Their main problem was perfectly expressed recently by a local businessman who said, "Oh, if only this town, with all the spirit it has, had some of the room to expand that other towns have."<sup>1</sup>

Economic Location

The city of Welch is located in the heart of the West Virginia "Billion Dollar Coal Fields." It is the county seat of McDowell County and serves as a business and shopping center for the outlying mining districts within a radius of about fifteen miles.

Geographic Location

Located in the lower range of the Appalachian Mountains, Welch lies primarily in the valley of Tug River but extends up the valleys of two creeks, Brown's Creek and Elkhorn Creek. The terrain is very mountainous, and level land is at a premium. Most of the residential sections are built on the sides of the mountains.

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<sup>1</sup> Knight, Wallace E.: "Bustling Welch Sits Amid Hills," The Charleston Gazette, p. 31, August 4, 1951.

### General Layout

The business section of the city occupies about three quarters of a square mile and is mostly served by one-way streets. From this business section the city spreads northwestward down Tug River valley, and branches off to the east up to Brown's Creek valley, to the north-east up Elkhorn valley and to the south up the Tug River valley where it ends in the most exclusive residential area.

### Population Trends

The population of Welch at the present time is approximately 8,000. According to the 1950 census report there was an increase of only about 300 since 1940. This suggests that the population will remain relatively stable. This stability is due primarily to the fact that the city has no room in which to expand.

### Type of Government

The city government is of the mayor-city manager-council type. The mayor and council are elected directly by the people. The city manager and other officials of the city are appointed by the mayor and approved by the council. Under the present administration the same official holds the offices of mayor and city manager.

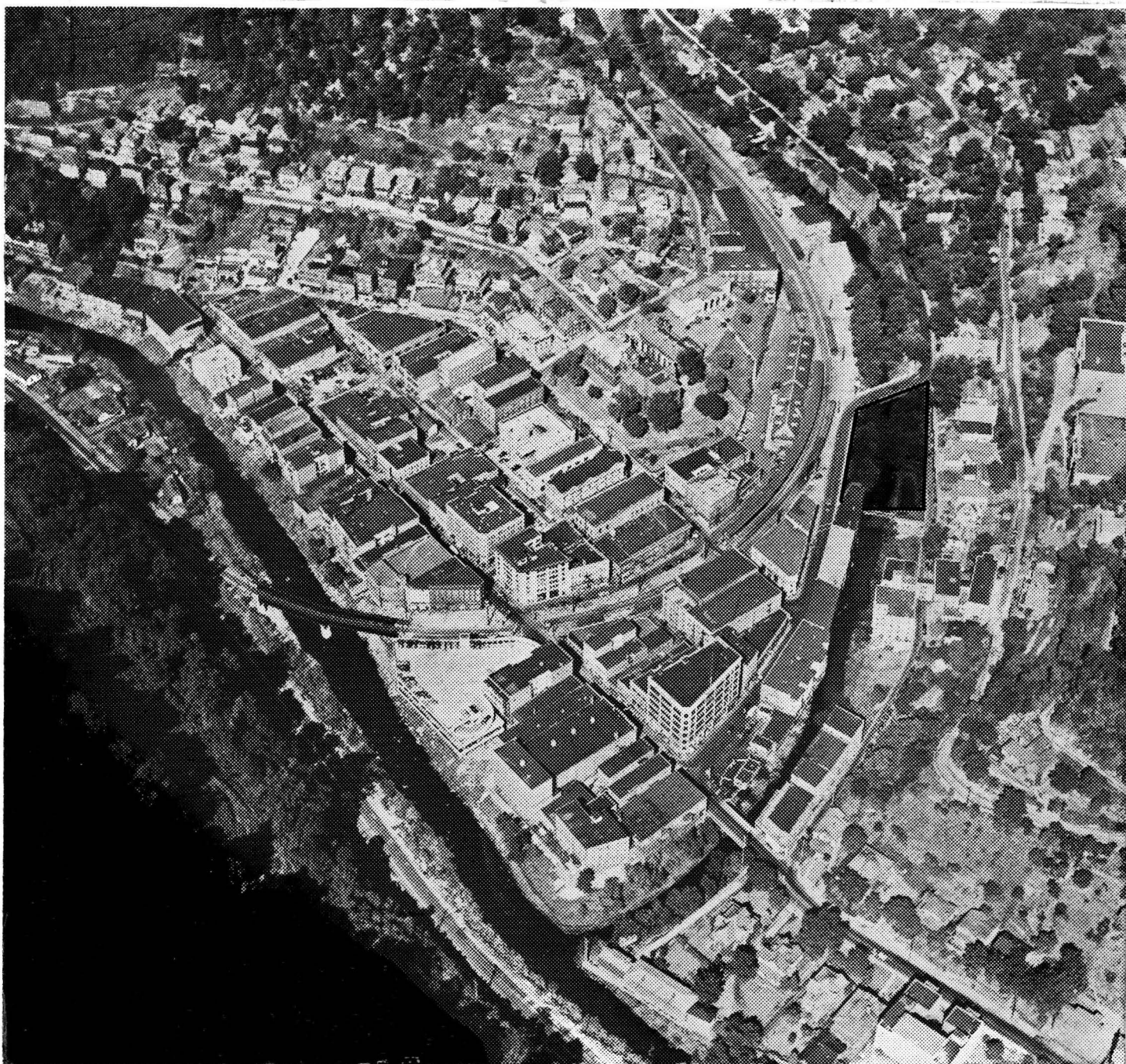
### Recent Improvements Within the City

The present administration has made several improvements within the city. The streets in the business section have been widened, and two small parks have been opened. Several streets have been resurfaced. The corporate limits of the city have been extended in the Brown's Creek district and city services are now provided in that area. Recreational facilities have been improved in the existing playgrounds, and a swimming pool has been provided for both children and adults.

Because of the great volume of business conducted within the city, a lack of parking space has become a problem. This problem was partly solved when the local citizens voted bonds and built a \$110,000 municipal parking building in 1941. A new bus terminal with city-owned, public parking on the second floor is now under construction. Because of the congested conditions within the city, this structure is being built directly over Elkhorn Creek.

### Other General Information

The Appalachian Electric Power Company furnishes electricity to the city, and the West Virginia Water Works supplies water. The county has supervision of the public schools together with health and welfare services.



AERIAL PHOTOGRAPH OF THE CITY  
SHOWING THE PROPOSED SITE

#### SECTION IV - THE PRESENT CITY HALL

### THE PRESENT CITY HALL

The present city hall is located in the heart of the business section of the city on one-way McDowell Street. It is a three-story structure approximately forty by sixty feet in size, sandwiched between two commercial buildings. This structure was erected in the early 1920's as a city hall and fire department. The ground floor houses the fire department. The second floor contains two offices, a toilet, and a combination council room, hearing room and public area. An apartment for the fire chief and his family occupies the third floor.

This structure has proved to be very inefficient as a city hall and fire department. The location is not desirable and the housing for the necessary city offices and departments is inadequate; lighting and ventilation are very poor in both the fire department and the combination hearing room and council room; and, furthermore, this building is anything but a tribute to the progressiveness of the city of Welch, West Virginia.

SECTION V - OFFICES AND DEPARTMENTS OF  
PRESENT CITY GOVERNMENT  
AND THEIR FUNCTIONS

OFFICES AND DEPARTMENTS OF PRESENT CITY GOVERNMENT  
AND THEIR FUNCTIONS

Office of Mayor and City Manager

The office of the mayor and city manager is now located in the McDowell County National Bank Building on the corner of Wyoming and Bank Streets. It is believed that these two city functions will remain in the hands of a single official because of the high degree of success already evident under the present arrangement.

The mayor is chief executive officer of the city and the city manager is responsible for the management of city affairs. The duties of this official are as follows:

(a) to preside at all meetings of the council and to vote in case of a tie;

(b) to have charge and control of the police department and to see that the laws and ordinances of the city are enforced;

(c) to keep and preserve the docket of all his proceedings in the trial of criminal cases in like manner and with like effect as provided by law in the case of a justice of the peace;

(d) to see that the peace and good order of the city are preserved and that persons or property therein are protected, and to this end he may cause the arrest and detention of rioters and disorderly persons;

(e) to perform such other duties and services as the council may ordain in addition to the duties prescribed by act.

#### City Clerk and Treasurer

At the present time the offices of city clerk, treasurer, and police judge are filled by one official whose staff consists of a secretary. It is expected that sometime in the future the police judge will be a separate official. This office is the only city office located within the present city hall with the exception of the fire chief's office. It is a single room with space for the secretary and is adjacent to the combination council and hearing room.

The city clerk is the ex-officio clerk of the city council. His duties are as follows:

(a) to assume the duties of the mayor when mayor is for any reason absent from city, except he shall not preside over the city council.

(b) to keep in a separate volume all ordinances of a general nature, any violations of which shall subject any person to any penalty, and carefully index the same;

(c) to enter in a separate volume all ordinances providing for the issuance of any public improvement of any local or temporary nature;

(d) to keep a complete account showing all official transactions of the city and of each department and make out all vouchers and pay rolls of the city;

(e) to attend all council meetings and keep records of proceedings;

(f) to perform and do all other duties which may be required of him by any ordinance or resolution.

As ex-officio city treasurer his duties are as follows:

(a) to be custodian of all monies of the municipality and to keep and preserve same in such a manner and in such place or places as shall be designated by the city council;

(b) to pay out money only on warrants issued and signed by him and countersigned by the mayor.

#### Police Judge

The police judge is an ex-officio justice of the peace and conservator of the peace. His duties are as follows:

(a) to issue process for all offenses committed within jurisdiction of the city of Welch and of state statutes;

(b) to perform all duties vested by law in a justice of the peace, except that he shall have no jurisdiction in civil cases or causes of action arising outside the corporate limits of the city;

(c) to commit persons charged with felony or misdemeanor to jail or take bond for their appearance before the grand jury or the criminal court of McDowell County;

(d) to keep a well-bound book marked "Police Court Dockets" in which there shall be kept a record showing the style of each case and the disposition thereof, which record shall be indexed and numbered;

(e) to issue warrants specifying offenses or violations charged, and shall have the power to issue executions for all fines, penalties, and costs imposed by him, and he may require immediate payment of same, and in default of such payments commit persons in default to jail.

#### City Attorney

At the present time the city attorney is only a part-time city official who combines his civic duties with his own law practice. His office is located in the Masonic Building on Wyoming Street.

His duties are as follows:

(a) to discharge all duties and exercise all powers which shall be conferred upon him by any ordinance or resolution of the city council;

(b) to be legal adviser of and attorney and counsel for the city and for all administrative offices thereof, in respect to their official duties;

(c) to prosecute and defend all suits for or against the city;

(d) to prepare all contracts, bonds, and other writings in which the city is concerned, and endorse on each his approval of the form and corrections thereof;

(e) to be prosecuting attorney of the police court and prosecute all cases brought before such court, and perform the same duties so far as they are applicable thereto as are required of the prosecuting attorney of the county, provided however, that it shall be necessary for said city attorney to appear in criminal cases only when so required by the mayor, police judge or proper authority.

#### Superintendent of Streets and Garbage Disposal

This office, which combines the commissioner of streets and the commissioner of sanitation, is held by one official. At the present time this department of the city government has two garbage trucks in operation along with one street cleaner. These vehicles are housed in a city garage that is already constructed.

The duties of this office are as follows:

(a) to have general supervision of the streets and alleys in the city and to see that the pavements, sidewalks, gutters, and sewers are kept clean and repaired;

(b) to have general supervision of the work of repairing and keeping in repair all pavements, sidewalks, gutters, and sewers and curbs of the city;

(c) to attend all regular meetings and special meetings of the city council and recommend improvements required for any street, alley, land or locality in the city.

### City Health Officer

This position is now held by a doctor who also has a private practice. His office is located in the Flat Iron Building on McDowell Street about two blocks away from the present city hall. It is felt that no provision will be necessary for this office in the planning of a new city hall since there is no indication that it may become one requiring a full time city official.

The duties of the city health officer are as follows:

- (a) to discharge duties and exercise all powers which shall be conferred upon him by any ordinance or resolution of the city council;
- (b) to report all unsightly, unsanitary, and obnoxious conditions existing within the corporate limits of the city;
- (c) to examine all restaurants, hot dog stands, refreshment places and lunchstands within the city and report the sanitary conditions thereof;
- (d) to close any places found to be in an unhealthy and unsanitary condition, dangerous to the health of the inhabitants of the city;
- (e) to supervise the sanitary inspections of the production, transportation, storage, and sale of food and foodstuffs;
- (f) to provide rules for the collection and disposal of garbage;
- (g) at the time of an epidemic or threatened epidemic to enforce such quarantine and isolation rules and regulations as are

appropriate for the emergency, and shall at all times have supervision over all contagious and infectious diseases;

(h) to perform any and all other duties, necessary and essential to promote a healthy and sanitary condition within the city.

### City Engineer

At the present time the city engineer is only a part time city official. His office is located in the First National Bank Building on McDowell Street, just across from the Flat Iron Building. There are indications that this office may require a full time official and, therefore, this should be taken into consideration in planning the new city hall.

The duties of the city engineer are as follows:

(a) to make surveys and fix grades when required by the city council, prepare plots, plans and specifications and inspect all work done by any contractor for the city while the work is being performed.

(b) to supervise construction of all buildings, bridges, and other structures, the erection of which is controlled or regulated by the city;

(c) to furnish to any resident street and sewer grades and building lines whenever required on such terms as the council may prescribe;

(d) to examine all applications for permits to erect buildings and other structures, and approve the same in writing before they are passed on by the council;

(e) to make complete maps of all streets, alleys, lanes, parks, and public property owned by the city and keep the same on file in his office, and furnish a copy thereof to the city clerk.

#### Police Department

The necessary police officers and one chief of police are appointed by the mayor and approved by the council. At the present time there are no facilities for the housing of the Welch police department. There is no city jail; instead, the city pays the county to take care of its prisoners.

The duties of the chief of police are as follows:

(a) to receive orders from the police judge and mayor and to discharge such duties as required by any ordinance or resolution of the council;

(b) to collect city taxes, licenses, levies, assessments, and other such claims as are placed in his hands for collection by the city council.

The police department shall have all powers, rights, and privileges within the corporate limits of the city in regard to the following:

(a) the arrest of persons, collections of claims and the execution and return of process as may be legally exercised by a constable of a district within the State of West Virginia;

(b) the arrest of any person who commits a felony, misdemeanor or infraction of the ordinances of the city in the presence of any city police officer.

#### Fire Department

The present city fire department is located on the ground floor of the present city hall. It opens onto a one-way street, McDowell, which is the most congested street of the city, particularly in the evenings and on weekends. That this location is indeed a poor one and that the present facilities are inadequate to provide the necessary fire services to the city is recognized by the residents of the city as well as the city officials. This department has an engine room, thirty by fifty feet, a fire chief's office at the rear, a small storage room, a toilet, hose tower, and a small basement area for the repair of fire hose. There are no facilities housing the permanent nor the volunteer firemen, and the facilities for the filling and re-filling of fire extinguishers are very poor.

The duties of the fire department are as follows:

(a) to protect and preserve all life and property in the corporate limits of the city from harm and damage caused by fire or by the elements;

(b) to have the authorization to condemn any building or structure if not conforming to the state fire codes;

(c) to inspect buildings for fire hazards, conditions of fire fighting equipment and other requirements as specified by the state fire code;

(d) to have available at all times a squad which will serve in rescue or life saving work;

(e) to inspect and fill or refill fire extinguishers throughout the corporate limits of the city;

(f) to see that the fire station is attended at all times and that the department is able to render service on immediate notice.

SECTION VI - THE NEED FOR A NEW CITY HALL

### THE NEED FOR A NEW CITY HALL

It is quite obvious to many of the citizens of Welch, as well as to the city officials, that there is a definite need for a new city hall, one which will house the administrative and enforcement offices and departments necessary for the proper and efficient functioning of the city government and which will provide space for an up-to-date fire department.

The present city hall has long outlived its usefulness as a building to house the city government. All of the offices of the city government, with the exception of the city clerk, police judge, treasurer and fire chief, are located in separate buildings dispersed throughout the business district of the city. There are no provisions for the housing of the police department, and there is no city jail.

"A city government should -- must -- be housed as the center of a mutually cooperative enterprise in which the government talks to the people and the people talk to the government."<sup>1</sup>

Existing conditions, having the offices and departments so decentralized and not easily accessible to the public and other offices, create a great tendency toward inefficiency in the city government.

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<sup>1</sup> The Architectural Forum, p. 39, May, 1943.

"The city hall must be considered the heart of the community, the house of government -- a building in which provision is made not only for the administration of the rules and regulations, but one which must contain facilities for the expression of the idea of government, which is never static and which can never be complete without the direct participation of the people who create it."<sup>2</sup>

It is the aim of the author to design a city hall which will not only provide for the necessary functions of the city government but one which will be a tribute to the city of Welch as well.

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<sup>2</sup> Ibid.

## SECTION VII - SITE SELECTION

### SITE SELECTION

Due to the congested conditions within the city and the lack of room for expansion, there seem to be only two possibilities in the selection of a site for the proposed city hall. One possibility is to go further up the side of the mountain. This choice, however, will be disregarded since it would necessitate having the new city hall too far away from the central portion of the city, thus being inaccessible to the public. The second possibility is to find a suitable location for spanning either Elkhorn Creek or Tug River with a structure capable of supporting the proposed city hall.

At the present time the city has plans to cover a large portion of Elkhorn Creek with a reinforced concrete slab which will be used to alleviate the shortage of parking space. For this purpose the city has obtained an option on part of the property along this creek. This property includes a three-story stone and brick structure which is now being used as a bottling plant, for storage, and as living quarters for the owner. It is also the aim of the city to remodel this structure into a city hall and fire department if it is at all feasible.

Under the circumstances, the author feels that this site upon a reinforced concrete slab spanning the creek would be ideal for the proposed city hall. This central location in the city is advantageous and affords easy accessibility for the public. The fire

department would have access to a two-way street which would allow quicker service to any portion of the city. There would be adequate space to house the city offices and departments and to provide for the much-needed parking area.

## SECTION VIII - THE PROGRAM

### THE PROGRAM

In order to obtain a further insight into the actual needs and requirements of the various offices and departments of the city government, the author felt that a survey of the offices and their respective functions and duties was necessary. On the following pages is an example of the questionnaire that was used in obtaining this information. These questionnaires were completed by each of the city officials and returned to the author in order to provide him with first hand information about the needs of the city.

Material gained from these questionnaires also was used in Section V of this thesis.



# I. NUMBER, AREAS AND FURNISHINGS OF OFFICE OR DEPARTMENT

SPACE	PRESENT OR ACTUAL			FUTURE OR EXPECTED		
	NO.	AREA	FURNISHINGS	NO.	AREA	FURNISHINGS
GENERAL OFFICES						
PRIVATE OFFICES						
SEMI-PRIVATE OFFICES						
RECEPTION OR PUBLIC AREAS						
VAULTS						
STORAGE ROOMS						
OTHER						
1.						
2.						
3.						
4.						

## II. PERSONNEL

NO.	PRESENT OR ACTUAL				FUTURE OR EXPECTED			
	CLERICAL	OFFICIAL	UNSKILLED	OTHER	CLERICAL	OFFICIAL	UNSKILLED	OTHER

III. EXPECTED EXPANSIONS

IV. DEPARTMENTS OR OFFICES WITH WHICH YOUR OFFICE IS MOST CLOSELY ASSOCIATED OR RELATED.

V. CITY OFFICES OR DEPARTMENTS WITH WHICH YOUR DEPARTMENT OR OFFICE MAY WORK IN CONJUNCTION OR COMBINATION.

VI. INADEQUACIES OR FAULTS OF PRESENT FACILITIES

VII. SUGGESTIONS PERTAINING TO THE CITY GOVERNMENT AND THE HOUSING OF THE VARIOUS FUNCTIONS

Specific Requirements for a City Hall for Welch, West Virginia

	Area, Sq. Ft.
<b>Office of Mayor and City Manager:</b>	
Private Office .....	225
Secretary .....	80
Public Area .....	80
Closet and Storage .....	<u>25</u>
Total ...	410
<b>City Clerk and Treasurer:</b>	
Private Office .....	230
Secretary .....	80
Public Area .....	100
Fireproof Record Vault .....	475
Closets and Storage .....	<u>15</u>
Total ...	900
<b>City Engineer:</b>	
Private Office .....	150
Drafting Room .....	175
Blueprint Room .....	80
Closets and Storage .....	<u>50</u>
Total ...	455

Area, Sq. Ft.

## City Attorney:

Private Office .....	125
Secretary .....	80
Public Area .....	80
Closets and Storage .....	<u>15</u>
Total ...	350

## Superintendent of Streets and Garbage Disposal:

Private Office .....	150
Secretary .....	80
Public Area .....	80
Closet and Storage .....	<u>15</u>
Total ...	325

## Police Judge:

Private Office .....	200
Secretary .....	80
Public Area .....	100
Toilet Facilities .....	25
Closet and Storage .....	<u>25</u>
Total ...	430

## Police Court and Council Room (Combination)

to Seat Thirty Spectators: .....	700
Retiring Room for Council: .....	150
Unassigned Office Space: .....	350

Area, Sq. Ft.

## Police Department and Jail:

Private Office for Chief .....	200
Desk Sergeant .....	100
Police Lieutenant .....	100
Radio Room .....	90
Squad Room .....	150
Locker and Toilets .....	125
Public Area .....	125
Closets and Storage .....	30
Small Vault .....	10
Eight Jail Cells and Guard's Corridor .....	600
Prisoner Waiting Room .....	<u>75</u>
Total ...	1,605

## Fire Department:

Private Office for Chief .....	200
Engine Room .....	1,800
Dormitory for Six Bunks .....	400
Fire Extinguisher Fill and Refill Room .....	325
Kitchen-Dining .....	200
Locker Room and Toilet .....	150
Lounge .....	150
Hose Drying Tower (Fifty feet in height) .....	30
Wash and Repair Room .....	300

Area, Sq. Ft.

## Fire Department (Continued):

Storage for New and Old Hose .....	350
General Storage .....	<u>80</u>
Total ...	3,985

## Toilets:

White Men .....	125
White Women .....	150
Colored Men .....	100
Colored Women .....	125
Employees Men .....	90
Employees Women .....	<u>90</u>
Total ...	680

Public Waiting Area: .....	325
Furnace Room and Coal Bin: .....	350
Mechanical Equipment: .....	250
Janitor: .....	<u>80</u>
Sum Total ...	11,345

Plus Twenty Per Cent for Corridors,

Stairways, etc.: .....	<u>2,269</u>
Grand Total ...	13,614

SECTION IX - POSSIBILITIES OF REMODELING  
THE EXISTING BOTTLING PLANT

### POSSIBILITIES OF REMODELING THE EXISTING BOTTLING PLANT

The author felt that the possibilities of remodeling the existing bottling plant should be explored to present an alternate scheme for the proposed city hall and fire department. This scheme, however, should be used only as a last resort since the structure has many shortcomings in regard to aesthetics and flexibility.

The structure is in the shape of a trapezoid, 36 by 130 by 44 feet. The basement and foundation walls were constructed of thick stone masonry, while the rest of the building is of brick construction. The floor of the first story falls at the same level as the proposed reinforced concrete slab spanning Elkhorn Creek, and the second story opens onto Virginia Avenue. The basement and first story ceiling heights are approximately nine feet. The second story has a ceiling height of approximately sixteen feet.

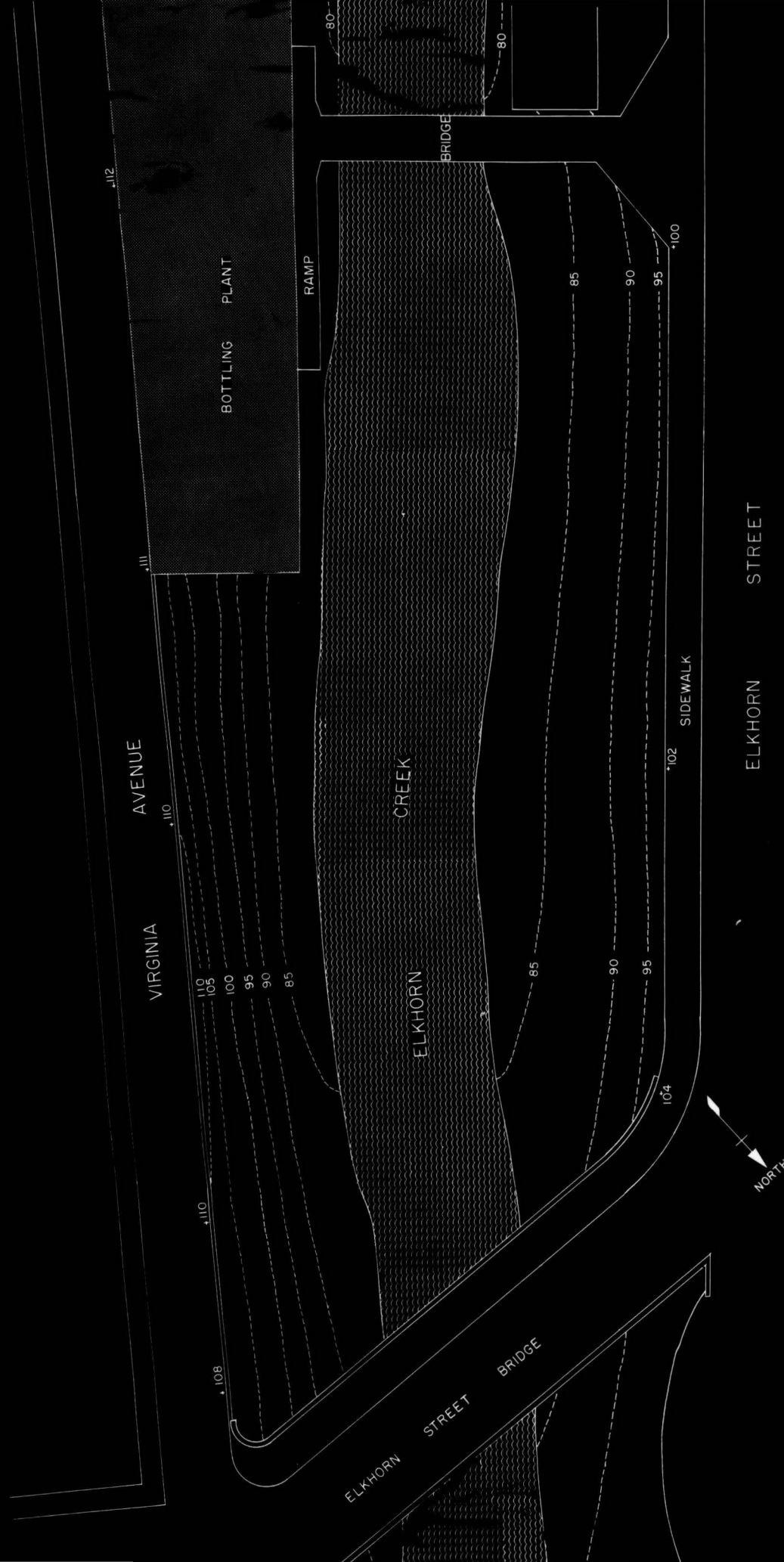
The over-all construction is sound but not comparable to that which would be obtained by modern building methods and techniques. Irregularities may be noted in the size and spacing of columns. Over-thick walls are used for the exterior construction.

Assuming that the reinforced concrete slab will be constructed as planned by the city, the fire department would have to be located in such a position that much of the parking space would be sacrificed as a turning radius for the fire engines. This location of the fire department is necessary due to the fact that the relatively narrow

width of the structure will not allow the engine room enough depth if it is placed elsewhere. Aside from this disadvantage, the author feels that this building may be remodeled into a satisfactory city hall from the functional standpoint, although not from the aesthetic.

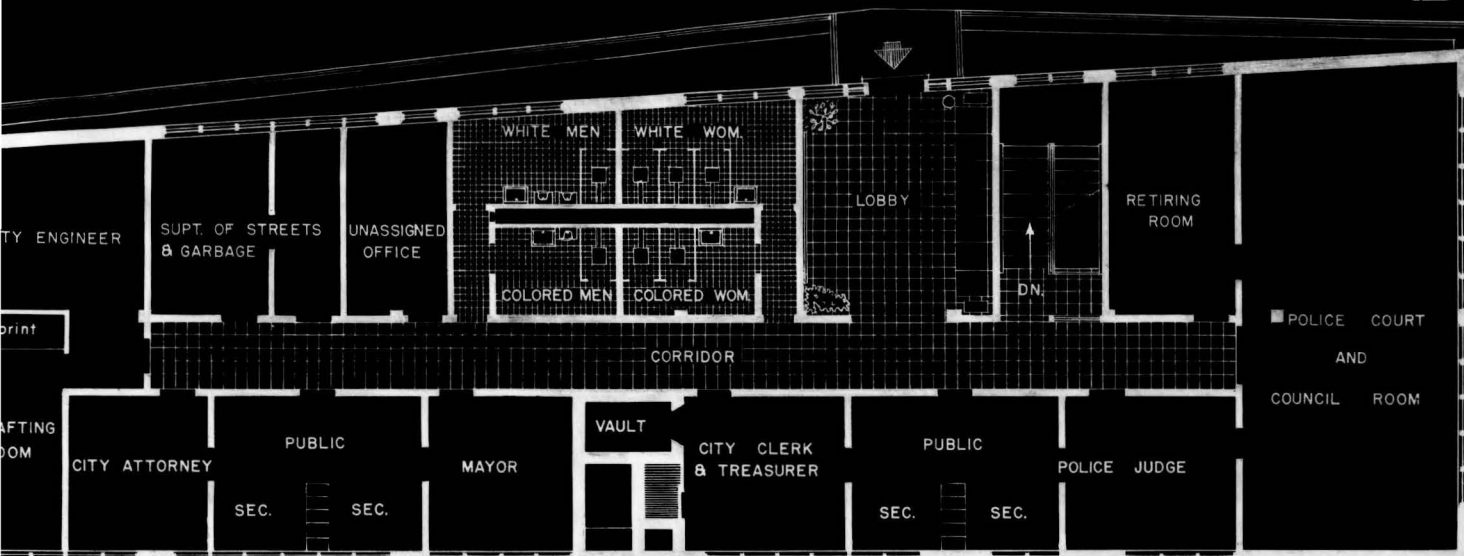
It is the firm conviction of the author that a building which is to represent the government of any city should be a contribution to the beauty of the city. It is also his conviction that, regardless of the possibilities of remodeling the existing bottling plant into a city hall and fire department, and although it may satisfy the necessary functions of the government, the structure will fall short in an attempt to make it of aesthetic value to the city.



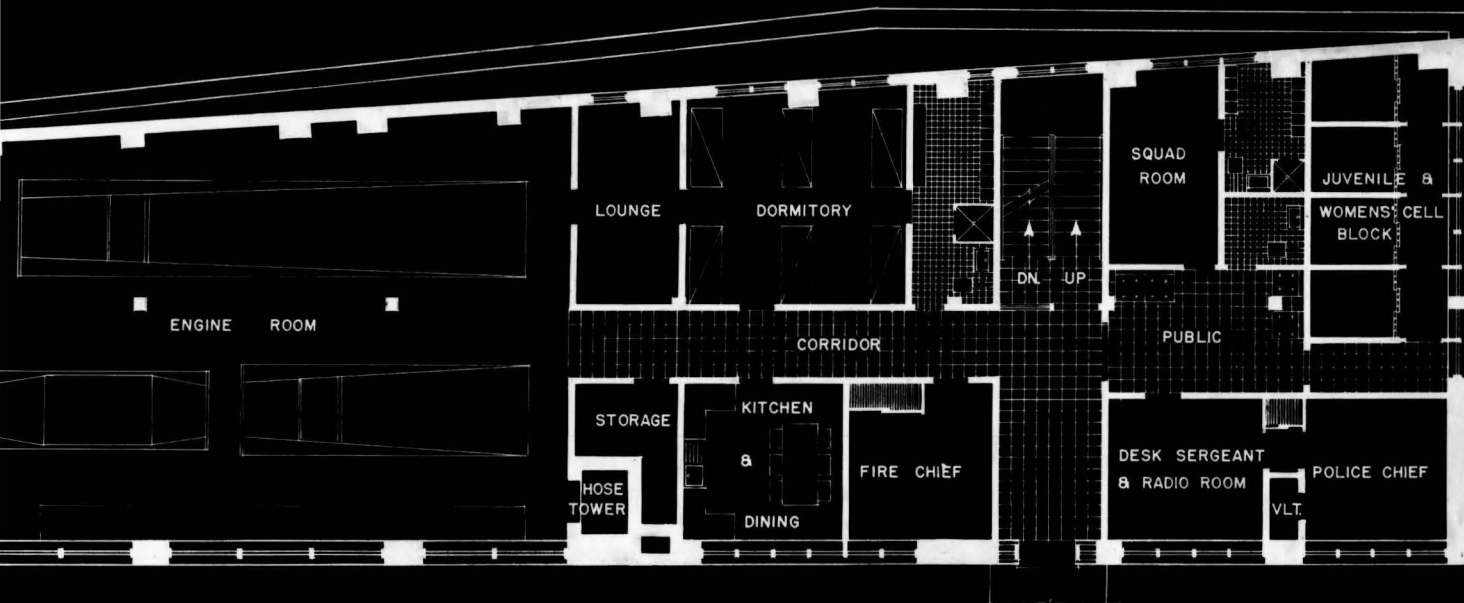


UNDEVELOPED SITE PLAN

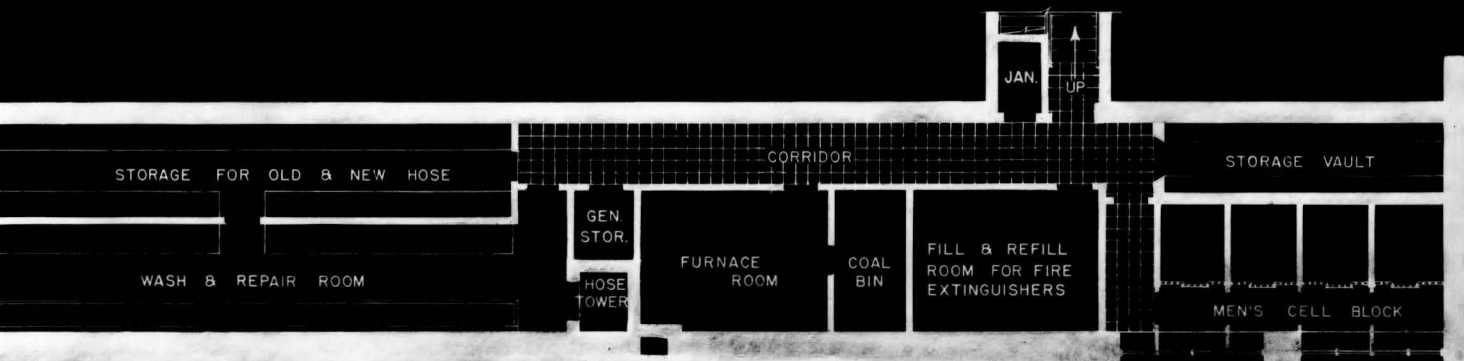




SECOND FLOOR PLAN



FIRST FLOOR PLAN



BASEMENT PLAN



REMODELED FLOOR PLANS TRANSFORMING BOTTLING PLANT  
INTO ALTERNATE SCHEME FOR PROPOSED NEW CITY HALL

SECTION X - DESIGN ANALYSIS OF  
PROPOSED CITY HALL

## DESIGN ANALYSIS OF PROPOSED CITY HALL

### Size, Shape and Layout

The size, shape and layout of the proposed city hall were determined because of the following considerations:

- (a) the functional differences and relationships between the various offices and departments;
- (b) the desire to preserve as much of the reinforced concrete slab as possible for a much needed city parking area;
- (c) the desire to locate the main entrances of the city hall and fire department on two-way Elkhorn Street;
- (d) the difference in elevation between Elkhorn Street and Virginia Avenue and the desire to provide an entrance to the building from Virginia Avenue;
- (e) the desire to use simplicity in design and functionalism in planning.

### Location and Orientation

The location of the structure with respect to the site was chosen in accordance with the considerations listed in the preceding paragraph and to fulfill the author's desire to take advantage of the good lighting qualities afforded by north orientation for most of the offices.

### Fenestration

The fenestration and window heights resulted from the desire to provide the necessary lighting for the offices and departments. Too much light can be as bad as too little. High light is more effective than low light. In order to satisfy these requirements the sill height in the offices was established at two feet, six inches above the floor and the window heads were carried to the ceiling.

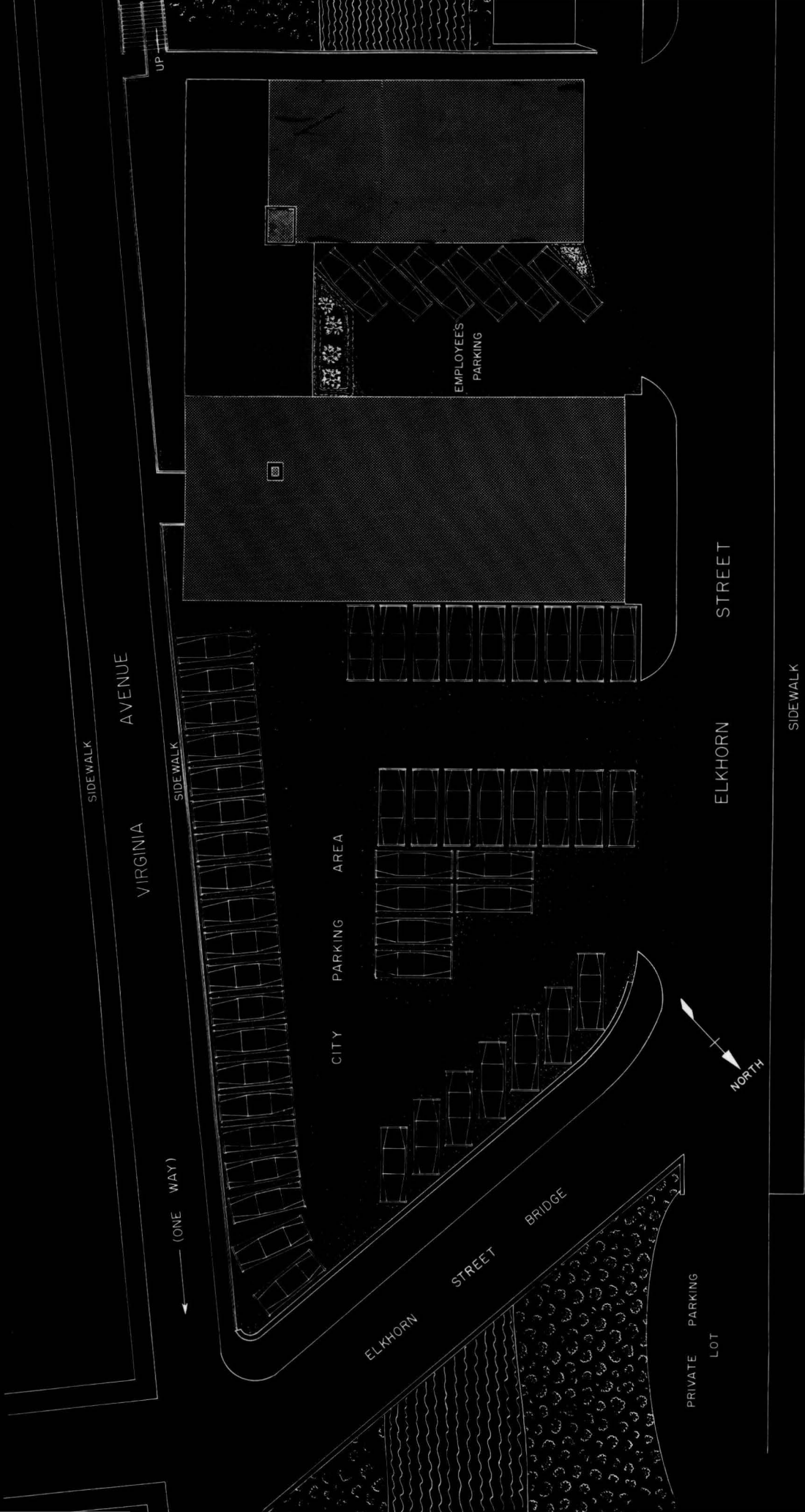
### Stairways and Corridors

Enclosed stairways from the basement to the roof were provided at each end of the office wing in order to conform to the fire code of the National Board of Fire Underwriters and to permit easy accessibility between floors and to the outside.

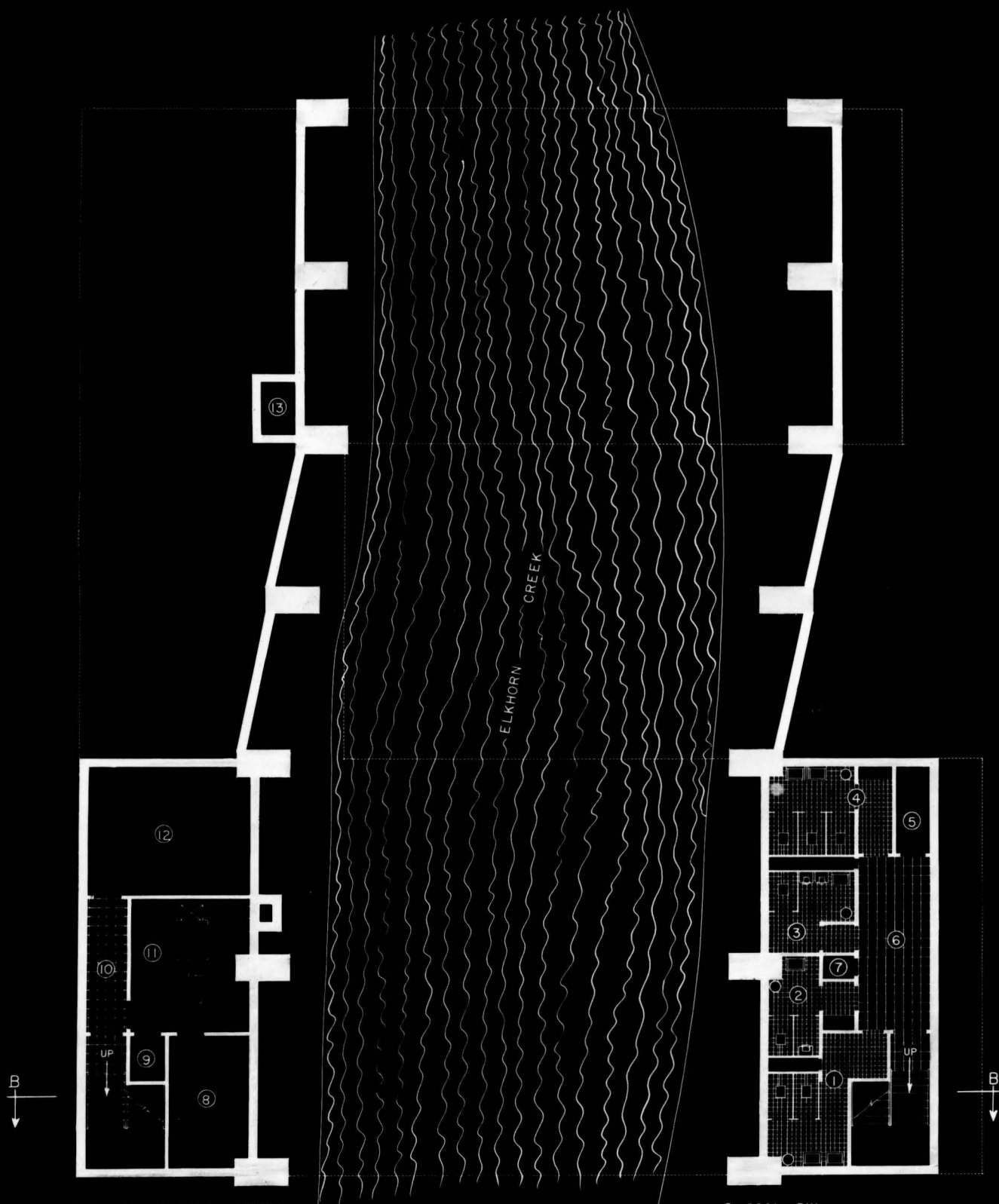
A width of eight feet was considered desirable for the corridors of this building.

### Toilets

Provisions for separate toilet facilities for the whites and negroes were considered necessary since state laws regarding segregation are still in force.



DEVELOPED SITE PLAN

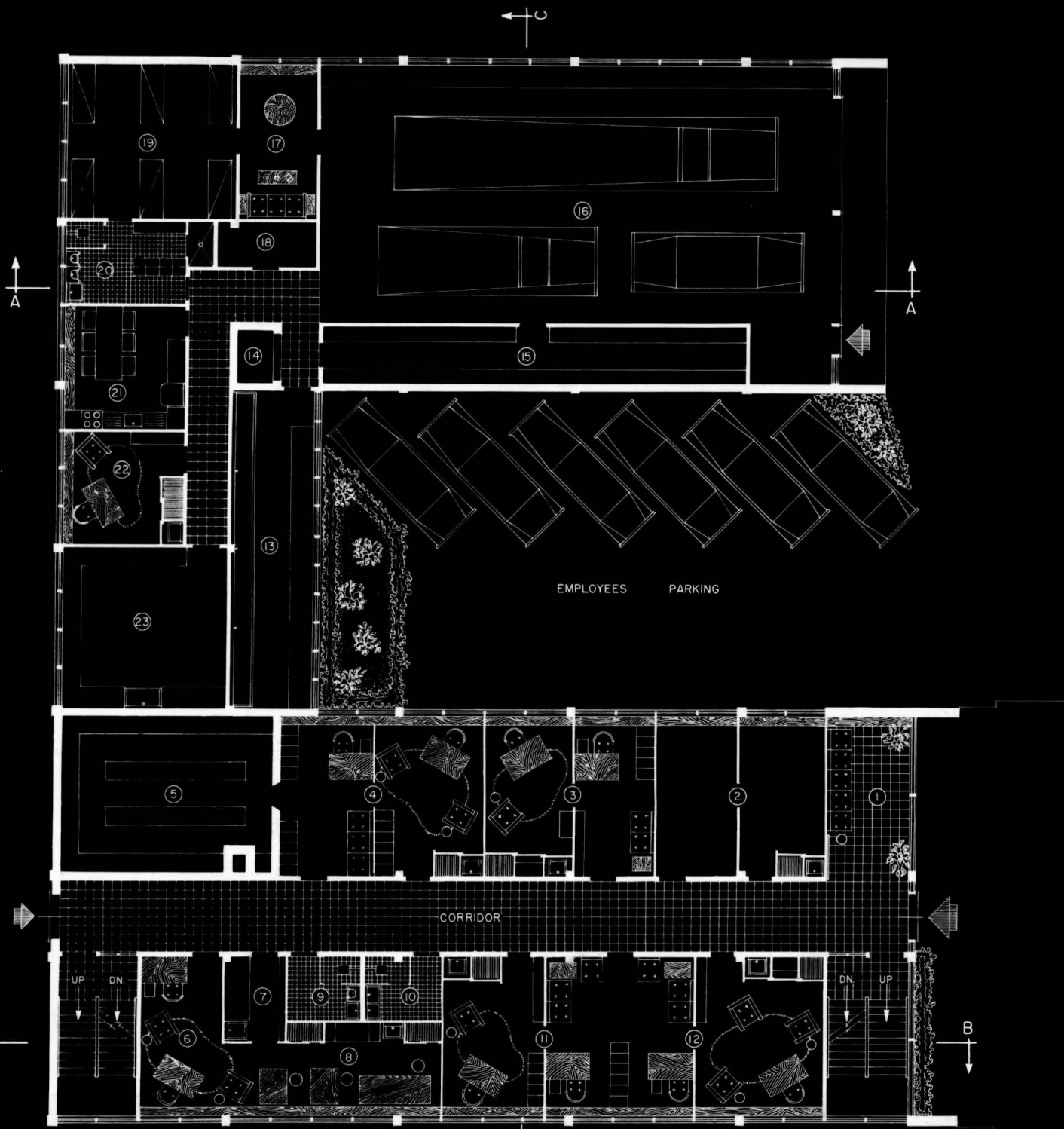


- 1-TOILET (COLORED WOMEN)
- 2-TOILET (COLORED MEN)
- 3-TOILET (WHITE MEN)
- 4-TOILET (WHITE WOMEN)
- 5-JANITOR'S ROOM
- 6-WAITING AREA
- 7-STORAGE

BASEMENT PLAN

0 5 10 FT.  
SCALE

- 8-COAL BIN
- 9-STORAGE
- 10-CORRIDOR
- 11-FURNACE OR BOILER ROOM
- 12-MECHANICAL EQUIPMENT ROOM
- 13-HOSE DRYING TOWER

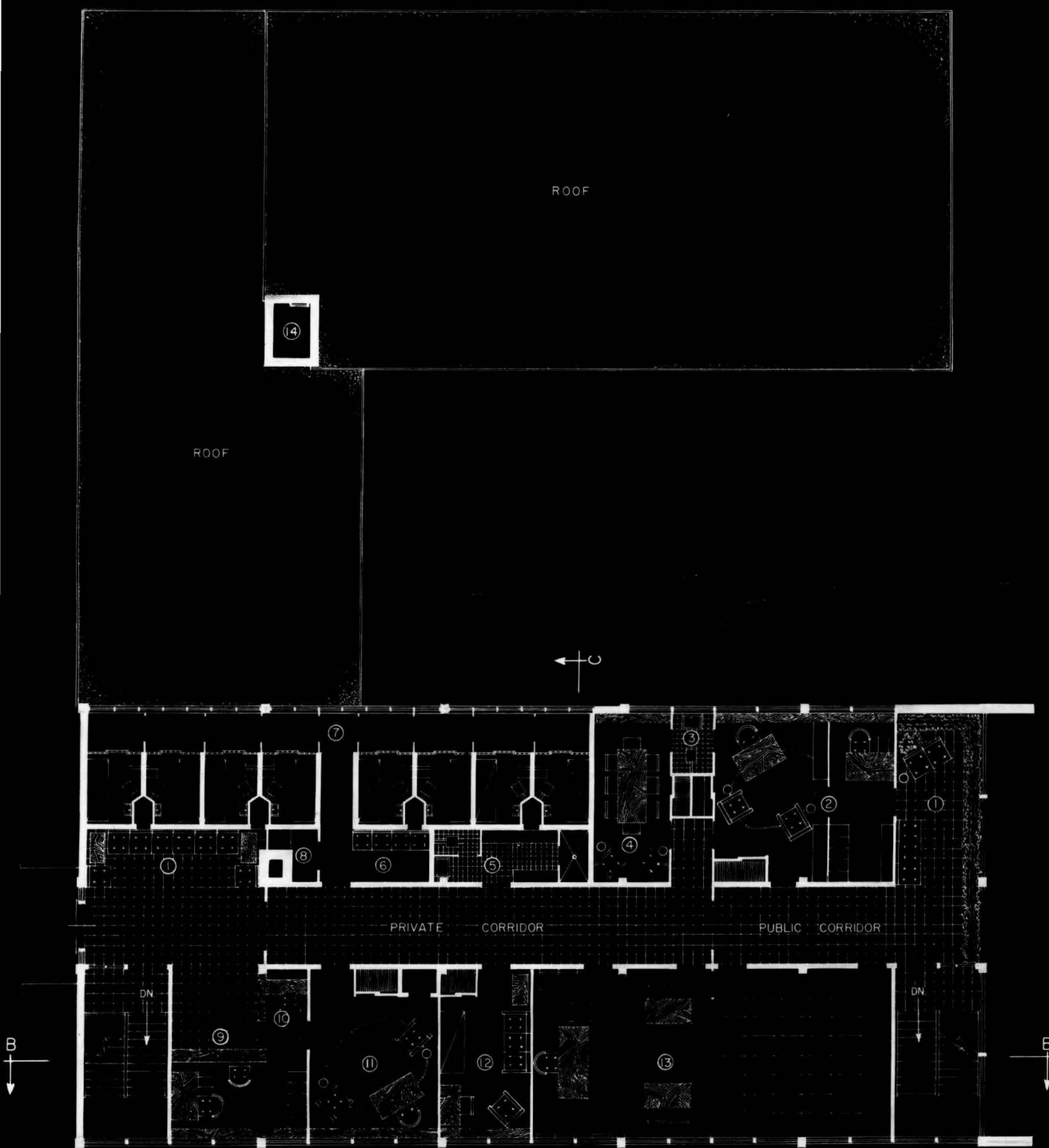


- 1—PUBLIC WAITING AREA  
 2—UNASSIGNED OFFICE  
 3—SUPT. OF STREETS & GARBAGE  
 4—CITY CLERK & TREASURER  
 5—STORAGE VAULT  
 6—CITY ENGINEER  
 7—BLUEPRINT ROOM  
 8—DRAFTING ROOM  
 9—TOILET (MEN EMPLOYEES)  
 10—TOILET (WOMEN EMPLOYEES)  
 11—CITY ATTORNEY  
 12—MAYOR

FIRST FLOOR PLAN

5  
 0 10 FT.  
 SCALE

- 13—WASH & REPAIR ROOM FOR HOSE  
 14—HOSE DRYING TOWER  
 15—STORAGE FOR NEW & OLD HOSE  
 16—ENGINE ROOM  
 17—LOUNGE  
 18—GENERAL STORAGE  
 19—DORMITORY  
 20—SHOWER & LOCKER ROOM  
 21—KITCHEN & DINING  
 22—FIRE CHIEF  
 23—FIRE EXTINGUISHER (FILL & REFILL ROOM)



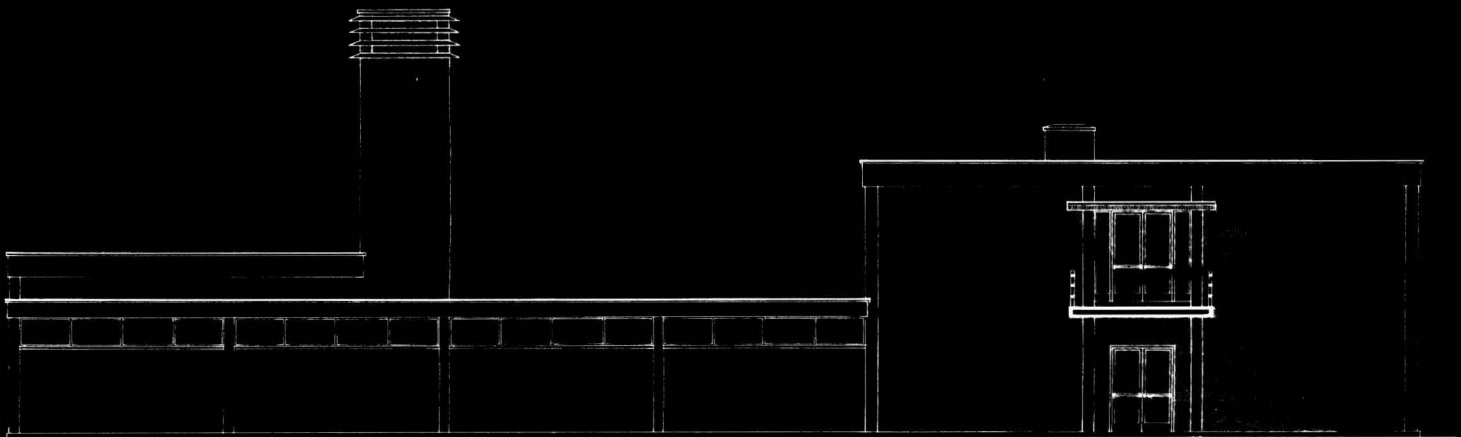
- 1 — PUBLIC WAITING AREA
- 2 — POLICE JUDGE & SECRETARY
- 3 — TOILET
- 4 — RETIRING ROOM
- 5 — SHOWER & LOCKER ROOM
- 6 — WAITING AREA FOR PRISONERS
- 7 — CELL BLOCK
- 8 — STORAGE
- 9 — DESK SERGEANT & POLICE LIEUTENANT
- 10 — RADIO AREA
- 11 — CHIEF OF POLICE
- 12 — SQUAD ROOM
- 13 — POLICE COURT & COUNCIL ROOM
- 14 — HOSE DRYING TOWER

SECOND FLOOR PLAN

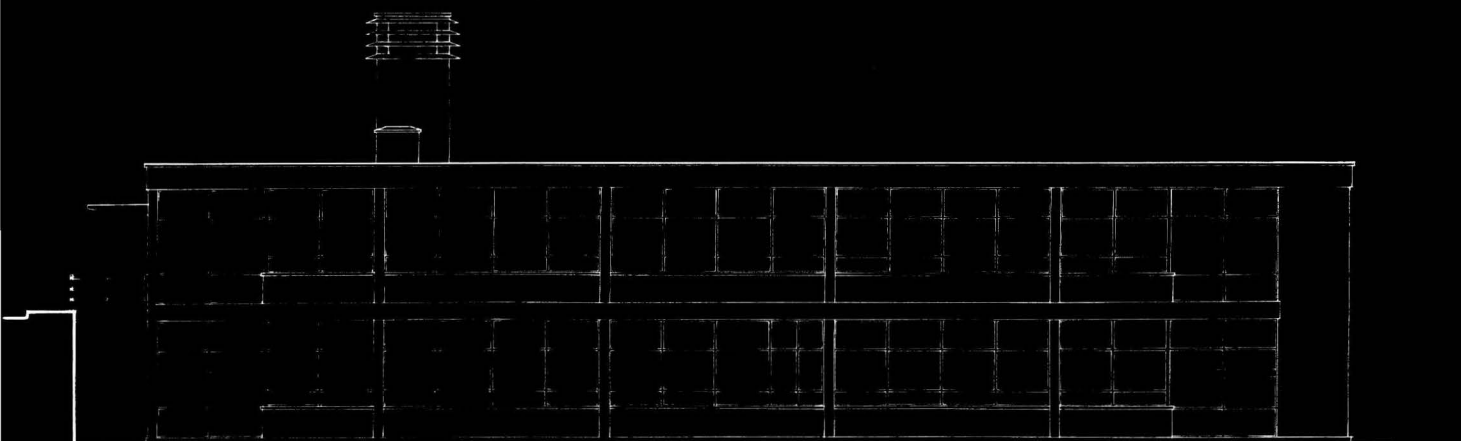
0 5 10 FT.  
SCALE



FRONT ELEVATION



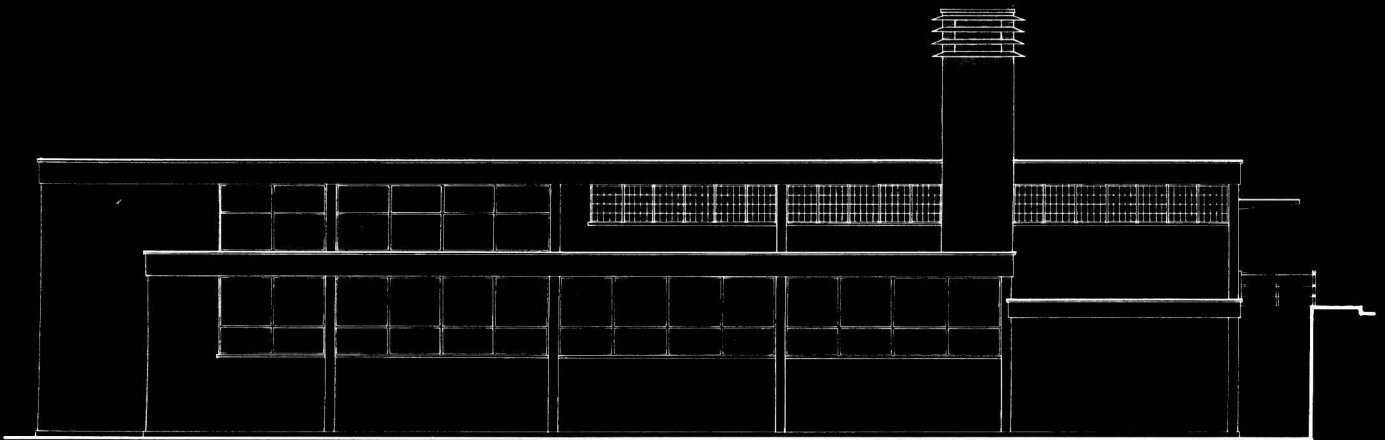
REAR ELEVATION



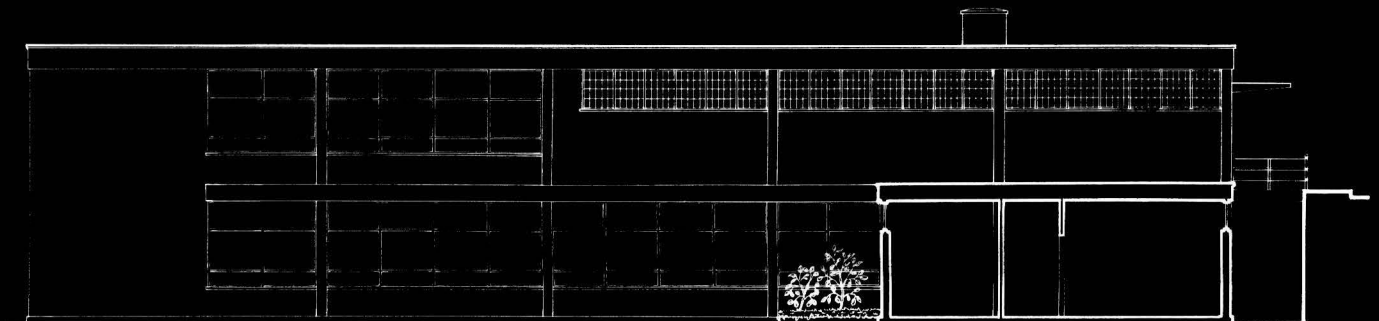
LEFT SIDE ELEVATION



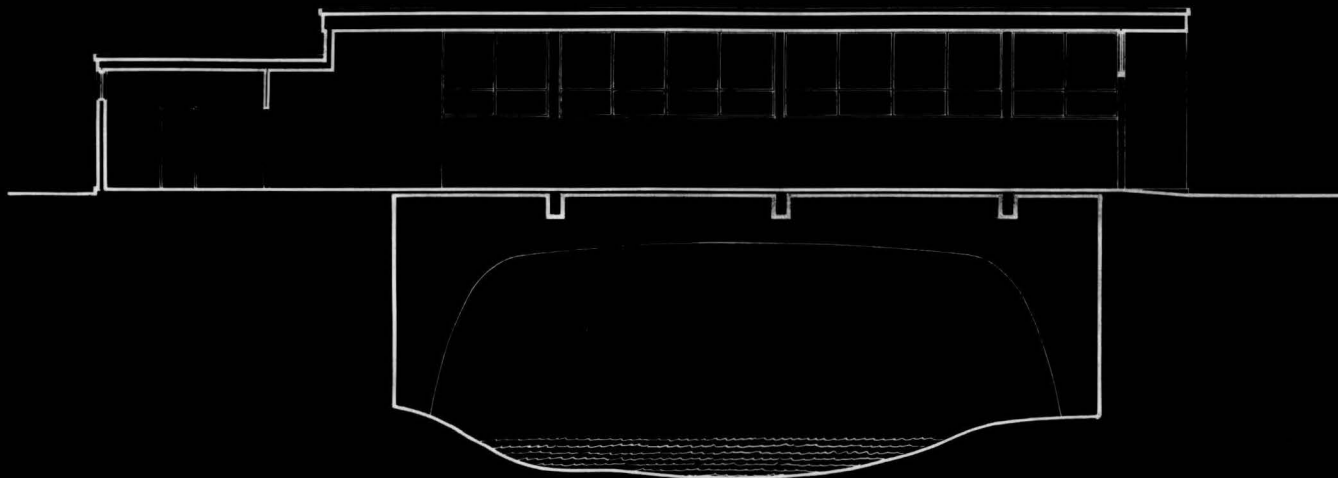
SECTION THROUGH FIRE DEPT. FACING ENGINE ROOM



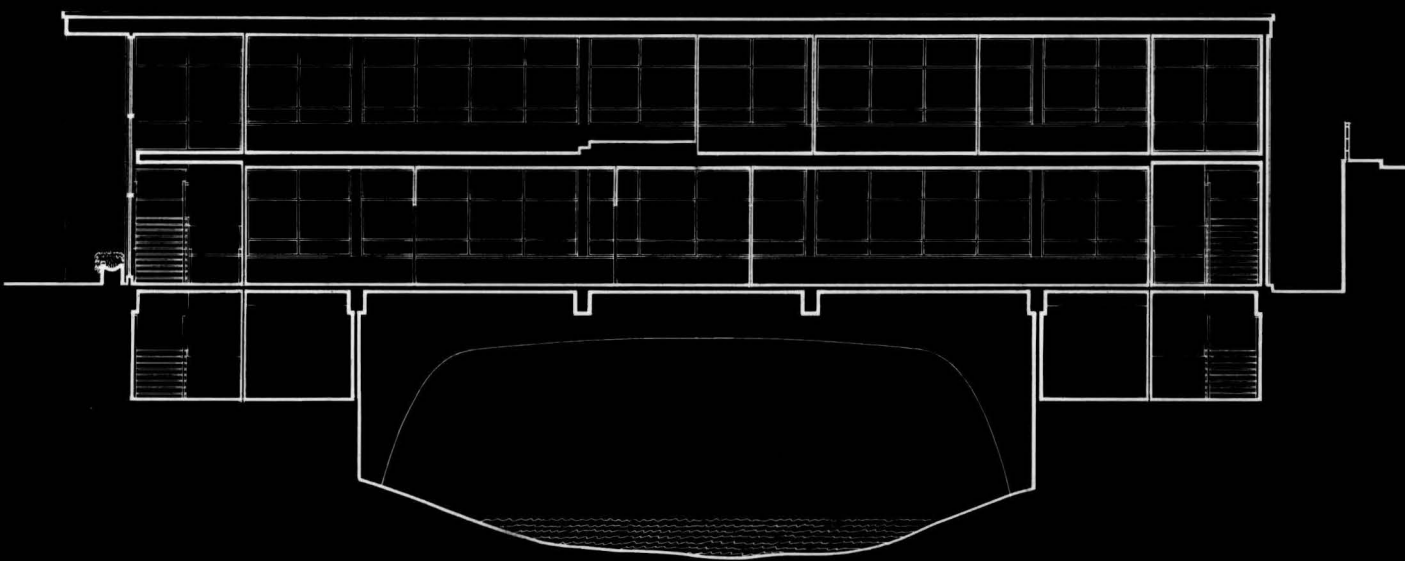
RIGHT SIDE ELEVATION



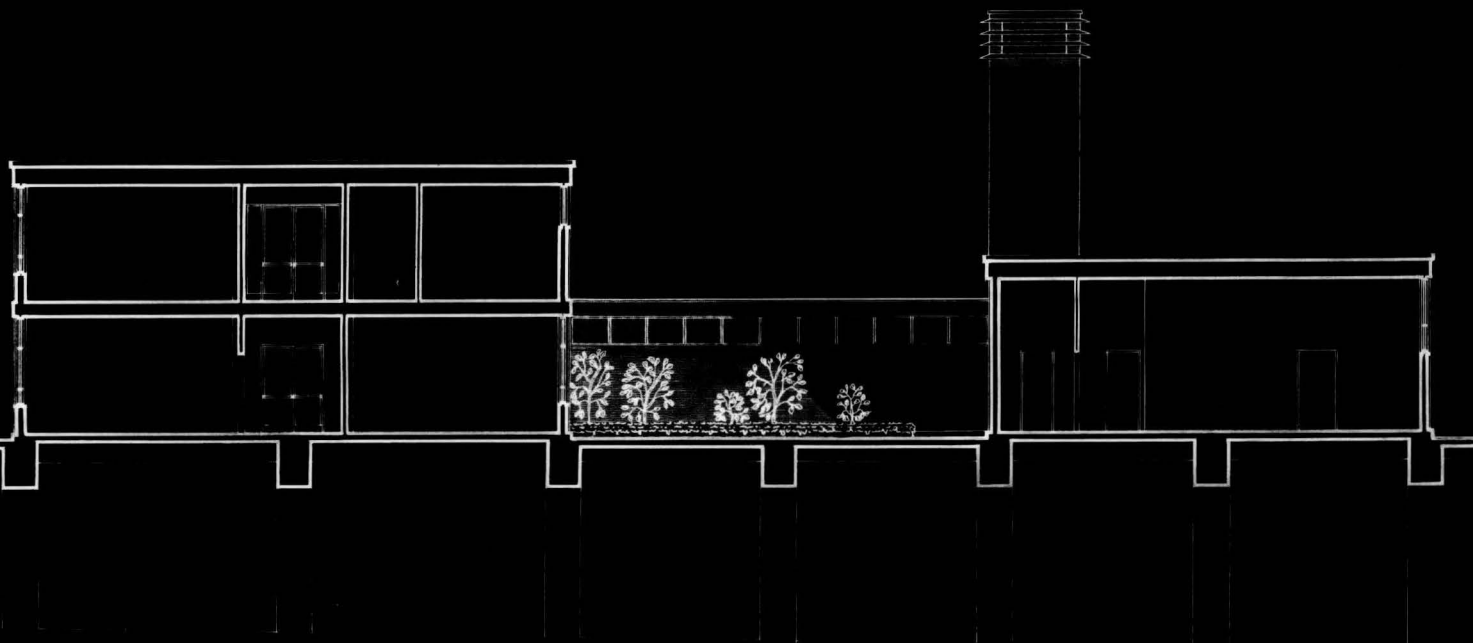
SECTION THROUGH FIRE DEPT. FACING OFFICE WING



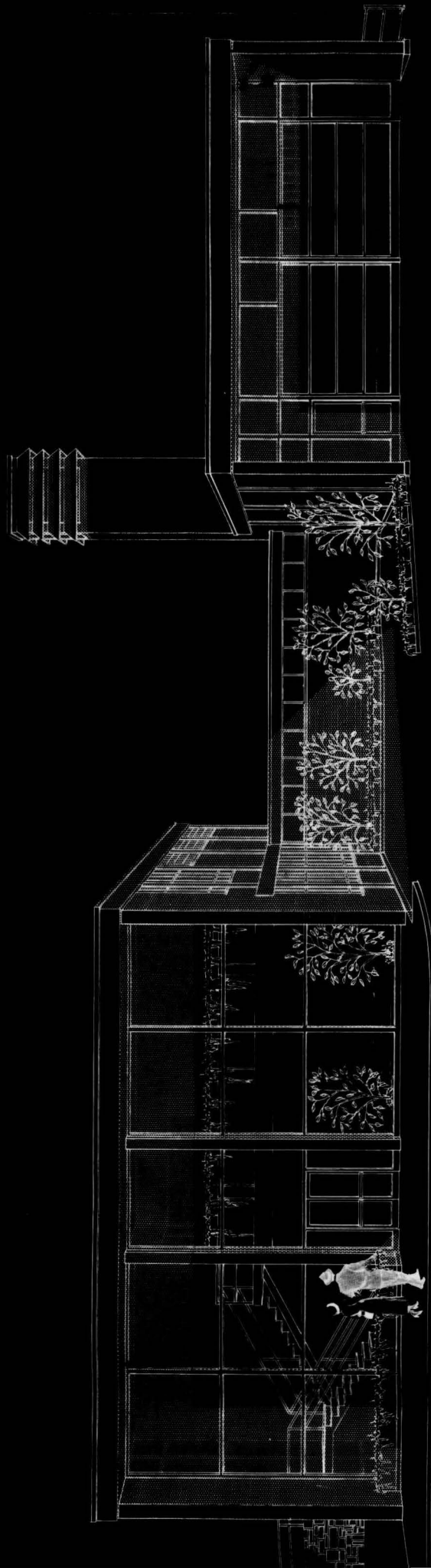
SECTION A—A



SECTION B—B



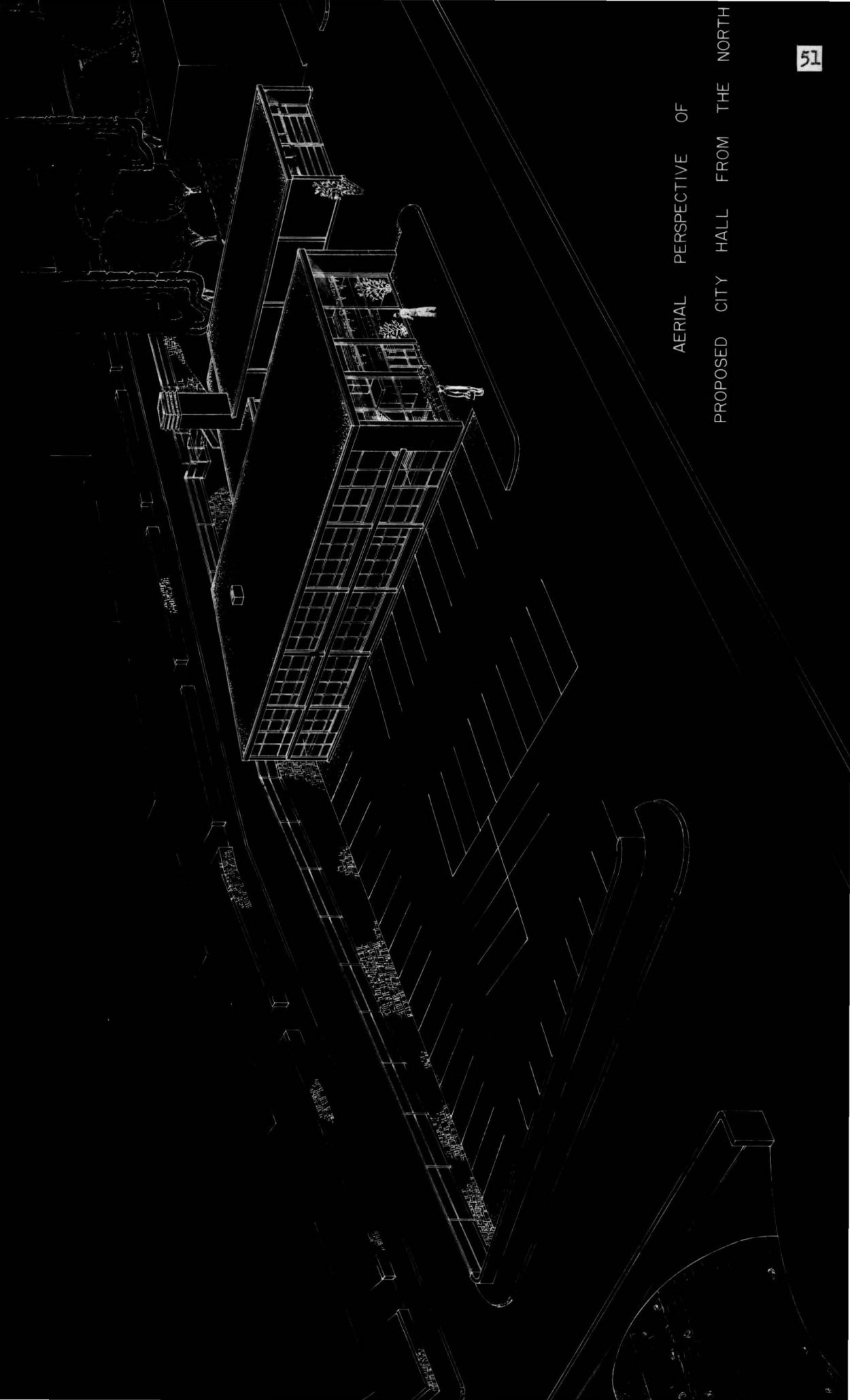
SECTION C—C



OFFICE BUILDING

FIRE DEPARTMENT

PERSPECTIVE OF PROPOSED CITY HALL FROM ELKHORN STREET



AERIAL PERSPECTIVE OF  
PROPOSED CITY HALL FROM THE NORTH

SECTION XI - CONSTRUCTION

## CONSTRUCTION

### The Substructure

The substructure consists of a series of reinforced concrete rigid frames with intermediate transversal beams supporting the concrete slab and superstructure. The rigid frames and transversal beams were spaced so as to conform to the columnar layout of the proposed city hall. Retaining walls, designed as beams, span between the rigid frames on both sides of the creek. This structure was designed in accordance with the city zoning laws which set forth the following requirements for the spanning of Elkhorn Creek:

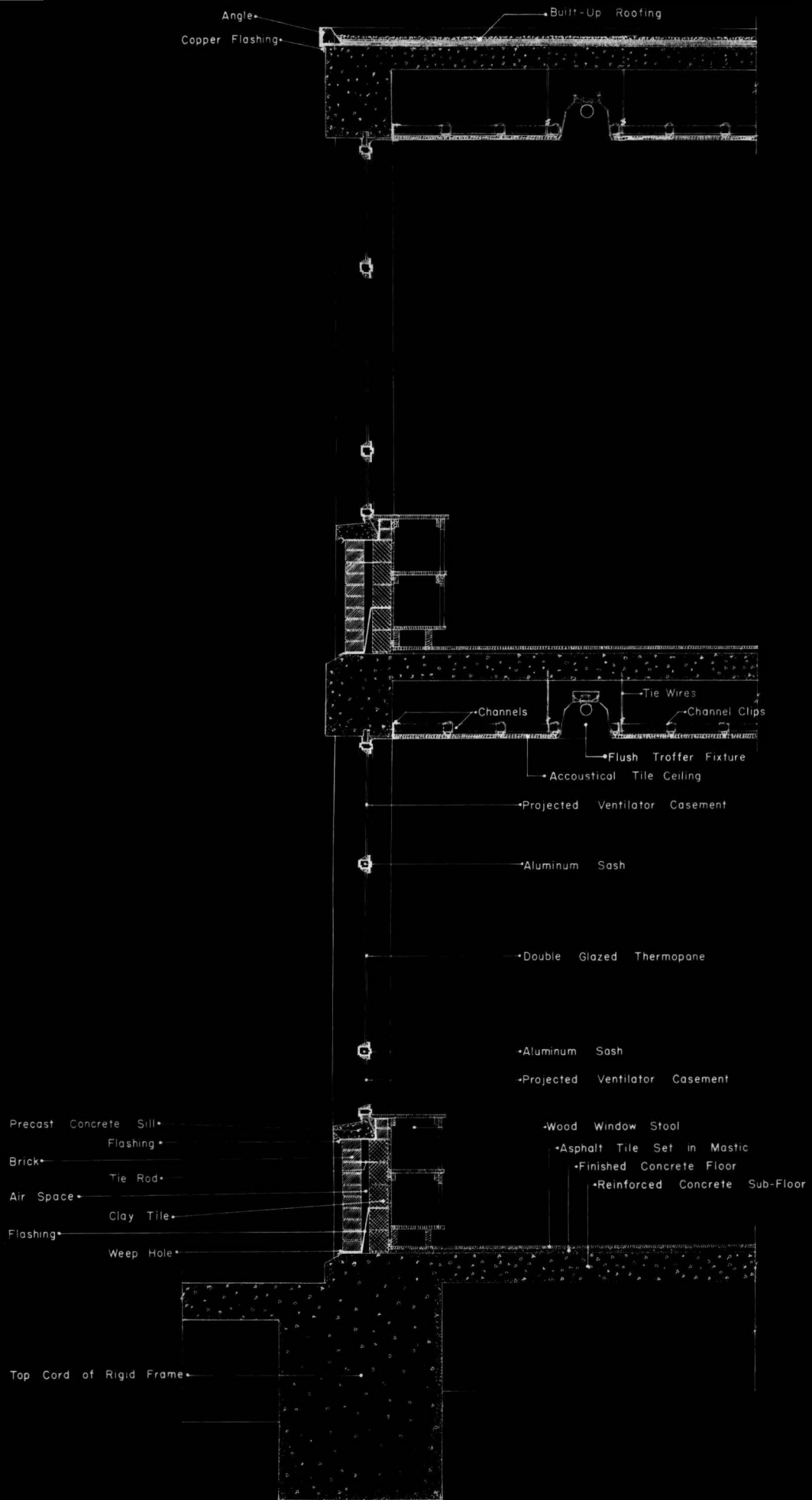
- (a) a channel width of fifty feet must be maintained;
- (b) a height of fifteen feet between the average water line and the lowest member of the structure spanning the creek must be maintained;
- (c) manholes are to be provided in the floor of the superstructure so as to insure access to any part of the creek in case of any obstruction interfering with the normal flow of the stream.

### The Superstructure

Since the substructure is constructed of reinforced concrete, it was felt that the same material should be used in the framing of the proposed city hall. This is due primarily to economic reasons. The exterior walls are constructed of hard burned brick with clay

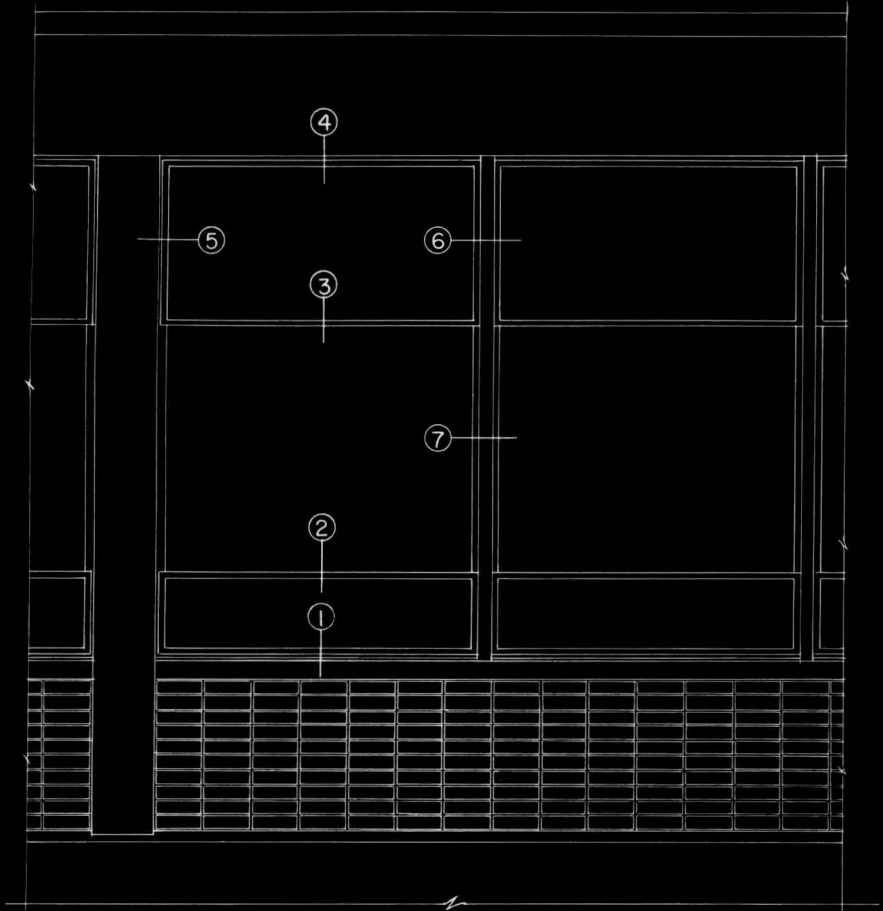
tile backing and a two inch air space between. Four and six inch metal frame partitions with three quarter inch acoustical plaster on metal lath are used throughout the structure with the exception of the jail cells which are constructed of six inch concrete walls.

All floors are constructed of reinforced concrete and covered with asphalt tile set in mastic. Hung ceilings are provided in order to allow duct space for the necessary mechanical equipment. The ceilings are of acoustical tile panels which are interchangeable with troffer fluorescent fixtures. Aluminum casement windows were chosen because of their durability and neat appearance.



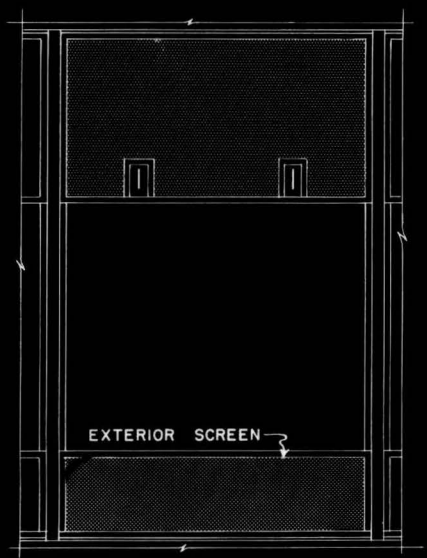
TYPICAL WALL SECTION

0 2 FT.

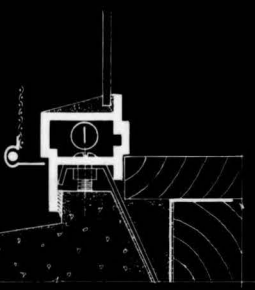
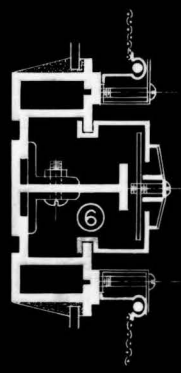
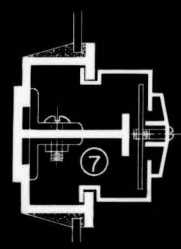
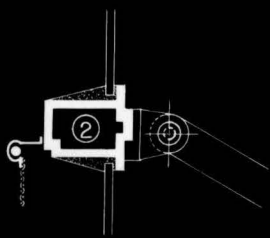
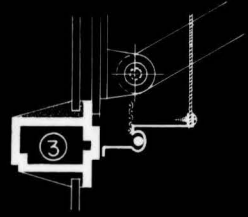
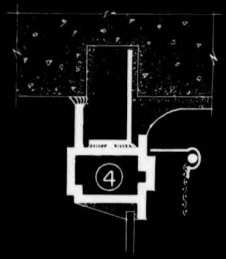
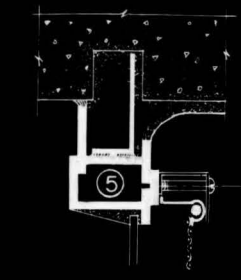


EXTERIOR ELEVATION OF TYPICAL WINDOW WALL

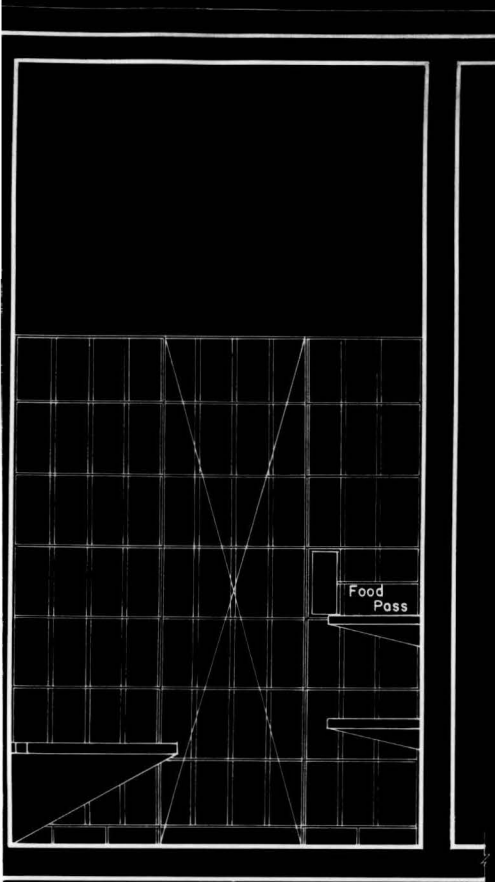
0 1/2 1 2 FT.  
SCALE OF ELEVATIONS



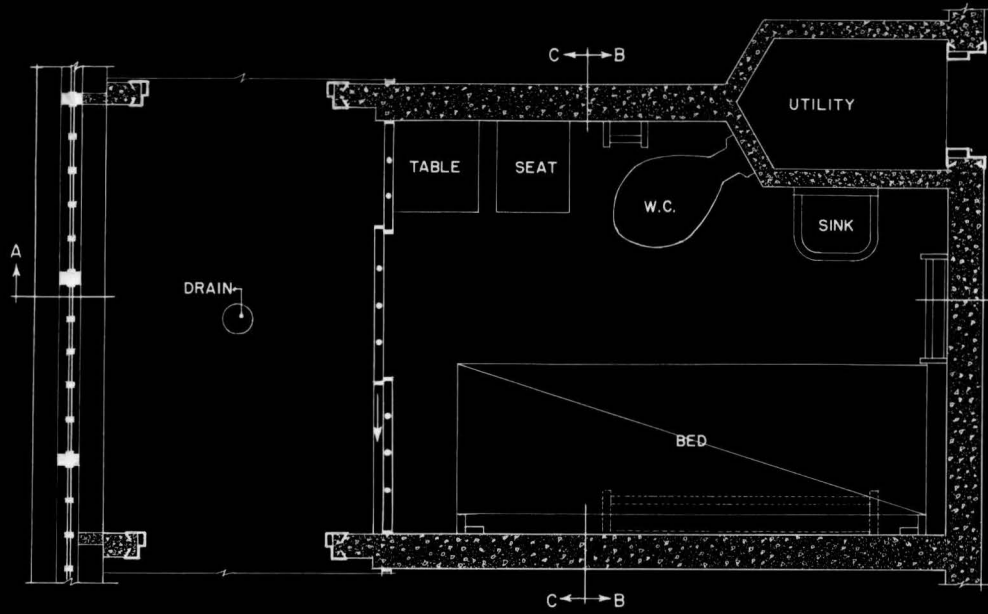
INTERIOR ELEVATION OF TYPICAL WINDOW WITH SCREEN AND BAFFLES



WINDOW DETAILS  
0 1/2 2 INCHES  
SCALE

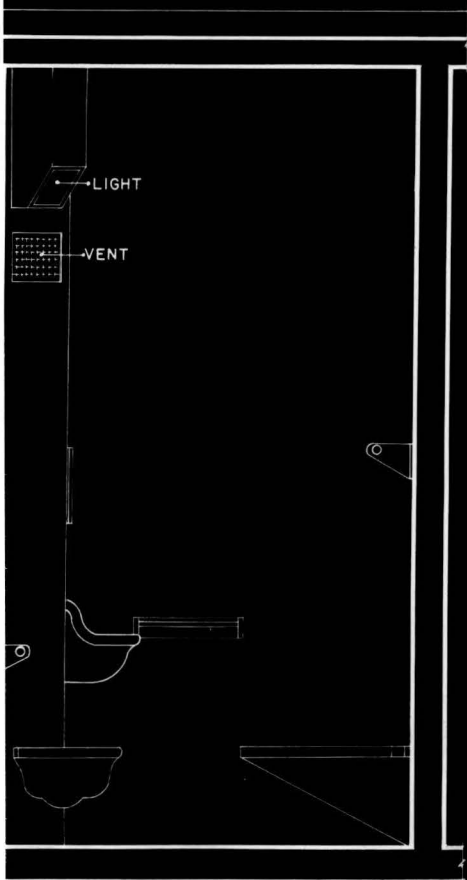


SECTION C—C



FLOOR PLAN

DETAILS OF TYPICAL CELL



SECTION B—B



SECTION A—A

SECTION XII - MECHANICAL EQUIPMENT

### MECHANICAL EQUIPMENT

The building has been designed for both summer and winter air conditioning. The distribution of air is by means of ducts above the suspended ceiling. Ceiling diffusers are located in each bay.

The centrally located mechanical equipment room will house the fan and other air conditioning equipment. This room is adjacent to the furnace room where steam heat will be supplied to the system.

Coal will be used as the heating fuel. Access to the coal bin will be from the parking area where a door and coal chute will be provided.

## SECTION XIII - CONCLUSION

### CONCLUSION

The author has made an attempt to fulfill satisfactorily the objectives mentioned in Section II of this thesis. His conclusions are embodied graphically in the drawings of the proposed city hall.

#### SECTION XIV - BIBLIOGRAPHY

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**SECTION XV - VITA**

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