

Charlestown Working Theater:
New uses for old spaces

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Charlestown Working Theater:
New uses for old spaces

Ronald John Alex

Submitted to the Department of Architecture on February 17, 1978
in partial fulfillment of the requirements for the degree of
Master of Architecture.

Abstract:

Architectural procedures for designing building
renovations can be adopted to meet the evolving needs of a
neighborhood theater group. The phases of a design process must,
at first, minimally meet the needs for functional spaces of
the theater company, without spending much money. Later
phases assume more complex expensive renovations and growth.

Thesis Supervisor.



Imre Halasz
Professor of Architecture

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Part I: Background

Explanation of Need:

A neighborhood theater such as the Charlestown Working Theater may have a lot of energy but little funding. Its future expectations are great but they cannot be accomplished through the traditional architectural construction approach of a developer financing package for building from start to finish in one step. Lacking developer financing the construction (or, in this case, renovation) of the building must take place in several phases. This kind of development requires a different approach by the architect.

This thesis assumes that traditional architectural program analysis can be adapted successfully to the needs of a building renovation project which is evolving in fits and starts according to the needs and resources of the client group. Often these kinds of renovations are undertaken without any overall architectural coordination. However, an architectural design which is inherently flexible, reflecting both the short term needs and the long range goals of the client can be an advantage for a variety of reasons. It is much easier to schedule the work projects effectively when the individual projects are seen in a larger context of a long term goal. It is also easier to set priorities for which projects should be undertaken first. It is a tool for consensus building and planning within a client group (which is usually non-hierarchical). But it also is a resource in

itself by helping to generate new funds from foundations and public agencies.

This thesis represents a modification of the more traditional building program, site analysis, need determination, design and work schedule. The architectural program in this thesis is formatted in the following way:

1. Analyze the client's concerns, interests and problems.
2. Research the history of the building use (in this case, a neighborhood theater).
3. Develop an understanding of the site environment, both physical and social.
4. Determine the specific requirements of the client, the elements necessary in the design.
5. Add a time dimension to the design program by defining "phases" of structural renovation: minimum, intermediate and maximum renovation.
6. Determine which of the required "elements" can be achieved through minimum renovation, through intermediate, and through maximum.
7. Do illustrations of the recommended design solutions for each phase (minimum, intermediate and maximum).

8. Do drawings for the final recommendations:

Phase I completed

Phase II completed

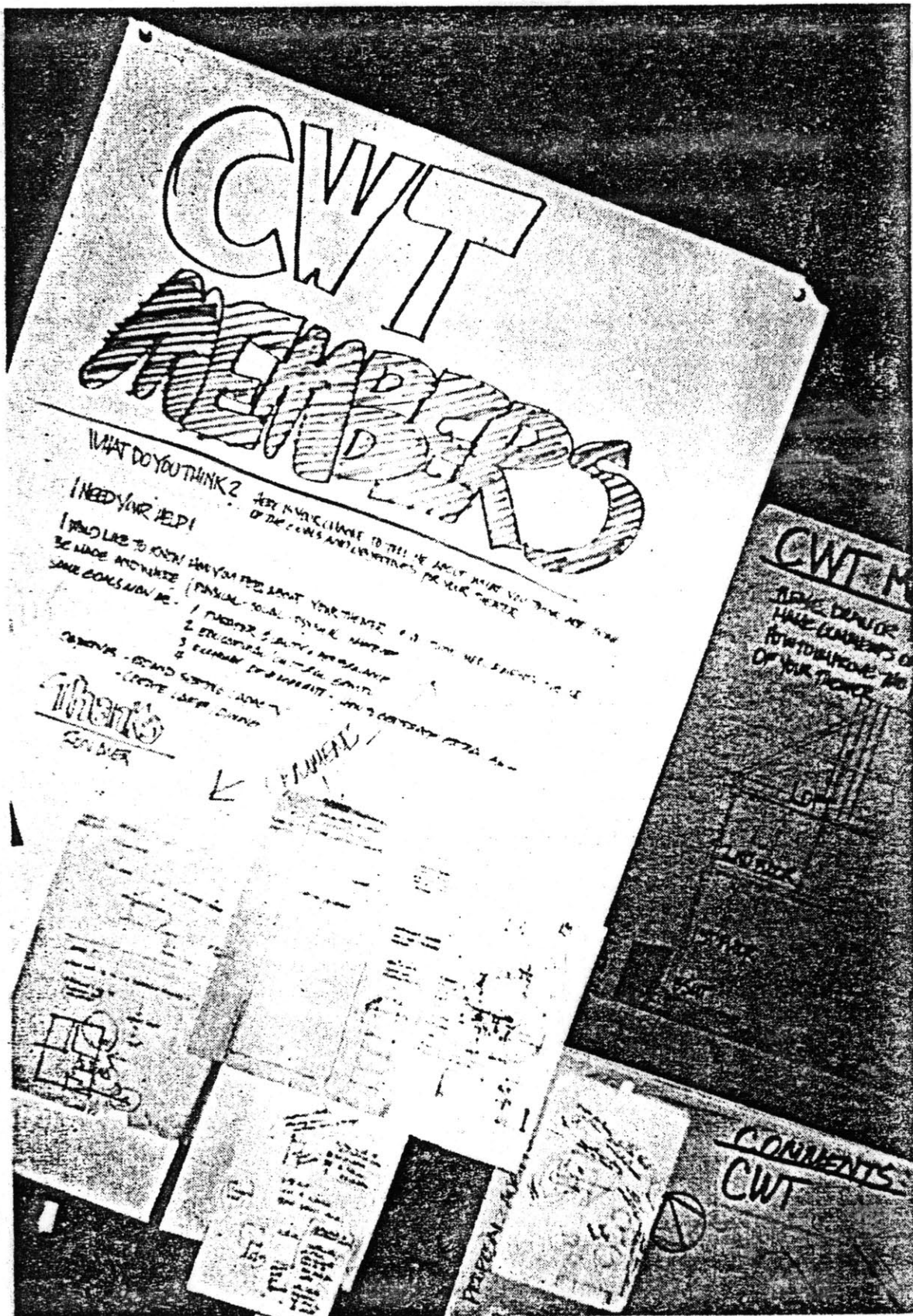
Phase III completed

Role of the Client:

One important aspect of this thesis is that it attempts to operate in the "real world," responding to the needs of an actual client group rather than being a hypothetical issue explored in an academic fashion. The client has reviewed, criticized and changed the work of this thesis project on several occasions. The client has real and immediate need for design assistance in the renovation of their building. It is hoped that this thesis will prove somewhat useful to them in the "real world." Their willingness to be patient, to offer suggestions and to treat this thesis as a professional consultation has been of immeasurable importance in bringing an academic exercise to life.

The Charlestown Environment: Social

Charlestown is a poor community. The average income of the approximately 17,000 inhabitants of the Boston neighborhood was \$8,827, in 1970, significantly lower than that of the City of Boston.



Despite the disadvantages, residents possess a strong sense of "townie pride." They are proud to live in Charlestown, and proud of the community's traditions. Although in recent years the tensions surrounding the school busing issue have hurt this proud identity, there is an air of optimism. The schisms within the Town will be repaired and the strong tradition of "townie pride" will continue. But the neighborhood is moving into a new age. Slowly but surely new kinds of people are moving into the Town. School busing will have an impact on the predominantly Irish, working class neighborhood. But so will the new young families and single professionals who are moving to Charlestown because of its neighborhood traditions and proximity to downtown.

Charlestown is a neighborhood with strong traditions but the foundations of those traditions are slowly changing as the community becomes more heterogeneous. Both old and new residents want to keep that sense of "townie pride" and the strong neighborhood identity. But the basic poverty and crowded conditions, the tensions of school busing and the changing composition of the population mitigate against preserving this identity. There are three areas of concern facing Charlestown now:

1. Community identity: Physically Charlestown has always been isolated from the rest of Boston, and other surrounding cities. This isolation

helped forge a strong identity. But now the surrounding communities see Charlestown's isolation as a self-imposed set of barriers. The community would like to keep its sense of a physical identity, but remove the barriers and make the neighborhood's boundaries a symbol of all the positive aspects of "townie pride."

2. Need for communication: Charlestown residents are badly in need of opportunities for dialogue, with each other and with other communities, opportunities that are removed from the heat and emotion of school busing. The neighborhood has been homogeneous and needs an opportunity to explore its own roots and express its particular ethnic and cultural traditions. It also needs an opportunity for dialogue to take place, for new ideas to enter and to be explored and for the neighborhood's traditions to be shared with other communities. This communication must take place if the neighborhood is to maintain its strong sense of community with new population groups moving in.
3. Urban overcrowding: Charlestown is typical as a low income, crowded neighborhood in a city. Few people have backyards, parks and overutilized,

and any available space is usually filled with refuse and broken glass, lacking any physical or visual amenities. More useable space is needed for two major purposes. First, since the MBTA moved, the large number of residents dependent on the orange line has had to walk much farther. This is a real problem for elderly living in the western part of Town who must walk from Sullivan Square, and have no place to sit and rest between the MBTA station and climbing up Bunker Hill. Second, there is a real need for meeting and recreation space for the population as a whole.

These problems are not atypical for an urban neighborhood. Yet they are remediable. Solving these problems won't make the residents rich and successful, but it will help to establish a firm bedrock for a strong and healthy community environment.

The Charlestown Environment: Physical

Existing Characteristics

Information on population and housing was derived from the 1960 and the 1970 U.S. Census. Within Charlestown four subareas Breed's Hill/Town Hill, Bunker Hill, Little Mystic and the Neck Have been defined for analysis.

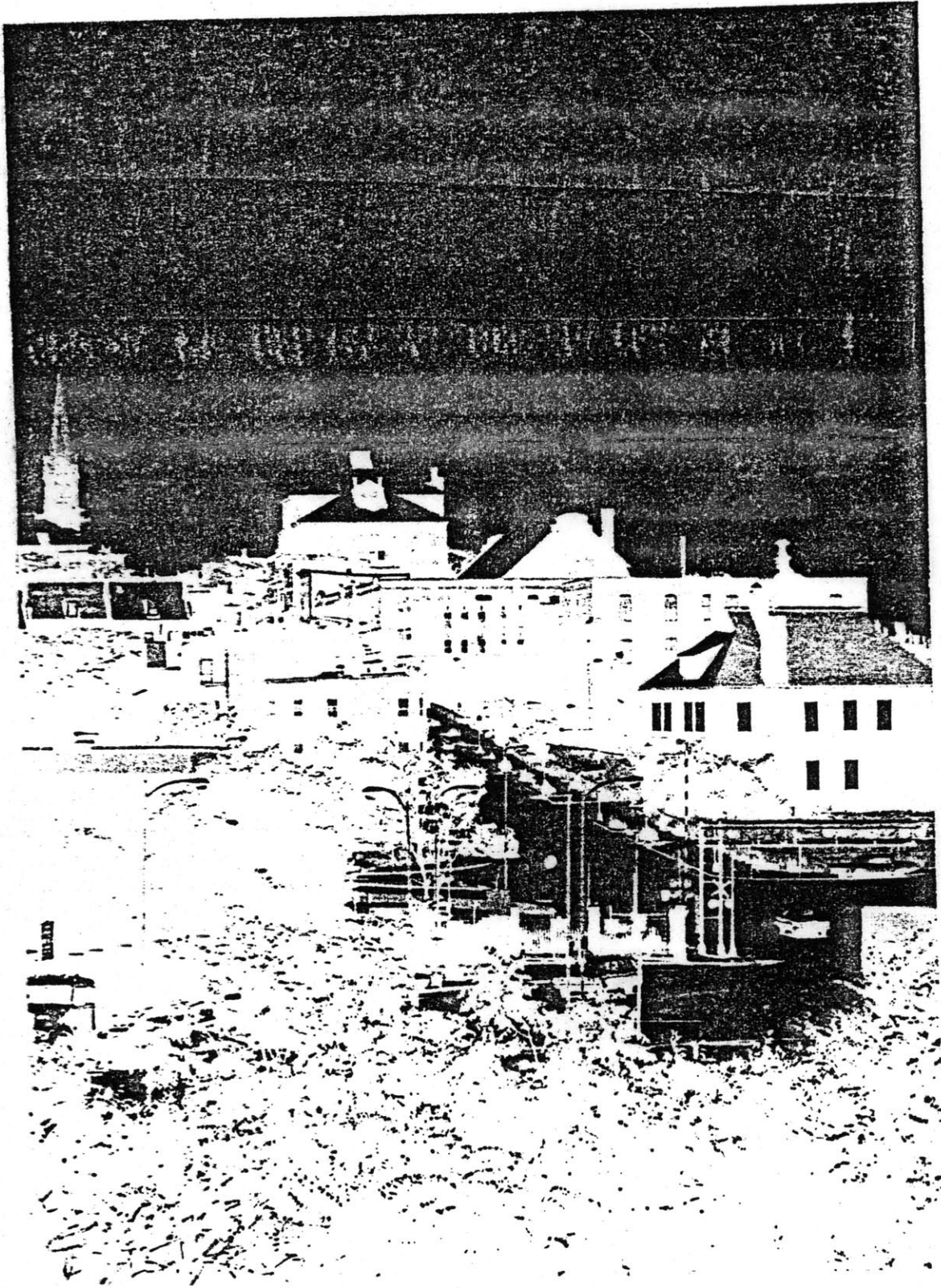
Breed's Hill

The Breeds Hill-Town Hill area is in the southern section of Charlestown and includes City Square which is the entrance to the town from Boston, the recently constructed Kent Community School and three historic parks, The Bunker Hill Monument, John Harvard Mall and the Training Field. Residential streets including Harvard, Prescott, Washington and old Rutherford are known as the town hill area. This area is listed on the National Register of Historic Places as the streets are among the oldest in Boston. Residences in the area are predominantly three and four story brick rowhouses built in the nineteenth century. In recent years, the Breed's Hill-Town Hill area has experienced the greatest influx of new residents coming into Charlestown. Many of the larger houses in the area, which had been converted into rooming houses during the periods of booming activity in the naval shipyard, are now being converted into one, two, and three family dwellings. Although considerable housing rehabilitation has occurred in the area since the inception of the Urban Renewal Program of 1965, over one-third of the units still needed rehabilitation in excess of \$1000 in 1973. Since 1973 however, some of these units have been rehabilitated under the continuation of the Urban Renewal Program and the City's Housing Improvement Program which was initiated in 1975. It is expected that housing rehabilitation in the area will be further encouraged by the recent demolition of the elevated structure on Main Street and by the anticipated redesign of City Square.

Bunker Hill

The Bunker Hill area is located to the west of Breed's Hill-Town

View of Bunker Hill



Hill. It includes the traditional center of commercial activity, Thompson Square, as well as the site for the new shopping center, the Bunker Hill Community College, the new library, the Ryan and Doherty Playgrounds, the MDC skating rink, the recently completed low and moderate income development, Mishawum Park, as well as a variety of industrial uses. The Mishawum Park development was not completed when the 1970 census was taken and little information is known on today's population in Mishawum Park. The development contains 327 units including 60 for the elderly. The population is estimated at about 1,400 people including 850 children.

The Bunker Hill area contains most of the one and two family dwellings in Charlestown. Most of the residences are two, three and four story rowhouses, predominately brick in the southwestern portion, and wood frame in the northeastern portion. The majority of the buildings are in good or fair condition. However over one third are estimated to be in need of rehabilitation in excess of \$1000. The Bunker Hill Sub-area Showed the strongest rate of participation in the Housing Improvement Program with 63 cases in 1975-76. The demolition of the elevated line on Main Street and the continued availability of financial assistance should spur an increase in both residential and commercial rehabilitation.

Excluding Mishawum Park, the 1970 Census shows the Bunker Hill Area to be rather stable in that 59% of the people in the area resided in the same house five years or more. The housing units in the area are 45% owner occupied. The area showed a 22% decline in population from 1960 to 1970 but the new residents of Mishawum Park more than offset this loss. The majority of the working population in the Bunker Hill area are in the clerical and service industries.

The Neck

The Neck area is the extreme western section of Charlestown, physically separated from the rest of the town by Cambridge Street and Rutherford Avenue. It included some industrial land, some auto-mobile oriented, commercial development along Cambridge Street and a very small residential neighborhood. The dominant housing type is detached frame one and two family houses. There are also a few six-unit apartment structures and several three family houses. The majority of the area's housing is well-maintained and in fair condition with less than one third of the units requiring rehabilitation in excess of \$1000 in 1973. Because the Neck was not included in the urban renewal project boundaries, it has not been eligible for federal rehabilitation assistance. Interestingly, only two homeowners took advantage of the financial incentives available to rehabilitate their houses under the Housing Improvement Program in 1975-1976. The Neck has a relatively high proportion of owner occupied units (49%), and (53%) of the areas population have lived in the same unit for five or more years. The area has what might be called a moderate housing market, with no significant increase in resale values or rent levels in recent years. The majority of employed individuals residing in the Neck are blue collar and clerical workers. The Neck has a fairly high proportion (30%) of families with incomes less than \$5,000. The area experienced a 47% loss of population between 1960 and 1970 because of the demolition of many of its residential structures necessitated by construction of the new Orange Line and Sullivan Square Station.

Little Mystic

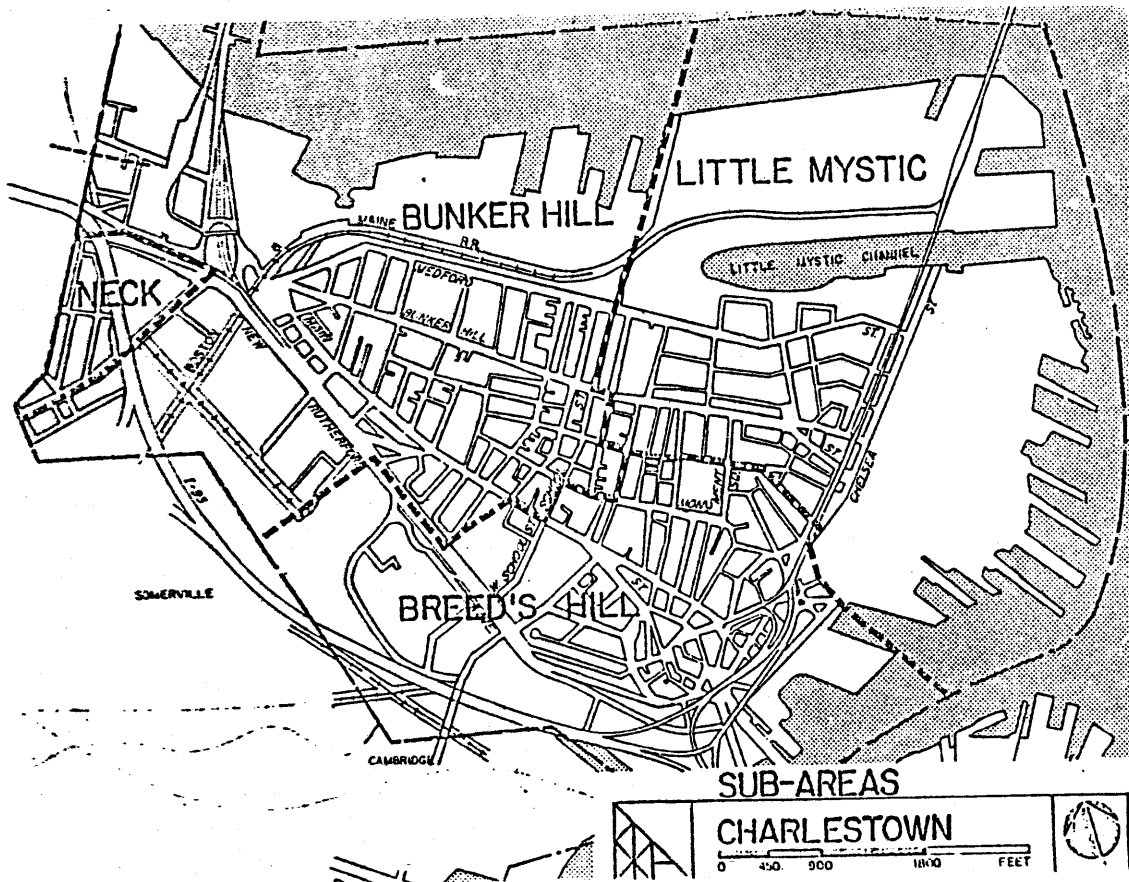
The Little Mystic area is in the northeast section of Charlestown. It contains the former Naval Shipyard, some port related uses including Boston's primary container port, the Bunker Hill Housing project, the new athletic complex, the new Charlestown High School, and

the Charles Newtowne housing development which was only partially occupied at the time of the 1970 census. Outside of the housing development, the area's residences are predominately two and three family wood rowhouses. The majority of these structures are in fair to poor condition with evidence of deterioration concentrated in the vicinity of the Bunker Hill housing project. Approximately, one-third of the area's dwelling units are in need of rehabilitation in excess of \$1,000.

In spite of these conditions the Little Mystic area shows certain signs of residential stability. In 1970, 53% of the population had resided in the same house for five years or more. Only 4% of the housing units are owner-occupied but this is because of the presence of the housing project. Little Mystic showed a population decline of 40% from 1960 to 1970. However the new residents of Charles Newtowne, numbering close to 1,350, including about 800 children, nearly replace the population lost in the past decade.

Little Mystic has retained its character as a family neighborhood with employment primarily in blue collar and clerical work.

Four sub-areas of Charlestown



Site Description:

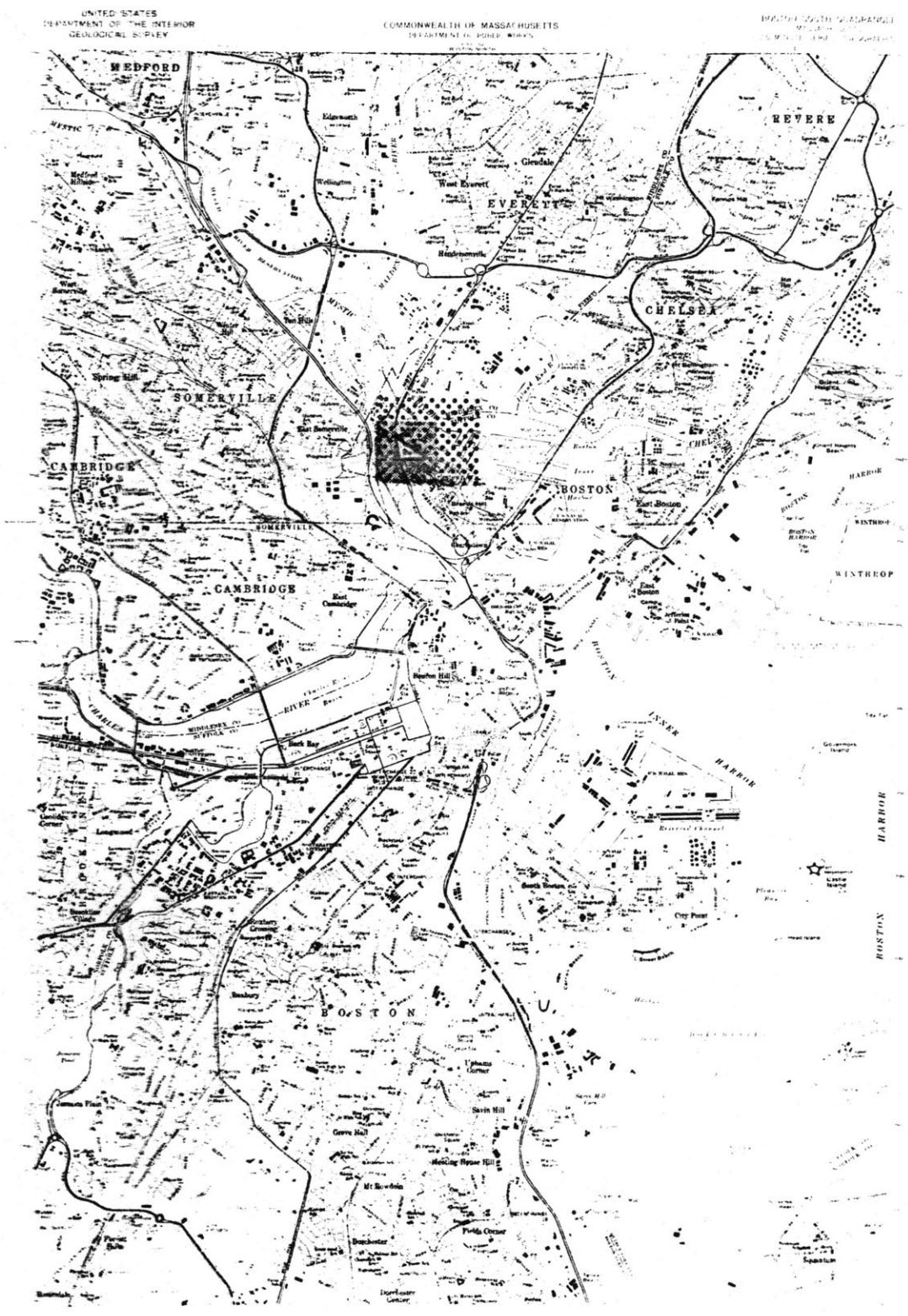
The general area studied is the triangular block bounded on the North, West and South, respectively, by Bunker Hill, Main, and Charles Streets. It is bounded on the East by Bunker Hill Elementary School and bisected by Charles Street Place. The triangle is 48,300 square feet. The theater is 2,652 square feet. It is located at the junction of commercial, industrial and residential uses.

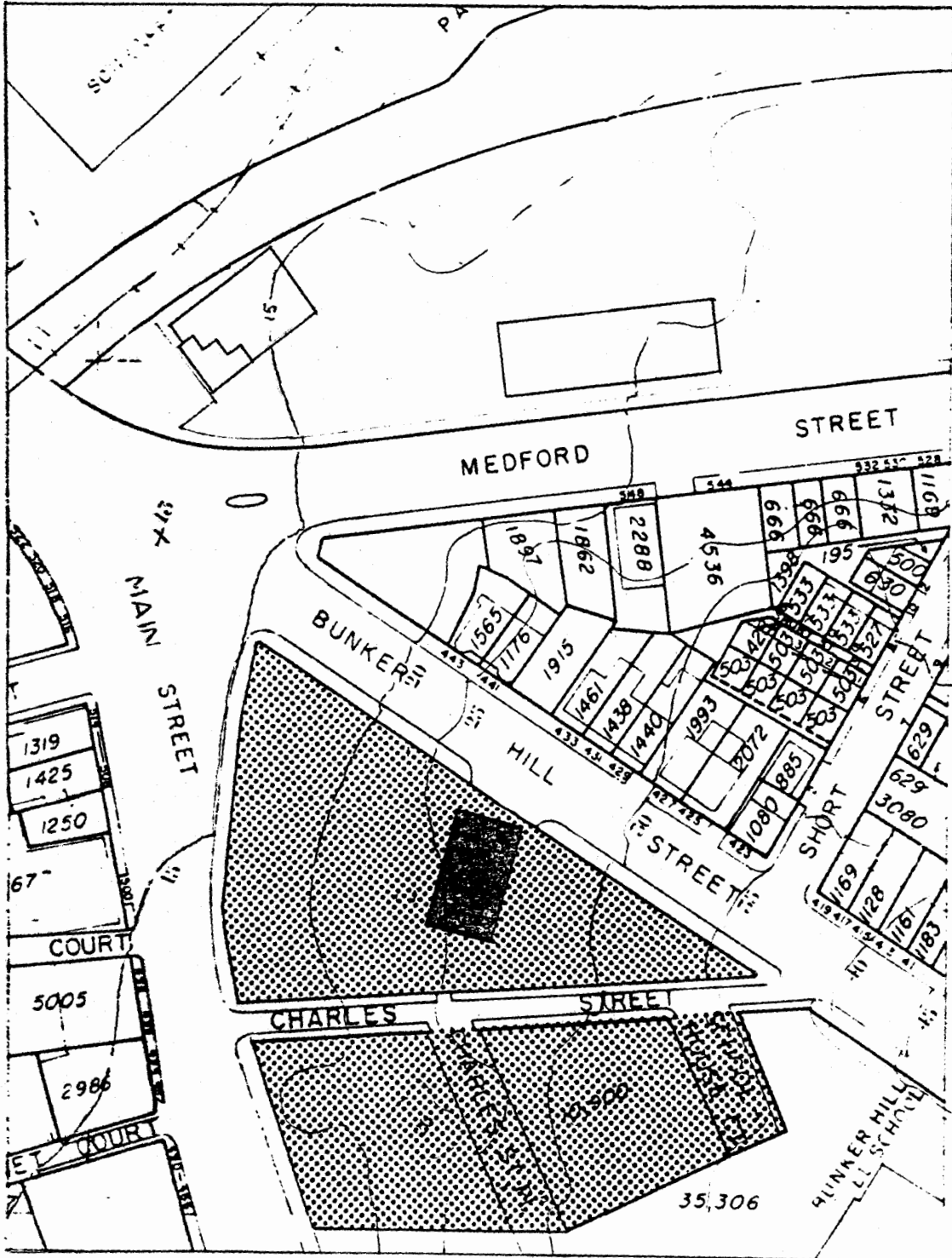
Central Site Issues and Development Goals:

The general aims of the physical development proposals of the Charlestown site are:

1. To expand and vitalize the Charlestown community theater within the existing core of Charlestown.
2. To provide new, culturally distinctive activity that will diversify the current retail mix and not compete directly with, nor over-saturate existing businesses.
3. To create a strong physical image both within and to the outside community that will improve yet respect the physical environment, enhance its cultural spirit, and serve as a sign that something is "happening" in Charlestown.

Boston, Charlestown and surrounding communities





4. To provide cooperation for the residents of Charlestown.
5. To increase the development capability of the Charlestown Working Theater to establish a track record.
6. To serve as a training and starting ground for new theater members (adult and children) by continuing to provide regular instruction in arts and theater workshops.
7. To promote employment opportunities in occupations appropriate to the work force associated with art.
8. To help restore physical character of the North edge, and Main and Charles Streets.
9. To preserve, improve and expand the lands along the North and West edge and link them together with paths and public access network.
10. To create pedestrian and bicycle linkages through the site to other land use components in the area.
11. To provide an effective, secure and enjoyable circulation for elderly and handicapped persons.
12. To provide parking.

The Charlestown Working Theater is an open organization of people working at making the theatrical experience an important part of the cultural life of Charlestown. We produce plays with social themes so that we may better reflect on the life lived in our community. We are not designed for profit, nor to make art for art's sake. We believe there is a quality to life which can be felt and understood through a theatrical process that involves a community of people participating in a world of their own making.

CWT Philosophy

Everything about the Charlestown Working Theater reflects this philosophy. The plays the group performs reflect this. The way the plays are chosen reflects this. The process for managing the organization reflects this. Even the way the building is maintained and productions are put together reflects this philosophy of melding the lives of individuals and a community with the process of theater and art. The theater encourages people to work together toward producing a play, but in so doing the individuals discover more about themselves, their lives in Charlestown and in society as a whole.

In keeping with this philosophy plays for production are chosen according to their relevance to community life. Most of the plays performed so far by the company are based on life in a working class neighborhood or small town. In choosing a play for production several alternatives will be suggested to the company at a general membership meeting. The merits of the plays, their background, quality, and relevance to Charlestown will be discussed. Members will read the various plays and reach a consensus through a general meeting process where everyone has an opportunity to participate equally. This process usually involves between 15 and 20 people.

The organization's management and the maintenance of the building are a group effort of the members of CWT. Anyone is a member who contributes their time and effort to the theater. The level of commitment of the members, the rate of growth of the organization and the demonstrated ability of the people to maintain and improve the

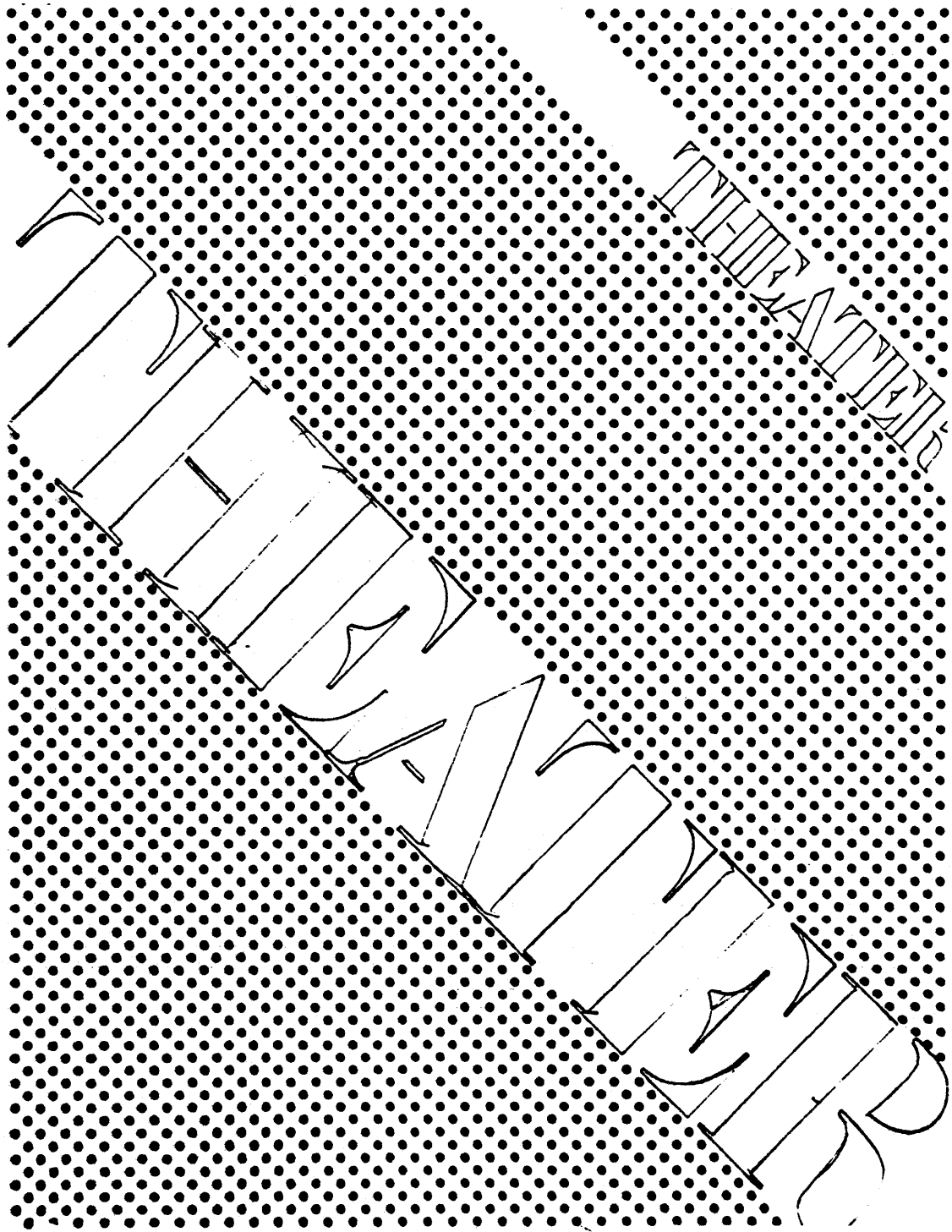
building are testimonies to the success of this philosophy. Plays are produced, the company grows and the theater improves because people are rewarded for their participation by the development of a new sense of themselves.

Description of the Charlestown Working Theater: History

In 1970 Peggy Ings, then a theater student at Emerson College, moved to Charlestown. She brought with her a concept of theater that would be a part of the life of people in a community. Her idea evolved and in 1972 she began negotiations with the City of Boston to use an old fire barn in Charlestown as the site of the theater.

After little success, she went to England for a year on a grant from Rotary International to study community theater. In England she found community theaters were thriving. In a population the size of Boston there would be 120 successful companies. In Boston there were about ten. When she returned to Charlestown she renewed her efforts to acquire the fire barn, and this time met with success. In 1974 clean-up work began on the site and in 1975 the Company opened its first production. Since that time the Company has pursued an increasingly ambitious schedule of performances, projects and workshops.

The first play was "Lottery Day," an adaption from Shirley





Jackson's short story "The Lottery." The play was about a small town with a strong sense of pride in its traditions, including the tradition of stoning to death one of its citizens every year at a lottery. The play opened in the Fall of the first year of court-ordered busing when emotions in Charlestown were at a peak. The play was well received by the community with a 'full house' every night.

One of the most recent plays, "Factory Ping Pong," was a complete example of translating the theater's philosophy into reality. The production began as an acting workshop which focused on the participants' acting out current events that related to their own lives. It evolved into a group process where participants discussed theater, read about factory life, reviewed their own experiences and everyone participated in writing scenes expressing their thoughts. These scenes were edited and rewritten by the group, eventually emerging as a script. The play was written, acted and directed by the entire group.

Between "Lottery Day" and "Factory Ping Pong" the theater has been very active, as reflected in the following chronology:

- 1975, Fall -- "Lottery Day"
- 1976, Spring -- "The Wedding" and "The Exception and the Rule" two plays by Bertolt Brecht
- 1976, Summer -- "Spreading the News" by Lady Gregory
- 1976, Winter -- "The Incredible Jungle Journey of Fenda Maria" a play for children
- 1977, Spring -- "Factory Ping Pong" an original script of CWT

CWT performances



Charlestown Working Theater Long Term Expectations/Potential:

Since its inception the Charlestown Working Theater has won a tremendous amount of enthusiastic support from the surrounding community. Its dynamic capacity for growth promises a future where creative new programs are tried and whole new segments of the city's population, until now unserved, will become involved in this exciting community based art and theater concept.

Members of the Charlestown Working Theater are actively interested in pursuing the full potential of this community organization. There is a vision shared by people that become involved in the theater. It's reflected, generally, in the theater's philosophy. In the next five years the theater expects to expand the range of programs it offers, to develop solid links with more art, cultural and educational organizations throughout the Boston region, and to increase the opportunities available for individuals to discover more about themselves by learning job related skills and by developing an ability for self-expression. Some people in the community are interested in starting dance classes on the second floor of the theater. The teachers are ready, the students are interested, and the program awaits some financing for minor physical rehabilitation. Many people have expressed an interest in developing a dark room in the building's basement. This project, too, awaits financing -- for proper plumbing connections. Over the past years the theater

has offered a number of workshops for children and adults. An adult workshop started last winter to dramatize newspaper articles and current events, ended in the spring by writing and producing an original play about roles and relationships surrounding factory workers' lives. Children's workshops also often lead to actual stage productions and the kids are involved in every phase of the development. These workshops could be expanded and scheduled on a regular basis. Again, the theater awaits financing to subsidize, in part, the staff time, which for the last few years has been donated, absolutely free, by theater professionals. The workshops, the dark room, the dance classes are all examples of the many programs which the Charlestown Working Theater is looking forward to developing over the next few years.

And although "job training" is not a specific purpose of the theater, it is a very real by-product. Individuals working together donating their time set up the lights, build the sets and rehabilitate the interior structure. Some of the effort is donated by skilled electricians and carpenters who have trained others to enter these fields.

There are many potential affiliations that the Charlestown Working Theater can make with other art, cultural and educational organizations in the Boston region. These affiliations would not only strengthen the resources available to the Charlestown community, they would also add a new, important dimension to these other organizations throughout the

metropolitan area. One of the most potentially exciting linkages that the Charlestown Working Theater is interested in pursuing is with Boston's public schools. In preliminary discussions, school officials in the neighborhood have shown an enthusiastic interest in using facilities and programs available through the Charlestown Working Theater to augment their arts curriculum. Classes could study theater and develop actual productions with the assistance of the Charlestown Working Theater staff. Eventually this kind of special program could be made available to schools throughout the area. Aside from its use as a supplement to regular public education, the Charlestown Working Theater sees itself as a city-wide cultural facility with after school programs for children and a variety of workshops in both theory and practice of theater for adults. CWT hopes to use the theater as a hub and expand its activities into the various other art forms: drawing, painting, music, photography, dance, etc. that are associated with theater and branch off from it.

One of the most important factors in reaching the CWT's full potential is the development of the outdoor use spaces surrounding the structure. These spaces are significant for two major reasons. They could provide additional activity space to be used for concerts, art shows, displays and concessions. The spaces, if properly designed and developed, could also contribute to the community environment as an urban art form. There are many exciting ideas that the Charlestown Working Theater has for fulfilling this potential.

The Charlestown Working Theater has had a productive past and looks forward to an exciting future. In the next few years it hopes to take its place as a major institution in Charlestown, contributing to the personal growth of individual members of the community, attracting resources from throughout the area to enrich the community life, adding a new art form to the community to increase the local pride and bringing a strong, positive sense of the Charlestown heritage and tradition to the metropolitan area as a whole.

Project Description: Beneficiaries

There are three main categories of beneficiaries from this project:

1. Charlestown residents: This project improves the visual image of this "gateway" and therefore helps restore the sense of pride of Charlestown residents. It also functionally benefits the elderly by providing a rest space on a frequently walked route to and from Sullivan Station. And it benefits all residents by providing an additional useable recreation, exhibition space in a very congested community.
2. General public: It benefits the general public by converting a blighted area into an attractive urban scene. And it provides a neutral meeting ground, drawing together diverse ethnic and cultural groups to dialogue.

3. Arts community in Boston: Located on a major transportation route, this development would expand the space available for art and cultural events for the entire city. In addition, the Mass. College of Art will be located at the other end of the town. This project would make exhibition space available for the college, helping to integrate the work of the students with the lives of local citizens.

This project increases the individual's pride in the neighborhood, expresses the town's identity, provides useable open space and contributes a potentially important art facility to the city as a whole.

Neighborhood Theaters: The Big Picture:

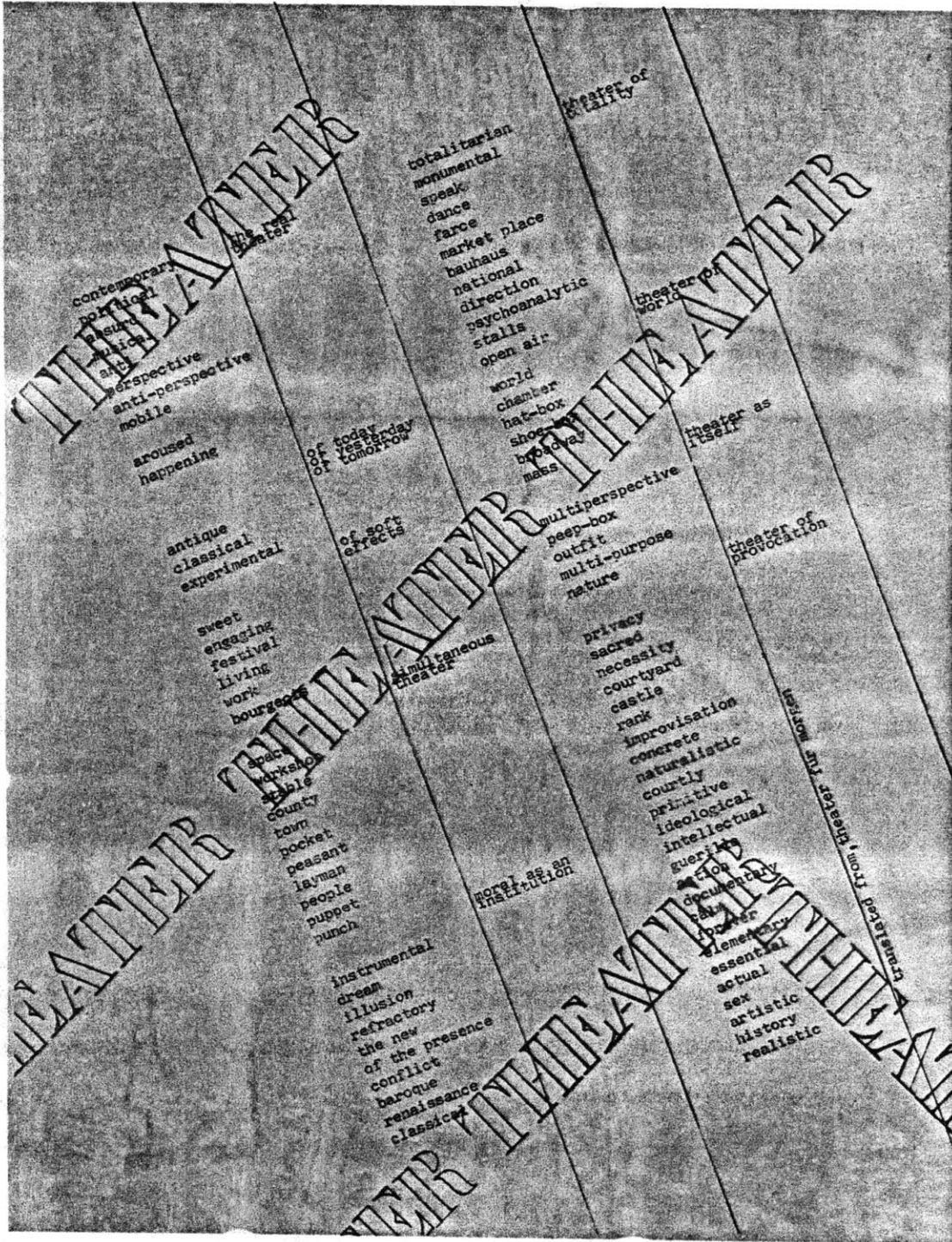
In recent years there has been a tremendous resurgence of interest in theater. But this growing interest is not directed toward the big, expensive "Broadway" productions. The interest, instead, is in neighborhood theaters. These theaters are bringing the art and experience of theater to countless people who may have never before seen a play. These theaters are not only less expensive and more intimate than the "uptown" theaters, but they also are much more likely to try to reflect the reality of life of the people in the surrounding neighborhood

England has enjoyed this resurgence of neighborhood theater for several years. The Hall Green Little Theater in Birmingham, England is an excellent example. In 1950 a local group of would-be actors got together and began their theater by digging a hole in the ground for the cellar. Ten years later the building had been completed, entirely by unskilled, unpaid labor. This is only one of several different neighborhood theaters thriving in England.

Neighborhood theater in the United States has an interesting and controversial history. During the Depression the Work Projects Administration (WPA) funded many out-of-work professional actors to put on plays and run theaters in communities across the country. Many of the plays were specifically chosen to reflect the problems facing the unemployed. The plays were successful and very well received by just about everyone. Unfortunately members of the Congress felt the neighborhood theater was relating too well to contemporary issues and having too much impact on people so the funds were cut and the theater experiment was killed.

The Charlestown Working Theater follows in the same mold as the WPA experiments with theater during the 1930's. It is like many other theater groups emerging during the 1970's in that it fills a need for people to discover an artistic medium to express their interests and lifestyles. Many of these theaters emphasize a political ideology,

others emphasize an identity with a particular community. The CWT cuts across both the political and the community emphasis.



Part II: Design

Process

My preliminary concept of attempting to organize the range of flexible use spaces of differing form , use, and density might be referred to as a hierarchy of spaces. This hierarchy allows the designer to incorporate certain necessary functions into identifiable uses. A list will be made of these functions and made into an hierarachy generated from the conditions

- below:
- 1 Catalogue the variety and types of conditions occurring internally/externally
 - 2 Form and movement patterns
 - Characteristics;
 - a number of people associated with space
 - b way in which it is used
 - c images and/or references to which it corresponds

To arrive at a solution or conclusion:

- 1 Generate design alternatives from the Form and movement patterns.
- 2 Work final solution into final form
- 3 Cite observations and conclusions:
 - a example

Does the physical form enable/encourage integration/identification with the performance?

Element	Types of conditions	form and movement way in which it is used	no of people	references
stage area	used in theater	theater in many forms	175	large space
multiple use	"	recitals, ballet, pantomime, chorus, dancing	"	"
sitting area	"	"	"	"
play space	"	This space will appear in different forms as use changes	2	small space
dressing areas	"	for actors, children	25	v sizes
storage space	"	costumes, flats, lighting equipment, junk. enough space for four companys	4	"
design workshop	"	tackboards, model building bench, two work tables, fitting area, cabinets, storage shelves	8	"
workshop, construct painting	"	scenery designs, lighting sets, wood and canvass ptg cutting tables, 3'x6' ironing area, washing area	8	"
loading area	"	loading and receiving, to storage, const	4	medium space
rear projection	"	used in certain theater proformances	1	small space
lighting system	"	provides theater lights and special effects	2	"

Lighting equipment	"	instrument, lamp, and accessory storage	2	"
Lighting rigging	"	usefull in Phases II, III	4	overhead movement
Seating	"	two or three types of seating for specific performances	175	multi-movement
Ticket office	"	purchase tickets, etc.	10	small space, med
Theater Marquee	"	information	3	"
Management offices	"	secretarial, business, etc.	6	"
Sight lines	"	used in designing seating positions and elevations for certain performances	0	-
Loft, Phase I	rental	commerical space	15	large space
Lobby	used in theater	seating, relaxing, coat checking, writing, social	15	medium space
Green room	"	actors relaxing, reflecting	12	"
Coat room	"	storage of visitors coats, max 100	2	small space
Coffee area/ cafe	"	nourishment, social	20	medium space
<u>circulation</u>				
aisles	"	entry and exit, circulation to stage	all	large space
entrance	"	means of getting to theater area, lobby,		small space

Egress	"	route to depart from building	all	-
Stairs	", and rental space	vertical movement to all levels	"	-
Safety and Health				
Heating and ventilation		to provide 70° temperature and adequate ventilation	all	-
Plumbing	"	sinks showers toilets	6	small space
Electrical	"	provide energy to run machines, lighting, etc. 220v-110v	-	-
Fire and building code		safety protection of occupants from natural or man made disasters	all	-
Acoustics	"	to arrange space and materials to receive or exclude certain tonal qualities		everywhere
External				
Landscaping	ground	provide shade or cool areas to building in summer, provides wind barrier in winter	-	-
Lighting	"	safety, focus	all	-
Parking	"	accommodate patrons	75 autos	large space
Assembly/performance	"	provides for outdoor activities	100	large space

Analysis of Site

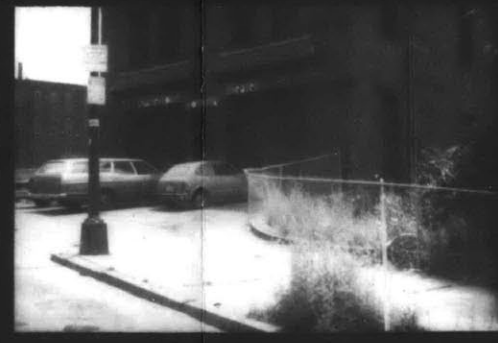
Site photographs

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1A

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RES. (Cont.)	COMMERCIAL	ALTERNATES
AREA IN THOUSAND SQUARE FEET	PARCEL NUMBER	AREA IN THOUSAND SQUARE FEET
22.4	C1	A1
3.1	C2	A2
3.6	C3	A3
3.3	C4	A4
2.0	C5	A5
0.4	C6	A6
0.8	C7	A7
0.8	C8	A8
22.0	C9	A9
29.2	C0	A0
1.6		A10
1.0		A11
46.7		A12
11.3		A13
7.2		A14
2.5		A15
41.6		A16
10.4		A17
4.0		A18
15.6		A19
15.6		A20
0.8		A21
0.8		A22
7.0		A23
1.8		A24
7.6		A25
1.7		A26
2.4		A27
1.1		A28
2.0		A29
1.3		A30
0.8		A31
0.8		A32
0.8		A33
0.8		A34
4.4		A35
8.0		A36
6.8		A37
4.8		A38
		A39
		A40
		A41
		A42
		A43
		A44

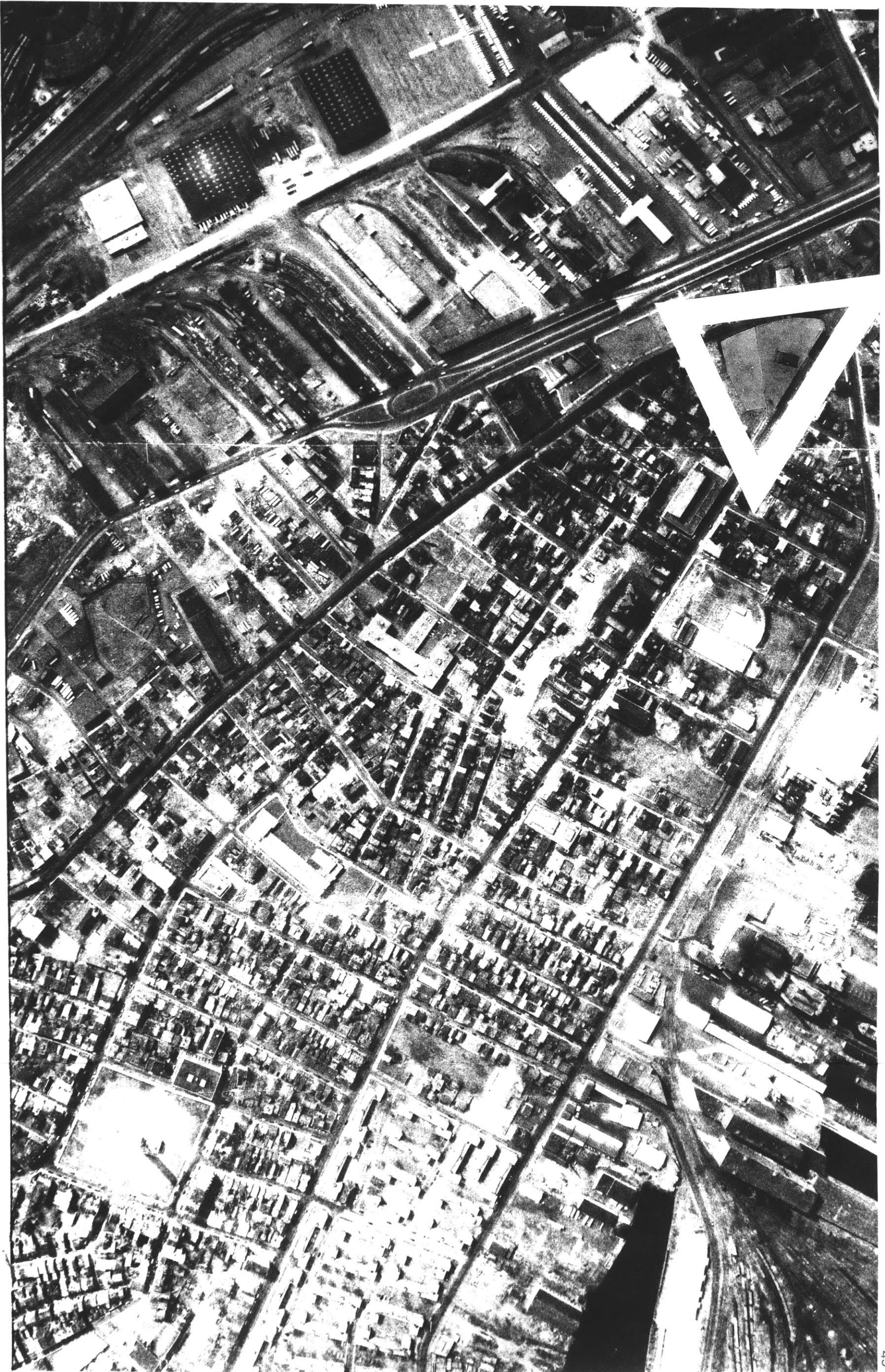
RESIDENTIAL
COMMERCIAL
INDUSTRIAL
PUBLIC
INSTITUTIONAL
ALTERNATES
PROJECT BOUNDARY
UTILITY EASEMENTS
DISPOSITION PARCEL BOUNDARY
PARCEL NUMBER

DISPOSITION PARCELS

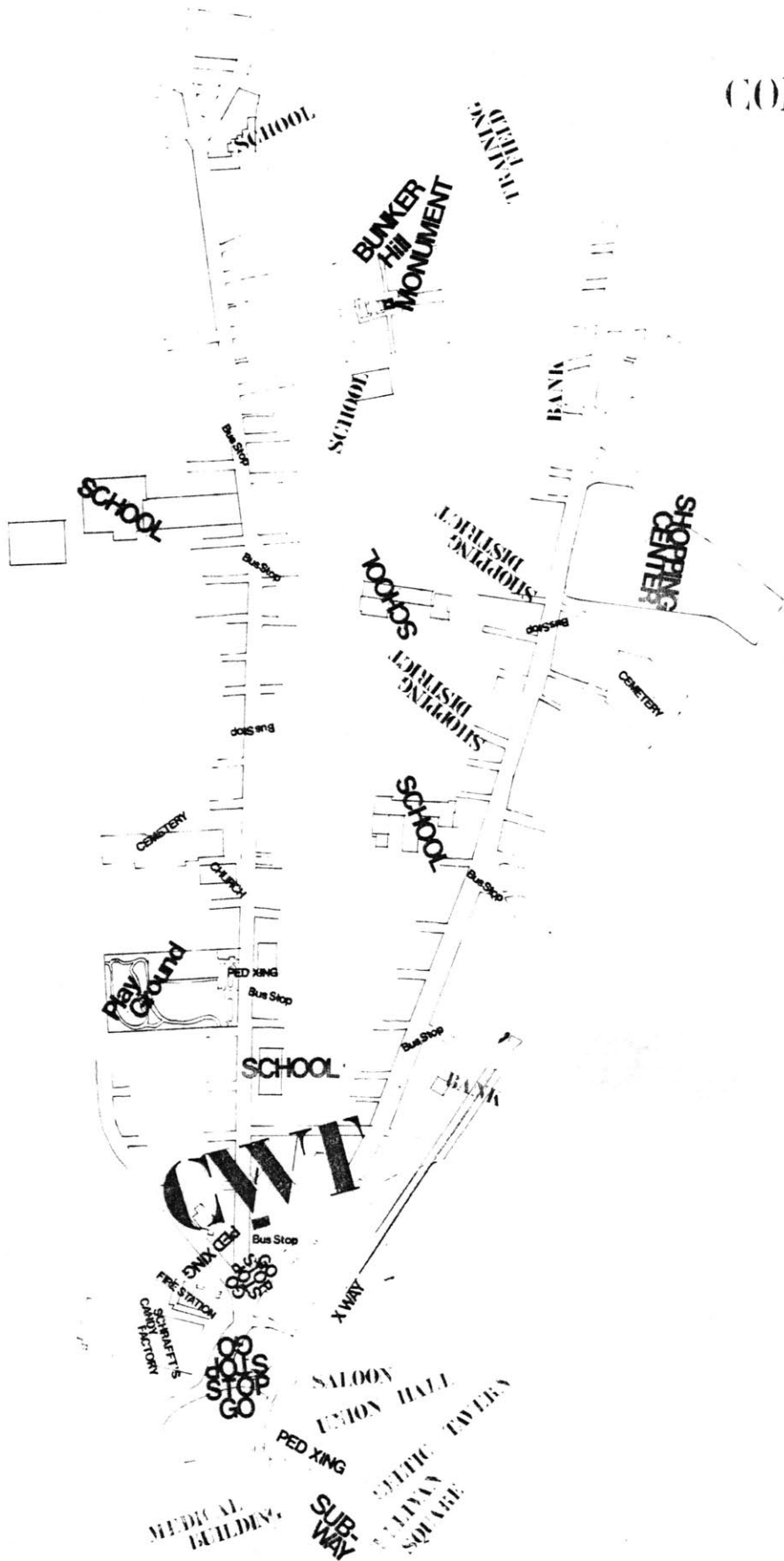
DESIGNED BY	REVISIONS
CHECKED BY	CODE NO.
SCALE	FILE NO.
DATE FEBRUARY 25, 1965	MAP OR

Charlestown Urban Renewal Area R-55
REDEVELOPMENT AUTHORITY

R
C
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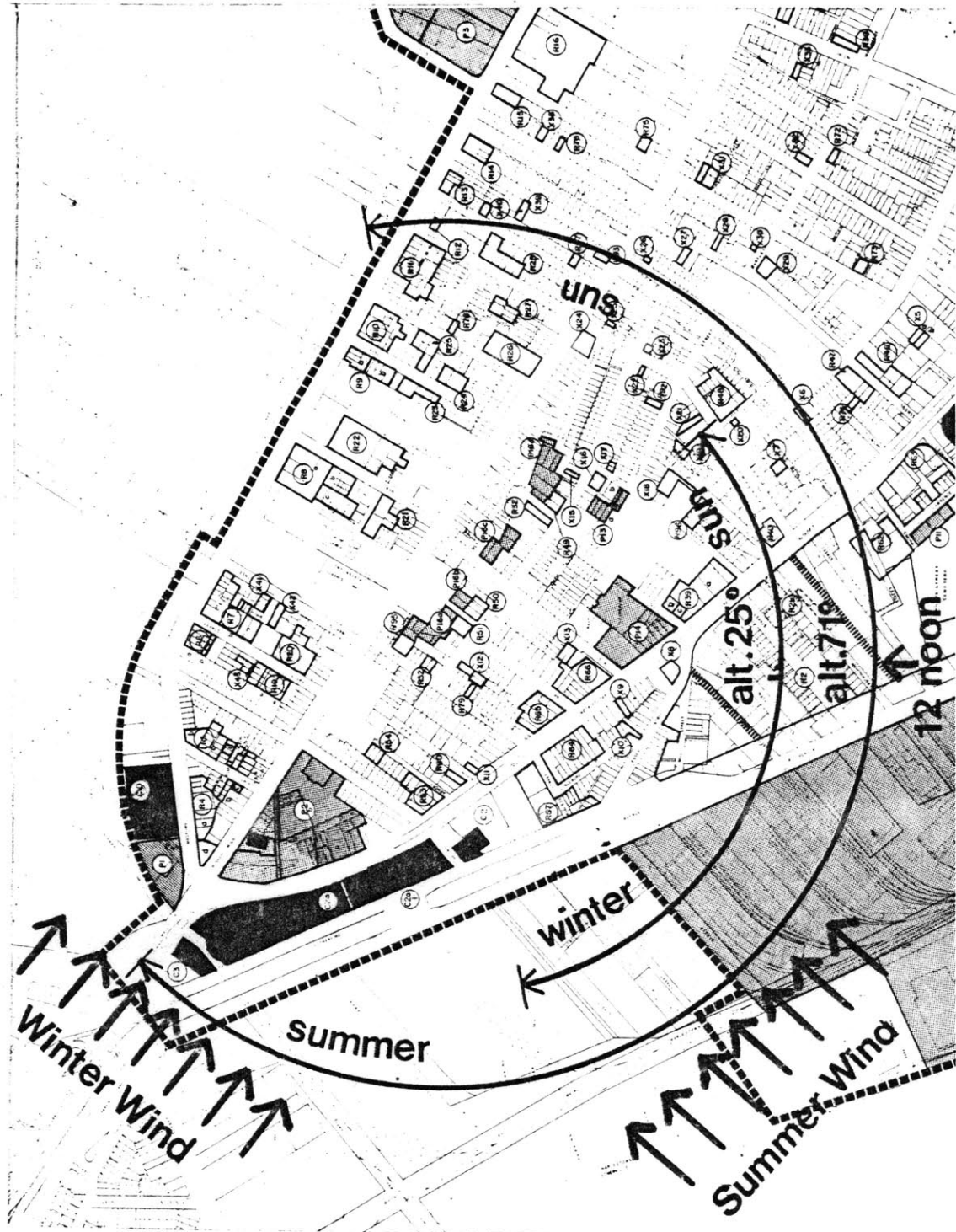
COMMUNITY CONTEXT



CLIMATE

June
Sunrise 4:22 am
Sunset 7:38 pm

December
Sunrise 7:13 am
Sunset 4:33 pm



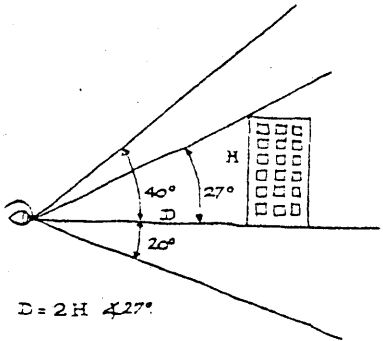
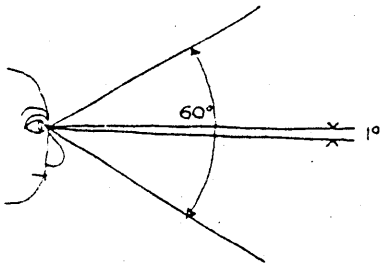
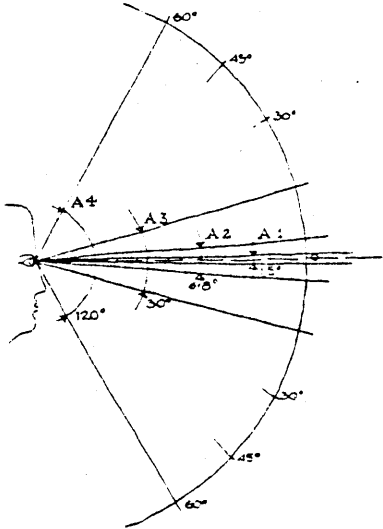
Analysis of Human Factors

Design considerations of theater are based essentially on three factors: the proportion of the human body, angles of vision, and sensory reflexes. The consideration of these factors in the CWT will help determine the physical design of the seating and stage. They also provide needed insight to help determine the relationship of spectator to performer in various CWT seating and stage arrangements.

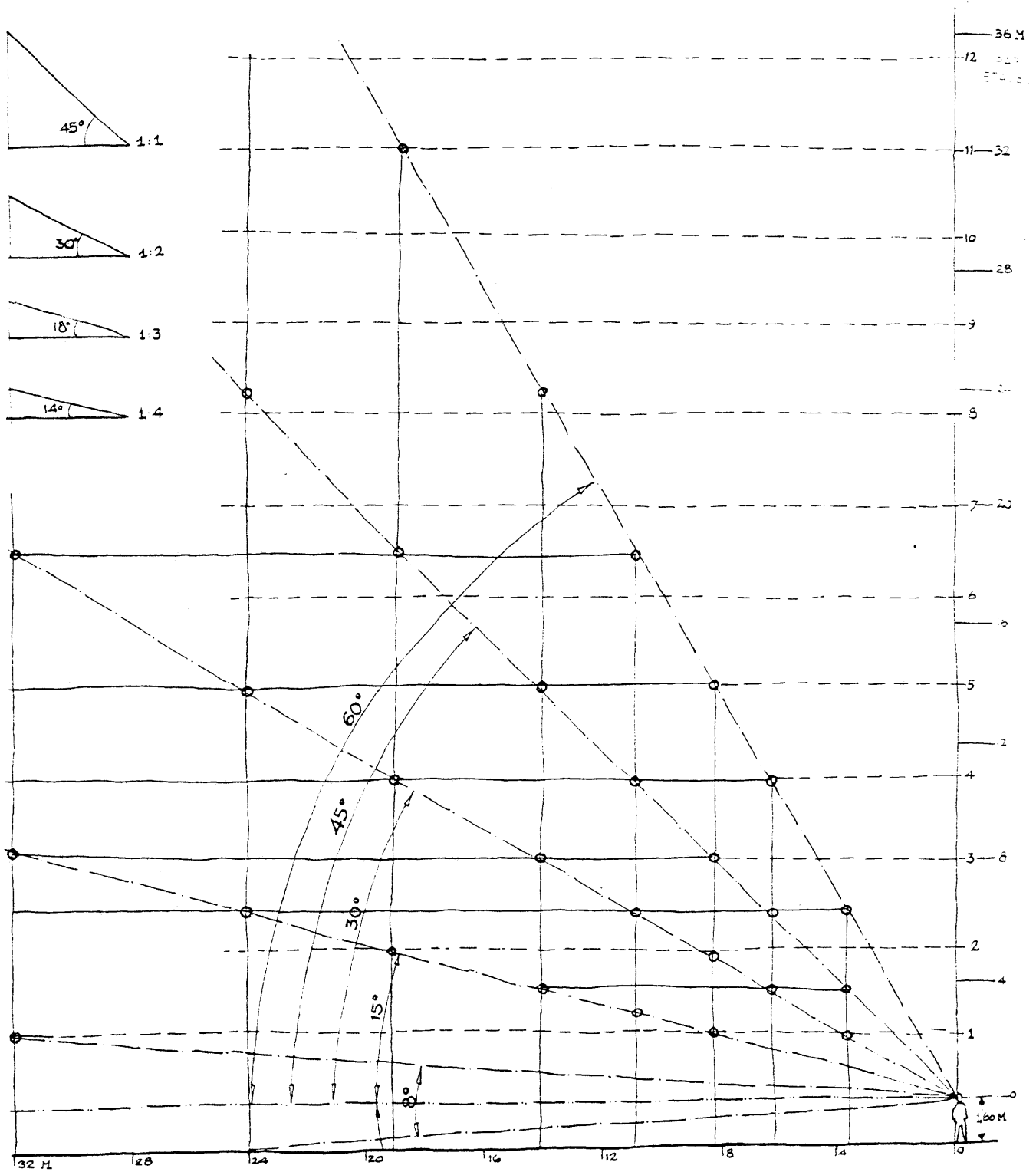
Angles of vision

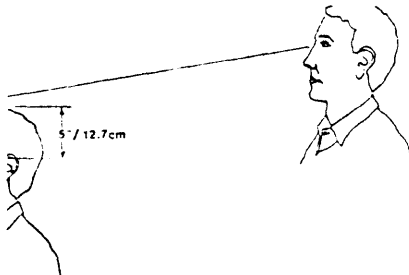
These three examples are a basic reference to help solve the seating to stage relationship.

- 1 minimum visible: $1' - 1,5^\circ$
- 2 minimum separable: $6^\circ - 8^\circ$
- 3 normal vision during the day: $30^\circ - 35^\circ$
- 4 perception of movement: 120°

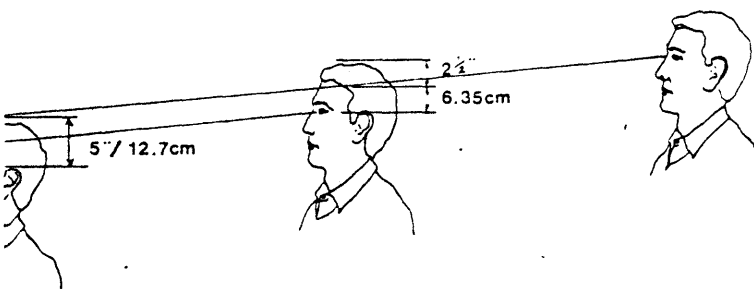


Proportion of angles to vision





Vertical sight line: every-row vision (after Frink). [G. C.]



Vertical sight line: every-other-row vision (after Frink). [G. C.]

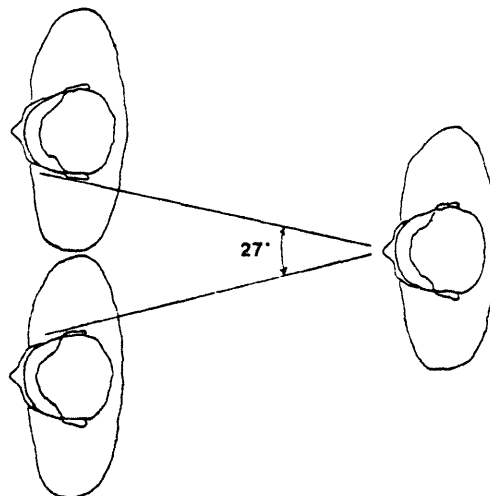
FIGURE 1.6 The horizontal sight line (after Frink). [G. C. Izenour Archive]

Lines

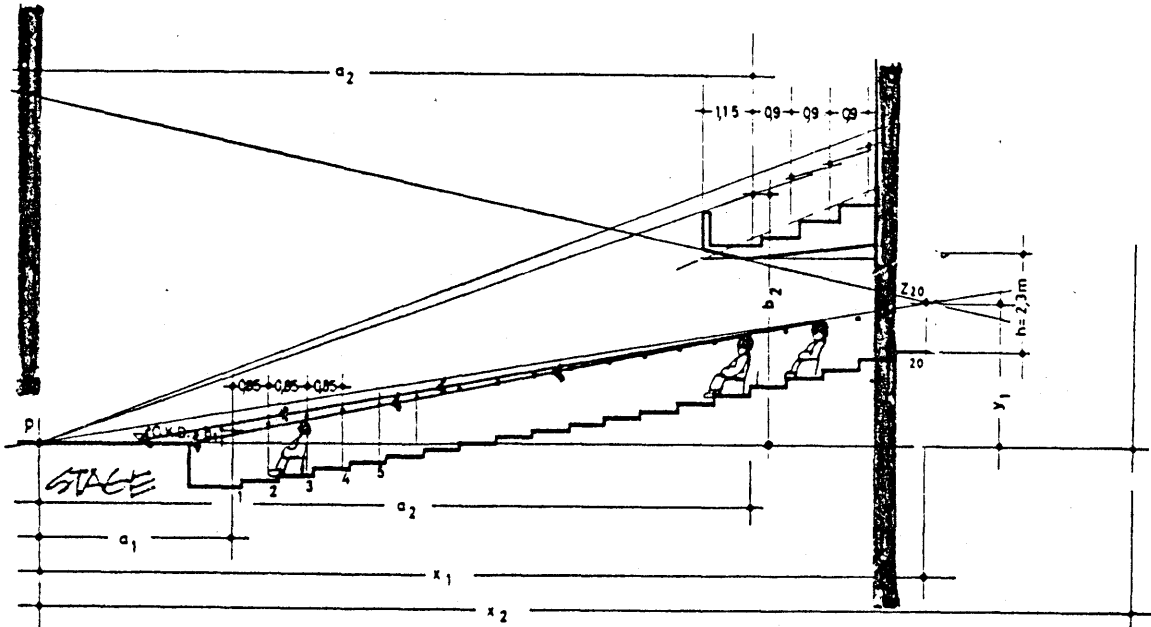
is defined as the path of vision from the position of a spectator (usually seated) to the performer or performance space. A sight line is one in which there are no impediments to vision or displacement (vertical and horizontal) of the eyes and head to the performance area. An unsatisfactory sight line transgresses more or less one or all of these criteria.

A *vertical sight line* (Fig. 1.4) is defined as the angular path of vision in the vertical plane over or under impediments, if any, between a sight point and the performance area. This is usually concerned with the heads of spectators (as in Figs. 1.4 and 1.5, illustrating every-row or every-other-row vision) or building restrictions such as a balcony rail, a balcony structure, etc.

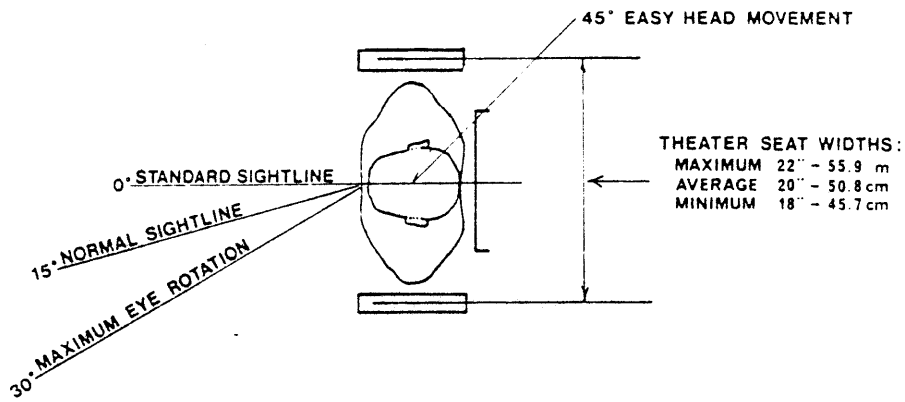
A *horizontal sight line* (Fig. 1.6) is defined as the angle of vision in the horizontal plane between or around intervening obstructions, if any, between a sight point and the performance area. These are usually the obstructions of spectators in the row or rows immediately in front or building restrictions such as box divisions, columns, etc.



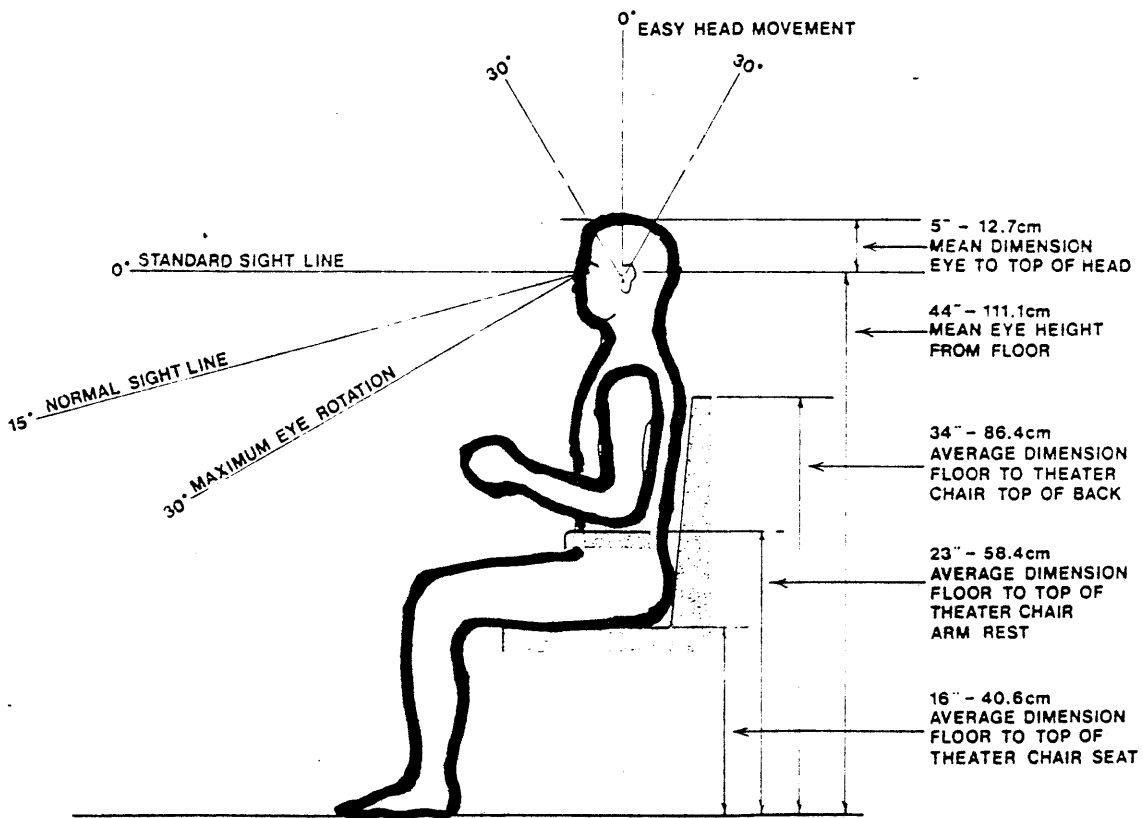
Sight lines in theater example
(Section representation)



Dimensions of the seated figure



Average dimensions of the seated human figure in plan (after Dreyfuss). [G. C. Izenour Archive]



Average dimensions of the seated human figure in elevation (after Dreyfuss). [G. C. Izenour Archive]

Analysis of Building

The old fire barn now used by CWT has operated as a public theater from early January 1975. Designed by a city architect and built in 1880 of red brick and timber it remains the last fire barn of its era in Charlestown built to shelter the horse and water pump wagon.

The physical examination of the building has found several unique architectural features. The large ceiling on the first level is hung from the roof truss at three points providing a clear span of 36'-0", and during the 1950's a concrete waffle slab floor was built to replace the old wood floor that once carried horses and fire equipment, and a 71'-6" hose tower that projects upward from the roof of the building surmounted by a large copper cupola.

Present Conditions of the Four Reference Levels

21'-0"

The bottom level of the building has no present use. It is filled with unsalvageable materials and debris. There is no permanent operable heating system and CWT presently uses a overhead 50,000 BTU gas fired heater. There is no working plumbing, although while drains are intact, the copper water pipes were salvaged during the building's dormancy. There is a 4'x6' double door provided next to the coal chute which provides access to the outside edge near Bunker Hill Steeet. The floor is concrete with brick pier supports located every 15'-0" along the length of the building. The 'half' windows, which are boarded, with the large light well on the east side of the building could provide adequate daylight within this level.

30'-0"

This is the theater's main entrance from Bunker Hill Street. The ground level floor is a concrete waffle slab "supported" on eight brick piers. There are two floor drains. The ceiling and walls are plaster with a ceiling covering of ornamental tin designed in square patterns. The continuous ceiling spans 36'x68' by pipe hangers supported from the roof truss. The pipe hangers are concealed in the second level wall partitions and end in the 27" floor to ceiling depth. The depth in the ceiling creates a potential safety hazard when lighting equipment is attached to the plaster and lath. There are no means of securing lights to floor joists or beams which are on the average eighteen inches above the ceiling. Natural light provided by the windows are boarded, and only one overhead 'garage' door is operable. Entrance to the hose tower is obtained through this level with an iron ladder leading into the cupola.

45'-0"

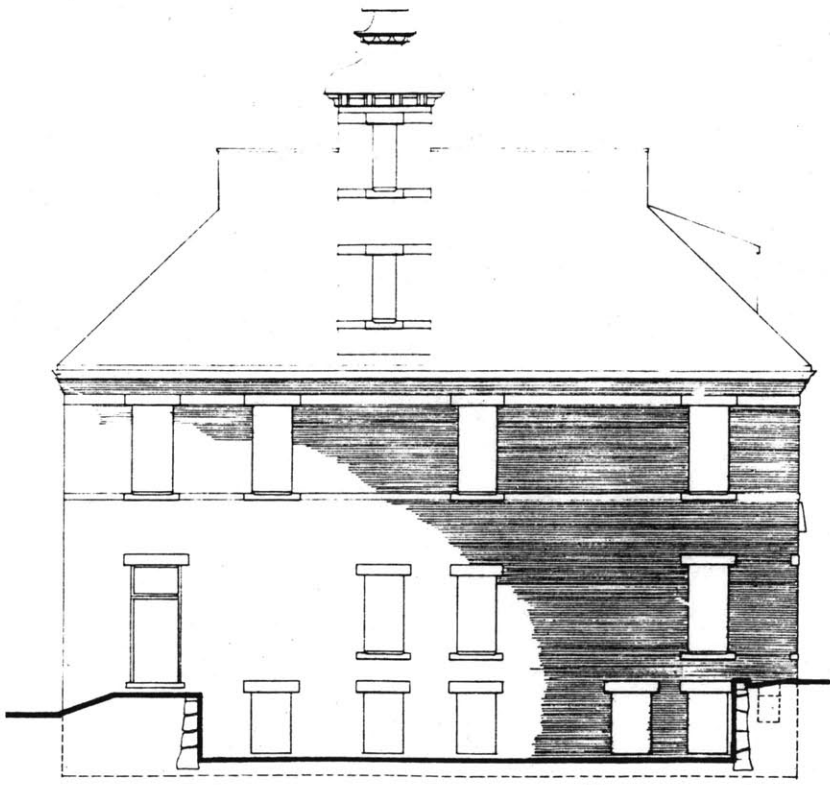
Entrance to this level is from the wood enclosed stair located on the east side of the building. This level brings attention to the plaster cast mouldings and millwork, a small marble walled shower, and three fairly large rooms with enclosed closets. The floor is hardwood and the ceiling lath and plaster. This level served as the fire departments office and sleeping areas. The windows are boarded. The wet stack which at one time served a toilet and sink is located next to the hose tower.

58'-0"

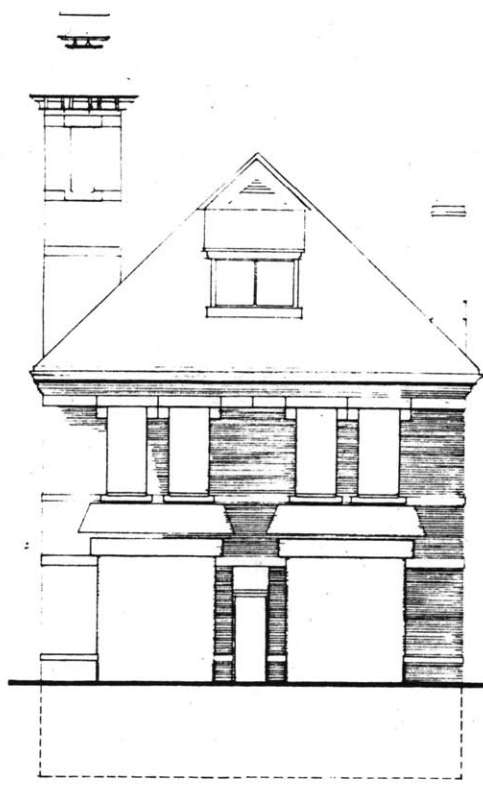
The third level is the 'loft'. This is the exposed timber open attic with no insulation. There is two sources of ventilation. One is the gable louver in each end of the building. The other is a special vent shaft in the hose tower that opens on this level. The only natural light is from the north dormer which looks out across Bunker Hill Street to the Little Mystic Channel. Access to this level is restricted by hatch and ladder.

Present Conditions of the Building Exterior

The red brick building has recently been pointed, the roof covering is slate in good condition, the doors are operable, and visually the building is not in neglect even though the windows are covered by painted plywood. The light well on the west side of the building is filled with debris and scrap, and earth-fill on top of the eastern-most portion of the land exists. Foundation remains of old dwellings can be found parallel to the west side of the building, however, landfill covers most of the remains. Along one edge of the triangle shaped site is Charles Street. The cobblestone street is very narrow, eight feet wide, and according to old plans of the city there were dwellings along the street. Basically, the land needs cleaning and care, and the building is in good physical condition.

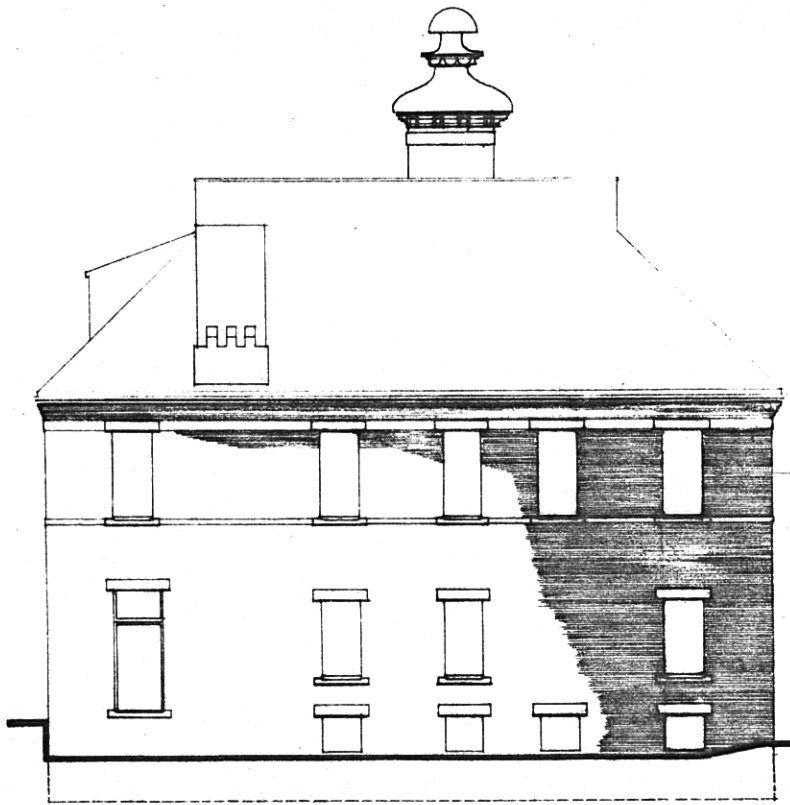


West

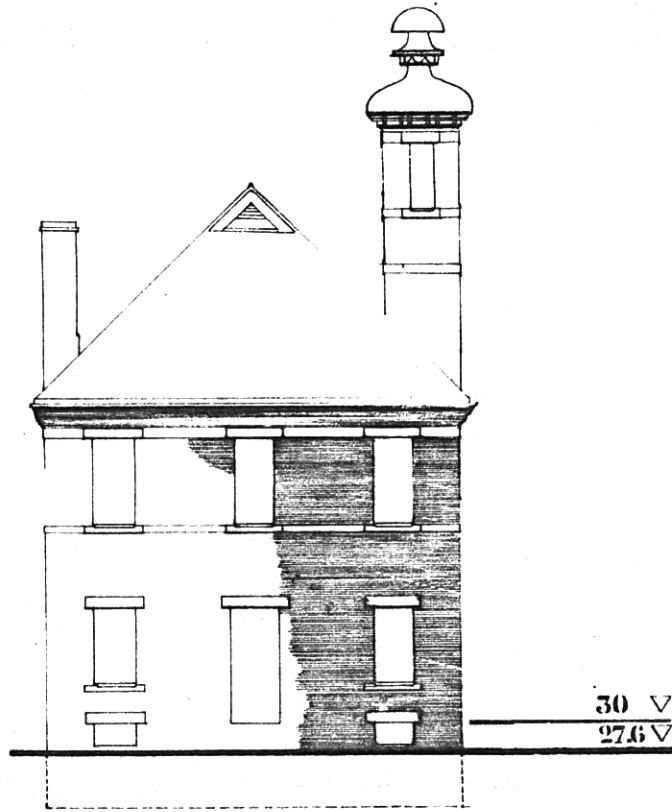


North

30 ▽



East

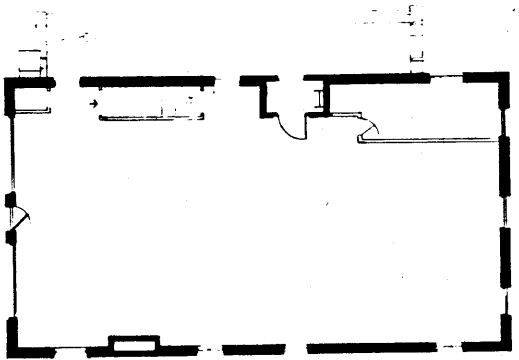


South

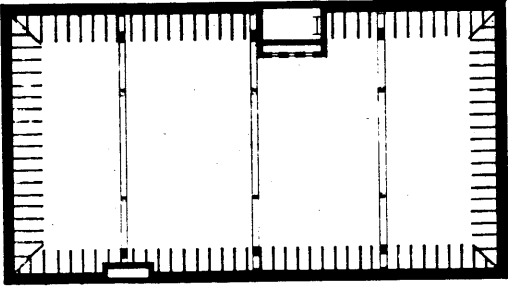
Existing section of CWT on September 18, 1977



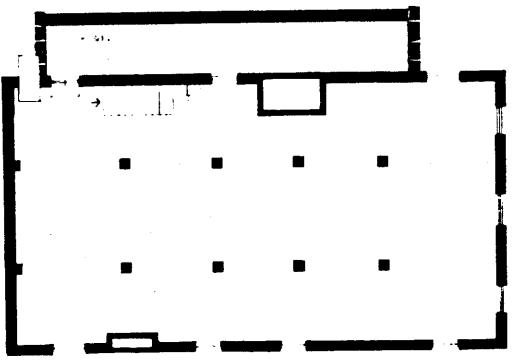
Existing Plans of the four reference levels, 21'-0", 30'-0", 45'-0", 58'-0", CWT on September 18, 1977



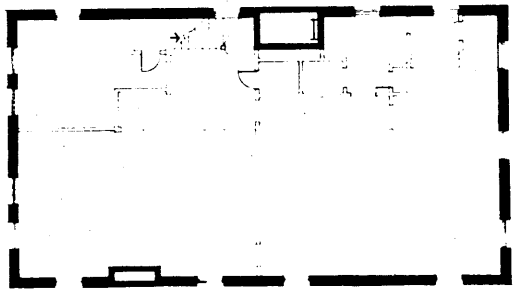
30



58



21



45

Seating examples in existing building/ possible variations

A= Stage area
 B= Seating
 C= Circulation

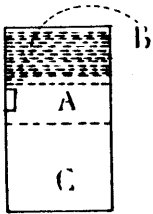


fig. 1

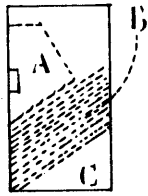


fig. 2

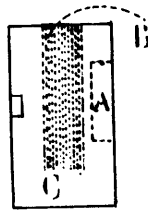


fig. 3

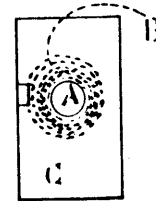


fig. 19

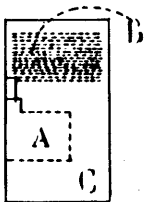


fig. 4

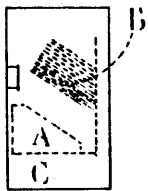


fig. 5

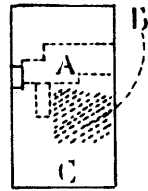


fig. 6



fig. 7

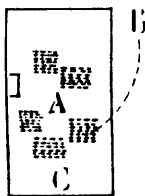


fig. 8

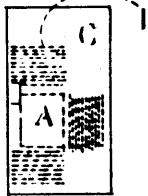
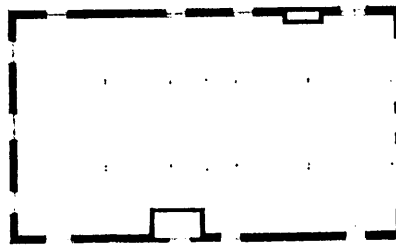


fig. 9



Each of the figures represents a modification of the basic configurations derived from Principal Western Theater Forms (See Appendices)

Solutions

Phase I Concepts:

The most essential function of CWT is the theater. A coordinated effort must be made to achieve versatility and flexibility of the stage and seating for various performances. I have attempted to design the theater for two specific performance arrangements, the apron stage, and theater in the round. The plan at 30'-0", and sections A-A, and B-B, shows the physical relationship between spectator and performer in theater in the round. The plan at 30'-0", section C-C, and D-D shows a different relationship between spectator and performer and how that relationship is achieved by the use of the modified apron stage. The stage remains flexible in both layouts by the use of lightweight construction materials. The use of rollers or wheels on the stage makes it move into virtually any position in the theater.

The seating criteria for design falls into two categories, the needs of people, and the needs of theater. Design factors for people such as personal comfort in seating selection, length of time in the theater, and sight lines, etc., determine the physical relationships for physical form. The needs of the theater criteria were determined by six basic factors. Flexible seating, easy storage, lightweight materials, economy, color and appearance. The seating, as shown in both plans-Phase I at 30,

is 34" wide built in wood or metal on a wood or metal frame. Risers are 8½" and seating rows end with a color panel, dimensions of 38"x34"x6", that provided safety protection and supplies visual identification to each row. The notion to use chairs on platforms came from forms they presently use, and CWT's concern with cost for new equipment. The first phase assumes the folding chair, in wood or metal, will be used because it is flexible in many ways.

Treatment of Space

The primary physical change in the building is the interior entrance, lobby, and ticket area. This new space has been created to take care of special needs and services of the CWT Phase I requirements. The ticket area functions near the entrance door, using the original entrance without interruption of building design changes in the north facade along Bunker Hill Street. The lobby area has several mixed uses. To serve the public as a relaxing/light refreshment place during intermission and after the performances. It serves the performers as a place to meet, organize , and establish their plans for future performances.

The incorporation of these needs into the lobby and ticket area has generated a design that subdivides the space both vertically and horizontally providing for better use of walls, platforms, and stairs, etc. The stair connections to the second level at 45'-0" have been designed to accompany persons attending lectures and demonstrations on level 45. A platform on level 37.5 provides storage space for costumes and a small dressing area. The platform also contributes to the low ceiling height enclosure around the main entrance which is desired until one steps into the main theater. The ceiling height is full at 15'-0". The distance from main entrance to theater entrance is approximately twenty feet. Level 45 has been redesigned to meet the needs of

the childrens activity area, dressing, toilet, and shower facilities for the actors. Toilets are both public and private.

Exposing and Recycling Old Materials

This is not a new concept to CWT. They make use of many old materials for stage design and seating. There are many other physical elements in the building that could be recycled. For example, in the first phase, the lobby area has an existing chimney that with some change could be an operable fire place with its natural brick exposed. The entire tin and plaster ceiling should be removed for several different reasons. One, to remove the dangerous fastening of lights to the plaster ceiling. Two, The removal of the ceiling will increase the floor to ceiling height by 27" allowing for a mezzanine in the theater. three, A partial platform extends into the lobby area and covers the ticket area to create storage and dressing space above that is directly adjacent to the theater. The net gain by the removal of the ceiling is the proper installation of lighting equipment attached to the floor joists, the horizontal subdivision of space, and the exposed ceiling joists will become visible adding to the richness and character of the building.

The lighting control booth which is called for in phase I is provided for in the hose tower. The area is large enough to contain all lighting and sound controls and the use of slide projectors on three levels. The finish materials would be exposed brick , wood platform 6'-6" above level 30, and a 4'x6' glass window for viewing the stage.

The design and materials of the new platforms, partitions, stairs, etc., is left to CWT members who want to participate in

the construction of the new elements.

The opening in the waffle slab next to the hose tower permits easy access and removal of stored material for different sets, parts of the stage or seating. This primary storage level is at 21. There is an old service entry in this level that could be re-used. The service door measures 4'x6' approximately and is located at the north and east corners of the building.

Rental space in the loft has been suggested (level 58). Two new stairs would have to be put in for ingress and egress. Openings in the roof would have to be made in the roof to permit the introduction of light. This opening should be carefully studied to determine the location and resulting physical exterior appearance of the building at the roof level. There would be some work to do but the rental space could be accomplished if these criteria were met and satisfied by those involved.

Lighting and Acoustics

Both of these topics need study. Generally speaking, the incandescent reflector and spot lamps could be used effectively for general illumination excluding the theater. The theater lighting is handled very effectively by CWT members. Glazing in select windows would provide natural light and views of the town.

Acoustics

The theater is not sited in the best location for outdoor theater. Bunker Hill and Medford Streets are not known for their quietness. The interior of the building is almost perfect for quiet listening in the theater thanks in part to the brick

walls which are excellent for stopping the transmission of sound. Sound-absorptive materials and other accoustical treatment can be used in the backstage area and especially in workrooms on level 21 and 45, the lighting booth, on and around doors leading into the theater/area, and in other locations where work or conversation might interfere with the spectators enjoyment of the performance. The exposed gas fired heaters must go and be replaced by a hot water heating system. Presently the heaters are turned off during performances bringing personal discomfort to the spectator and actor. Noise that might otherwise be transmitted to the theater by direct mechanical vibration can be suppressed by resilient constructions. This includes noise from transformer, ballast, compressors, fans, etc.

Notes:

The CWT has reacted strongly against the separation of the play from the audience, which is characteristic of the typical pro-cenium theater of the recent past. This has encouraged a search for a new actor to audience relationship.

My focus is to bring the seating and acting area into the same architectural space and to get as close as possible a relation between the action of the play and the spectators watching it.

The focus of the audiences' attention is on the center of the drama and members of that audience should tend to group themselves around this focus. This is achieved by the interface of seating and stage. The continuous flexible space of seating and stage provides for a variety of activities to occur within the theater. Examples of the desirability of encirclement around the stage is shown in figure

Since the theater has been used as an open stage, the arrangement of each performance and audience are contained within the same space.

What are the distinguishing characteristics that maintain a close relationship between performer to spectator?

Requirements	Yes	No	Number	Approximate area in net sq. ft.
--------------	-----	----	--------	---------------------------------

**PHASE I
CWT**

Explain briefly
how provided

Explain briefly
why impossible

A.
Philosophy

1	Flexibility	through design, program		
2	Openness	" "		
3	Access to community	the above plus paths		
4	Simplicity	through design		
5	Fiscal economy	above +materials, program		

B.
Functions

1	Main stage area	existing	1	1880
2	Secondary stage area	shared/childrens theater	1	860
3	Seating area	some examples, max.125 seats		1400
4	Fly space	insufficient space		
5	Dressing areas	small at 45 location	3	225
6	Storage space	at 45-225sf, at 21-600sf	2	825
7	Workshop fabrication/design	at 21		1000
8	Loading area	north entrance	1	
9	Rear projection space	in lighting control booth	1	30
10	Lighting controls	hosetower- 2levels	2	60
11	Lighting storage	at 21	1	100
12	Rigging	inadequate ceiling		
13	Seating types	some examples		
14	Ticket office	located in lobby		50
15	Theater Marquee	exterior		
16	Management offices	shared w office/library	1/3	90
17	Rental space	at 58(loft)	1	2340
18	Lobby	at entrance	1	360

19	Green Room		inadequate space		
20	Coat room		" "		
21	Metal Working shop/studio		" "		
22	Classroom/general		" "		
23	Classroom for children		" "		
24	Arts and projects spaces		" "		
25	Primary/special materials		insufficient space		
26	Library office	shared mgt/office		1/3	90
27	Library workroom/study	" "			
28	House storeroom	at 21		1	100
29	Projects storeroom	at 21	inadequate space	1	200
30	Multi-purpose space				

C.

Circulation

1	Aisles	flexible with perform
2	Entrance	use existing
3	Egress	provide for loft,+45
4	Stairs	" "

D.

Safety and Health

1	Heating and ventilation	at 21, 45 showers, lav		
2	Plumbing	" "	2	125
3	Electrical	110v limited		
4	Fire and Building Code	changes will meet regs		
5	Acoustics	reasonable		

E.

External

1	Landscaping		no plans
2	Lighting	needs improvement	
3	Parking	street only	
4	Assembly/Performance		inadequate space

CWT

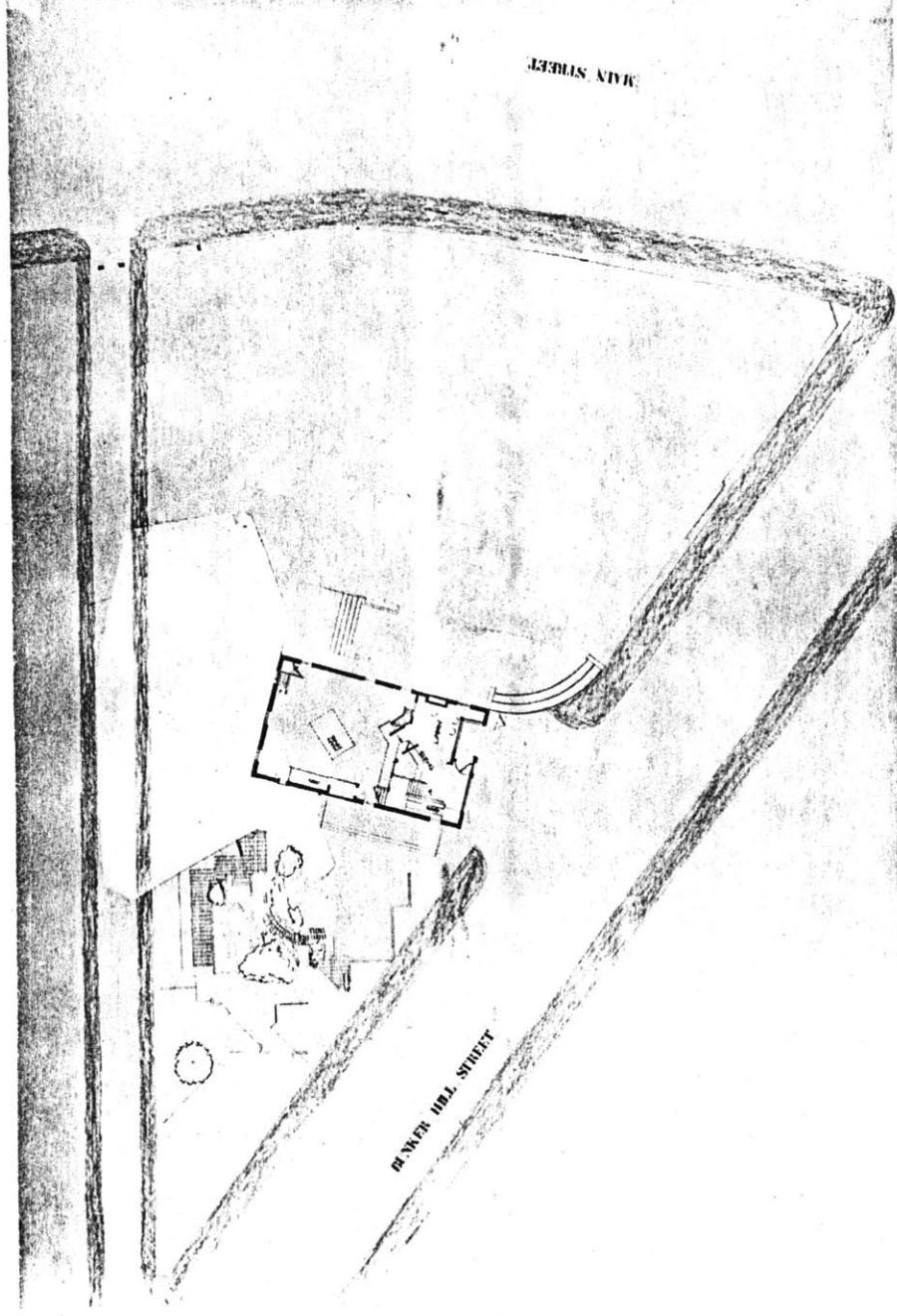
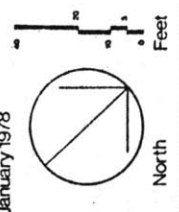
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HOUSE I



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CWT

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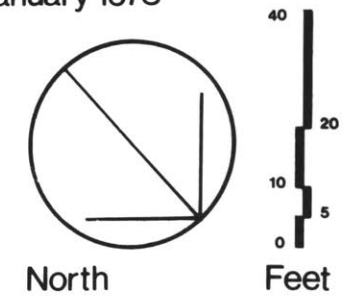
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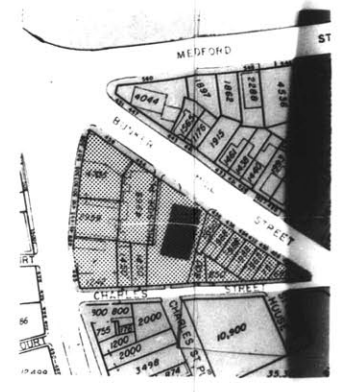
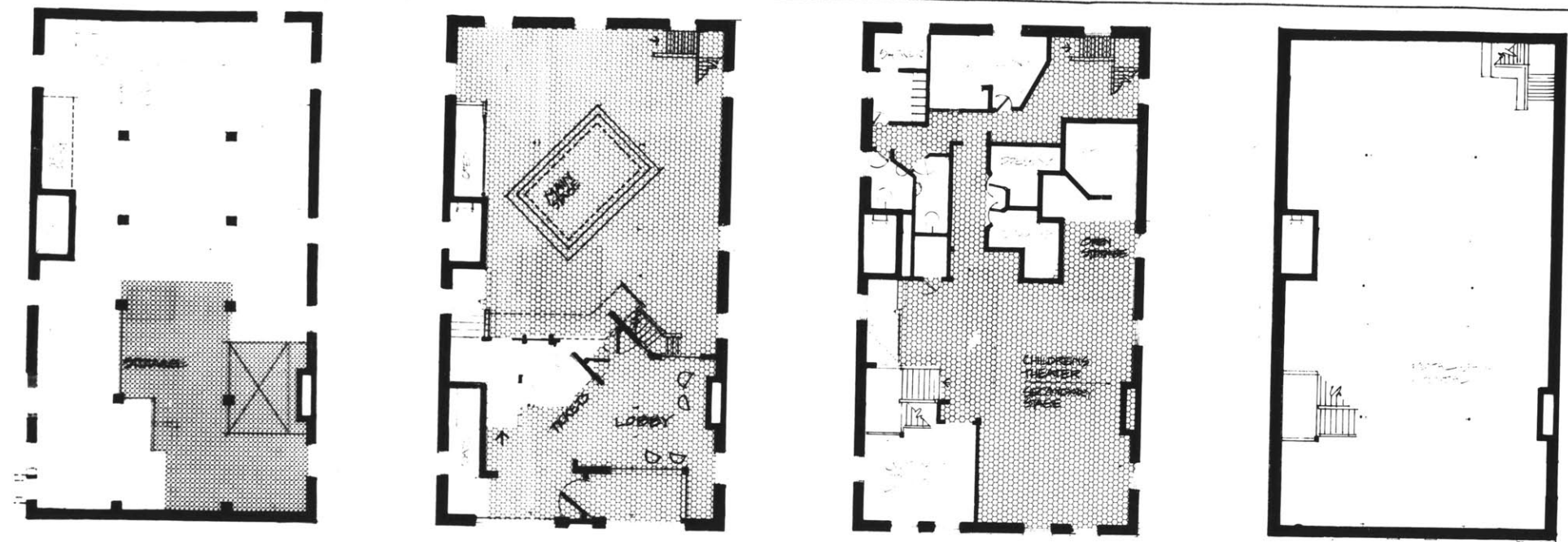
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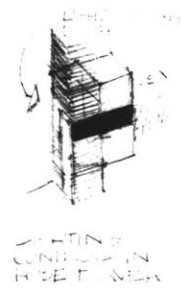
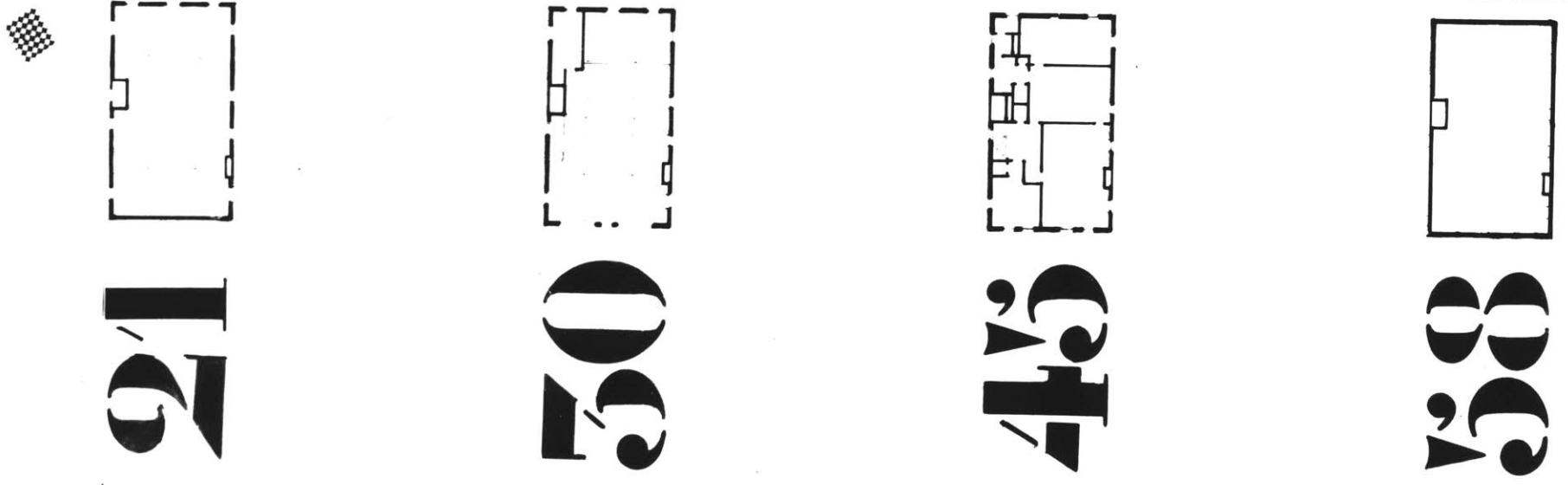
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FUTURE REQUIREMENTS

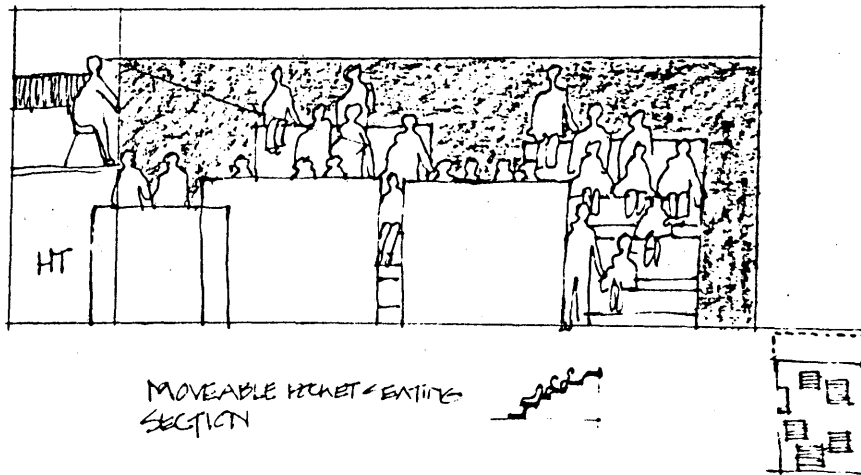
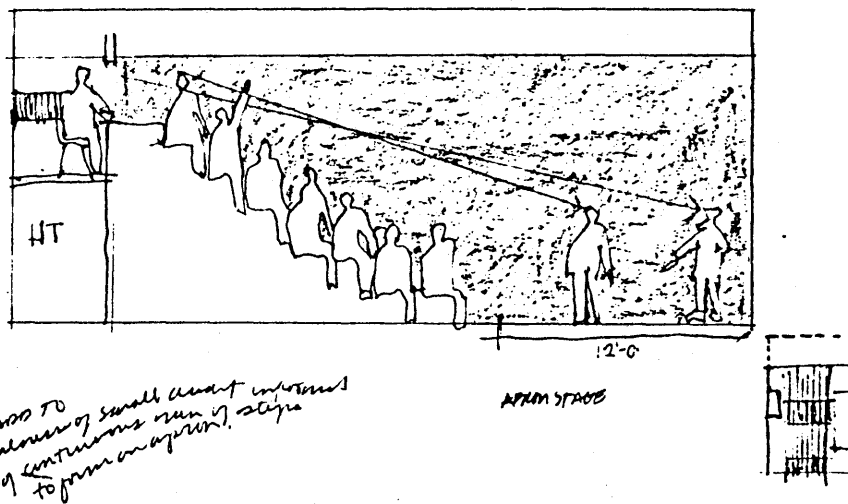
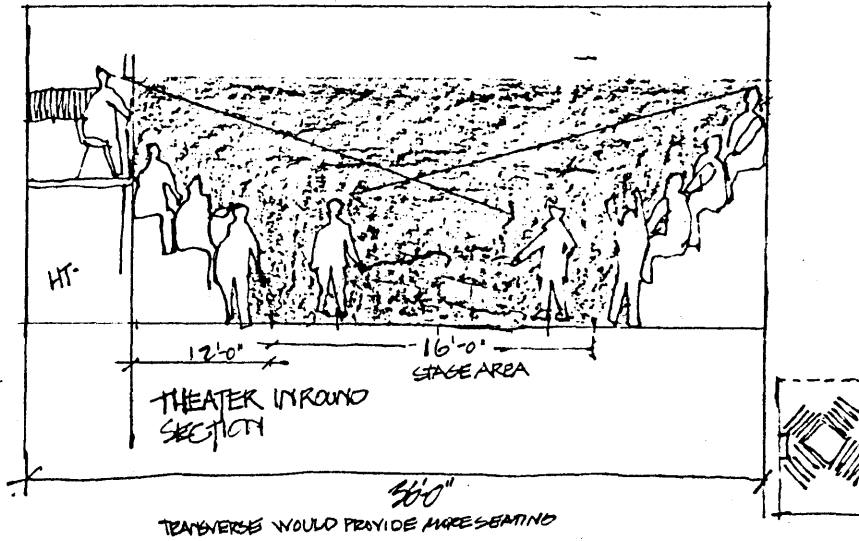


PRESENT CONDITIONS

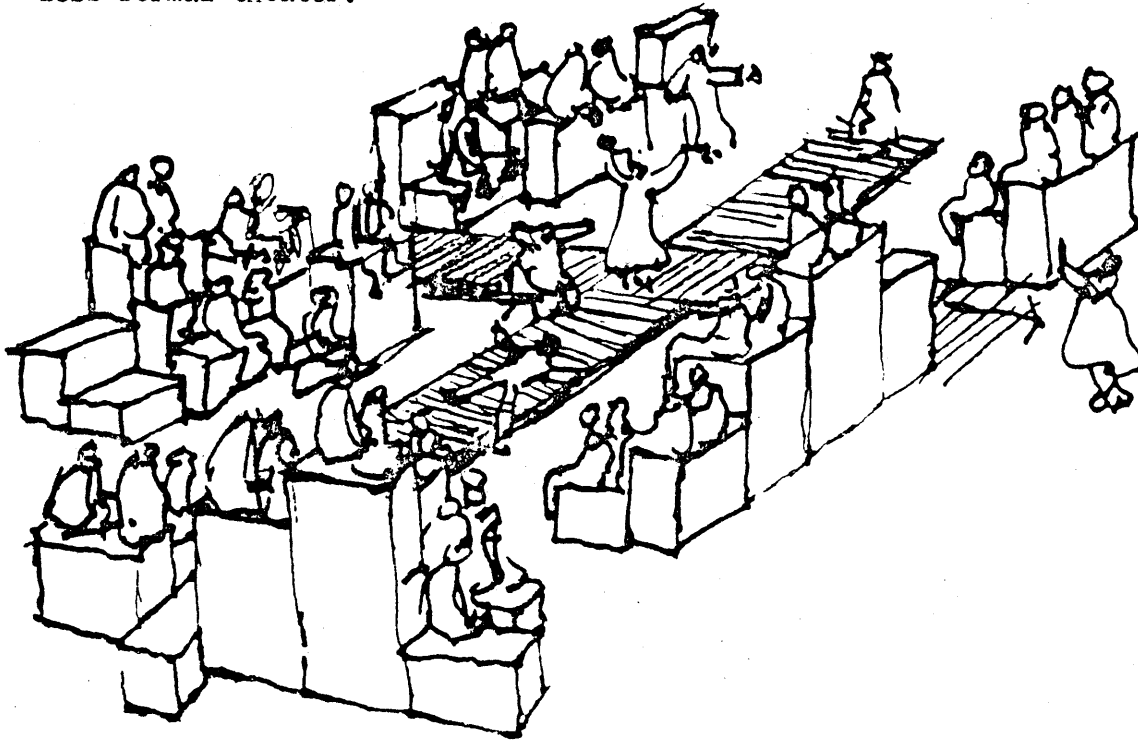


Flexible seating

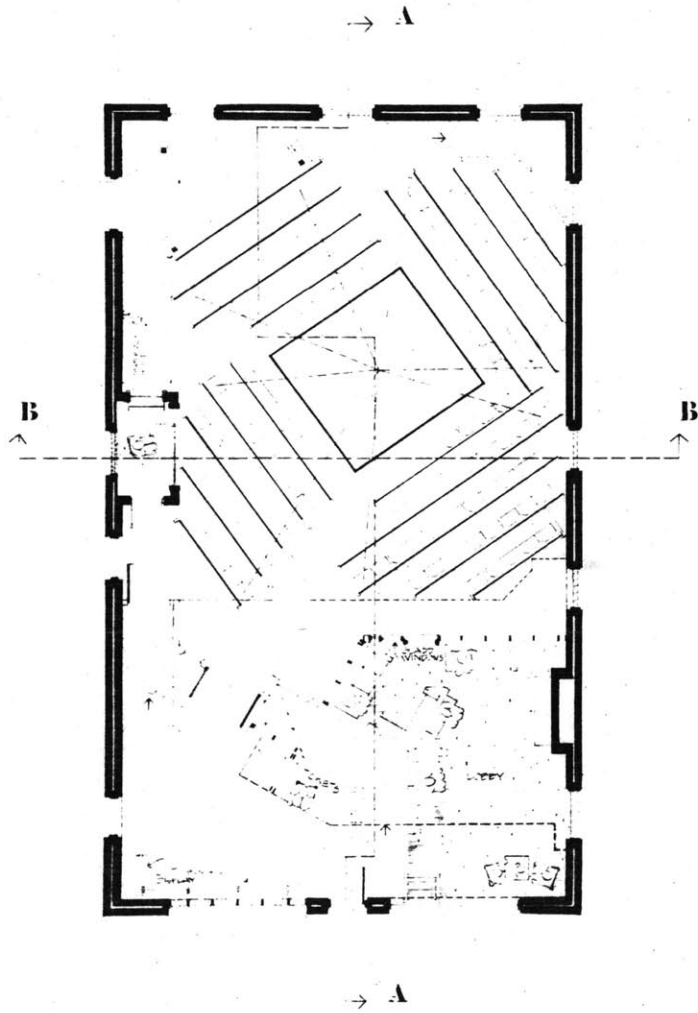
How will they work in plan and section?



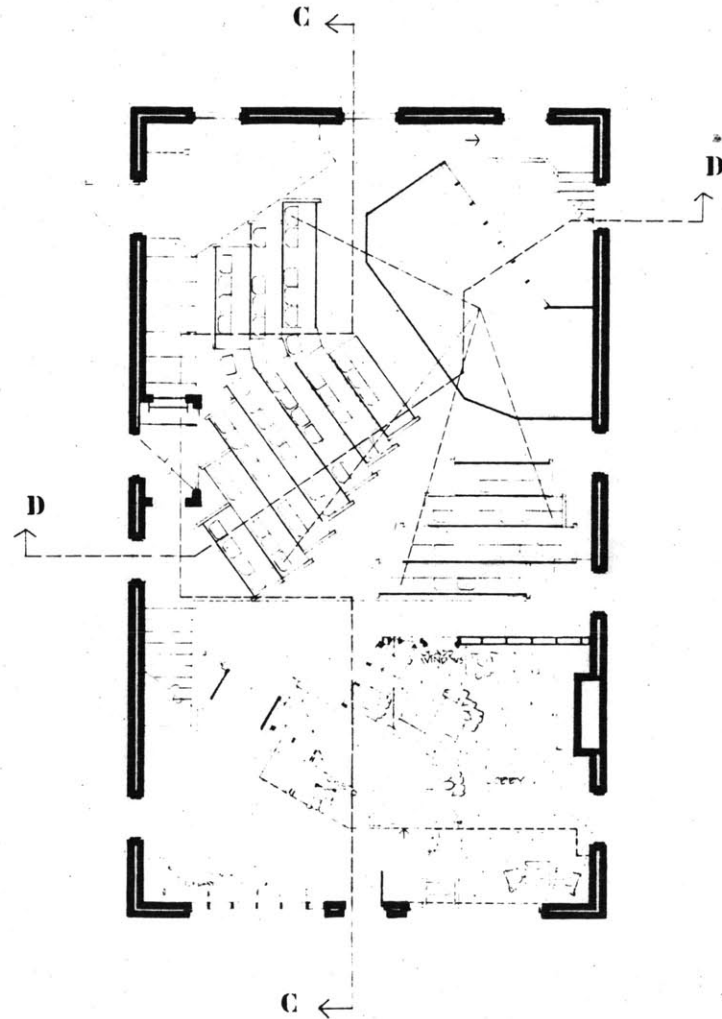
Another notion of flexible seating. This idea will not be tested in this thesis. The various height levels make for less formal theater.



Testing of flexible seating in theater-in-round and apron stage layouts.
 Refer back to Phase I Concepts for more information of the elements and design.



PLAN-50 Theater in the round



PLAN-50 Apron stage

C W T

Plan 30

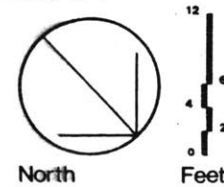
PHASE I TEST

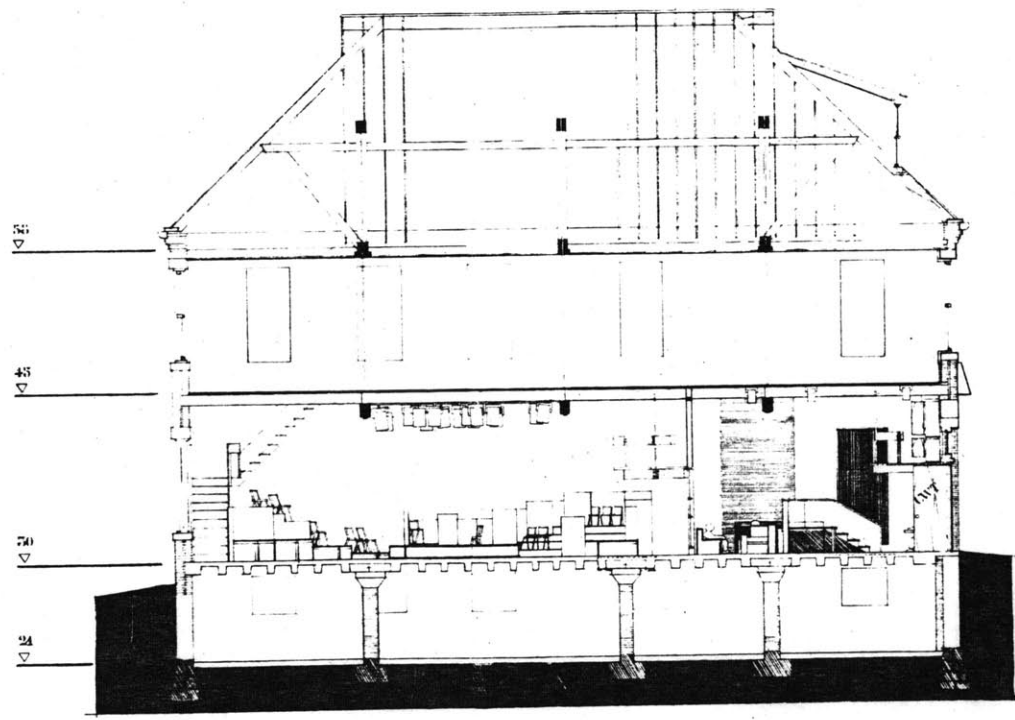


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 New uses for old
 spaces**

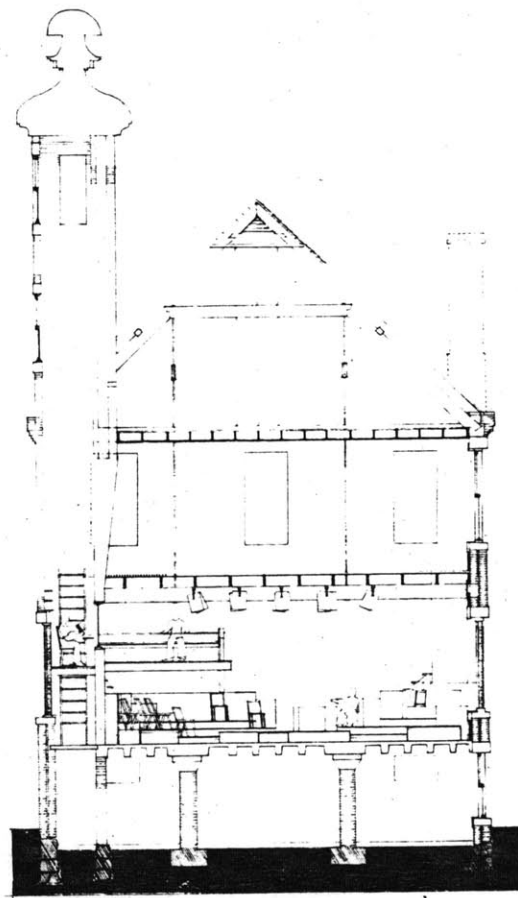
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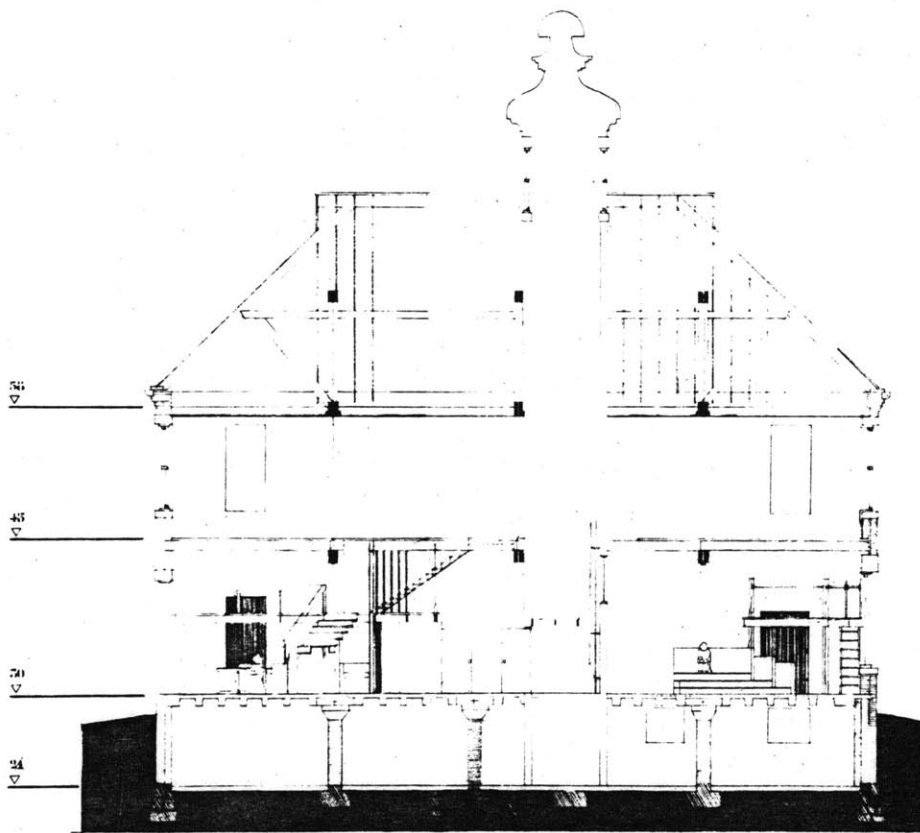




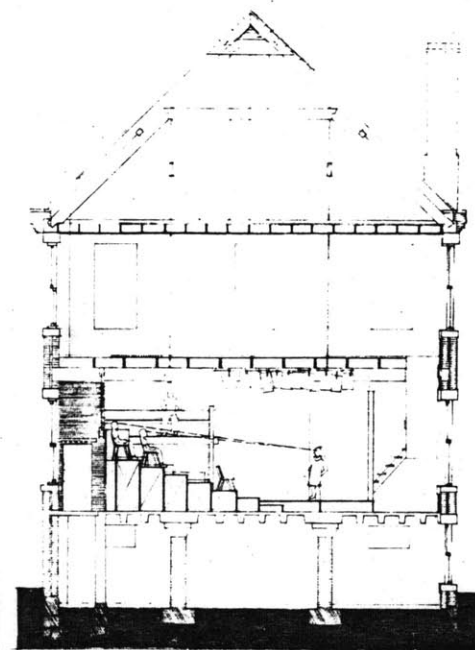
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

CWT

Sections

Phase I



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spaces

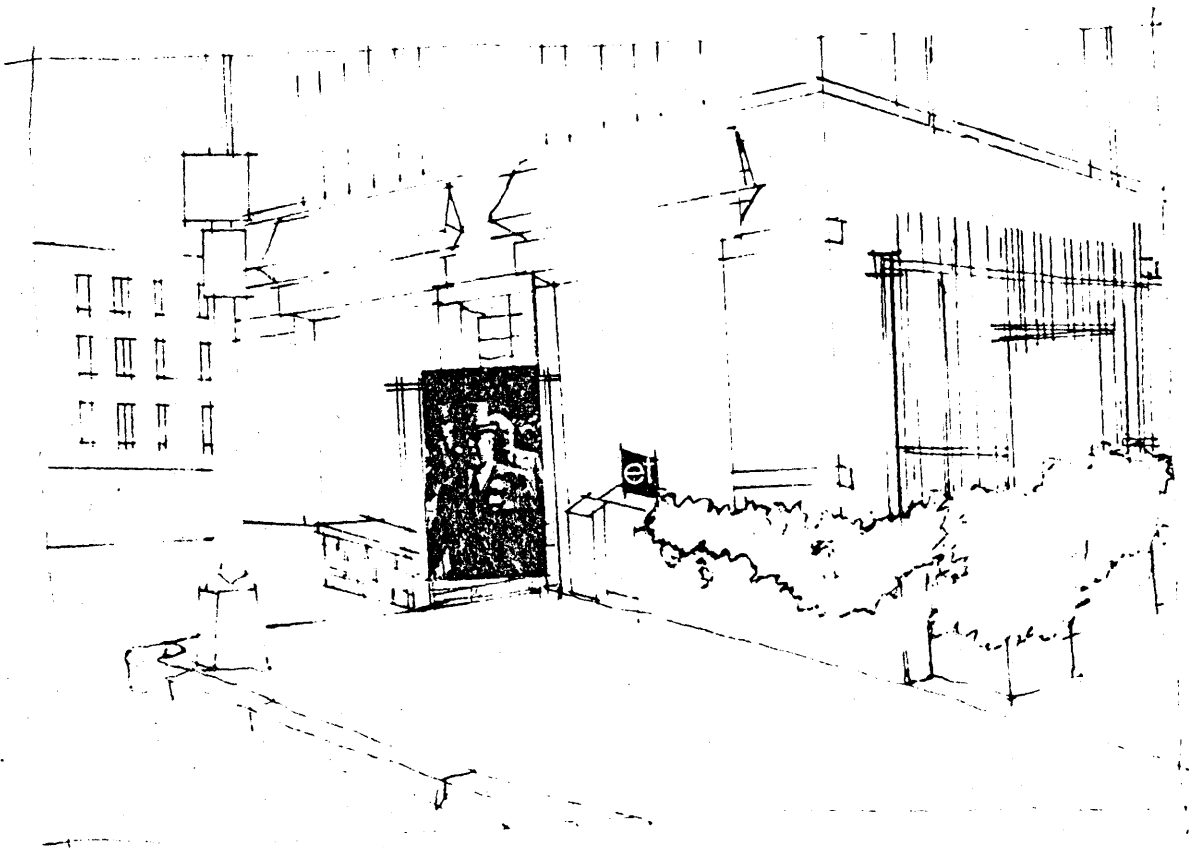
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Feet

Theater Marquee example
Phase I solution



Phase II Concepts

This is the first growth/expansion stage that CWT estimates is required to meet the needs of its long term expectations. Phase II is intended to progress sufficiently towards total development of a coordinated multi-use building for the Charlestown site. My intention is to focus on the definition and development of a preferred alternative: expansion of the theater facilities, and to continue to provide all the elements that CWT needs with the least possible structural change to the existing building. During this phase the existing building expands to accommodate a larger audience, related theater facilities, and new rental space.

The following criteria have been established:

1 Public Open Space

Development of the site should be done in such a way which insures improvement of open space and potential recreational space which will serve new and existing uses and will protect the environment. Major interior open space for Phase III encourages community support of new workshops and studios. At least one of these studios will be working during Phase II.

2 Expansion of existing site, across Charles Street, connecting land parallel to Main Street.

3 Visual enhancement of gateway street into public space.

4 Retail space suitable for development.

5 Pedestrian/bicycle network.

Summary of Spaces and Areas

For convenience in planning, particularly in its possible use as a check list, a summary of the major and minor spaces which have been discussed in this thesis are given in the table CWT Requirements, Phase II.

Along with the categories is given an appropriate net floor area. The actual area which is satisfactory is often dependent upon the shape that emerges in the design process. Therefore, in some cases a range is given. The range is workable to the needs of an efficient space.

All the requirements of the client are listed in each phase. The third phase fulfills the fullest representation of the clients expectations.

nts	Yes	No	Number	Approximate area in sq. ft.
0 II	Explain briefly how provided	Explain briefly why impossible		

ility	through design program			
ss	" " "			
to community	above +paths			
city	through design			
economy	above plus materials, prog			

stage area (MSA)	expansion, flexible w SSA		1	2025
ary stage area (SSA)	at 45 childrens theater		1	500
z area	integrated with MSA			2525
ace	adjacent to lighting control		1	90
ng areas	at 45		6	600
e space	at 21 expanded		2	2500
op fabrication	expanded		1	1450
z area	at south parking ent		1	300
rojection space	at 45			
ng controls	in ho setover			
ng storage	at 21		1	175
z	in fly space on tracks			
g types	some examples			
office	shared w lobby		1	700
r Marquee	already provided			
ment offices	at 45		1	500
space	at 53 loft exit w tickets			

room	shared w lobby			
room	in lobby		1	80
1 working shop/studio		inadequate space		
sroom/general		" "		
sroom for children		" "		
and projects spaces		" "		
ary/special materials			1	
ary office		insufficient space	1	150
ary workroom/study	at 30 "		1	250
e storeroom	at 21		1	100
ects storeroom	at 21		1	400
i-purpose space		inadequate space		

tion

is	flexible with performance			
nce	use existing + new			
is	three new			
's	" "			

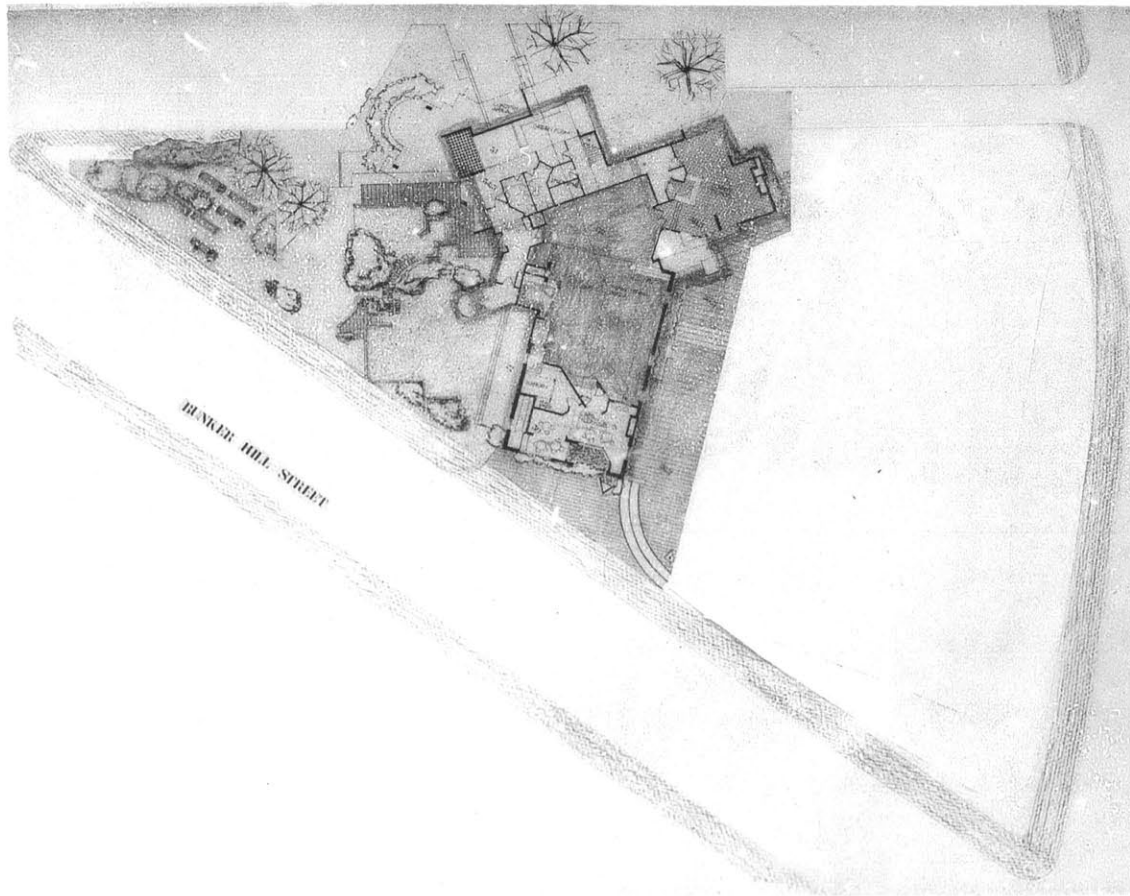
and Health

ng and ventilation	provide new plant, mech			
ing	new showers-lav		3	110
xrical	220-110v			
and Building Code	changes will meet regs			
stics	changes in expanded MSA			

scaping	new plans for east triangle			
ing	new external equipment			
ing	South parking expansion			
ably/Performance		inadequate space		

CWT site plan
Phase II





C W T

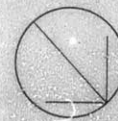
Plan at 30
PHASE II



Charlestown Working Theater:
New uses for old spaces

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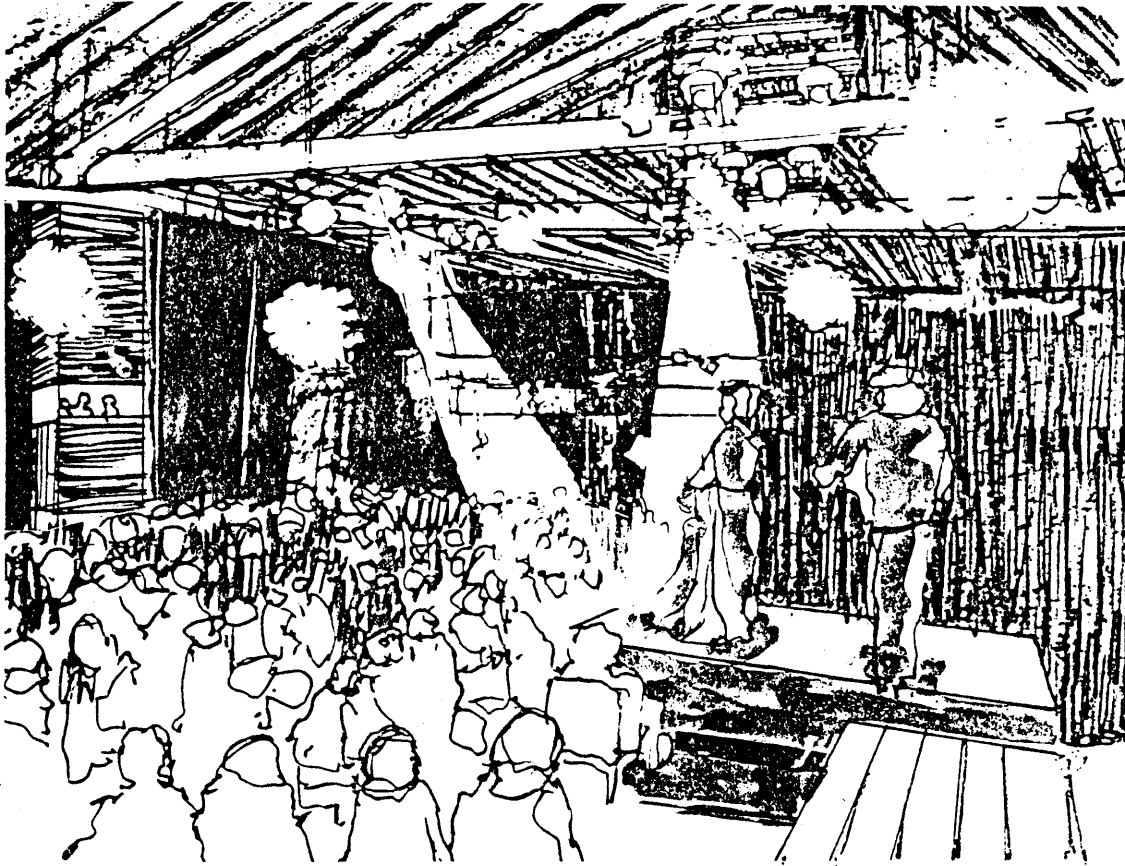


North

40
20
0
Feet

Sketch of lighting control in hose tower,
and lighting tracks exposed from -55- loft floor and
partial removal of Main stage area ceiling

86



Phase III Concepts:

The adaptable theater has already been used for different types of activity -- from Brecht to music to Elizabethan. With seats changing according to need. The simple biggest change has been the new activities added to the CWT organization and the building of the final phase of arts complex. The outdoor assembly space is partially enclosed by studios, craft training spaces, school of drama, metal working studios, pottery, photography studios and a gallery. The architecture in its total collective form penetrates the old structure to add new balconies for seating, TV filming and an entrance to the cafe. The childrens' theater on the first level has expanded to the same level with additional storage and dressing room space.

The main stage area will have to be increased in size by the demand for two problems:

1. larger attendance is denied by small seating capacity.
2. Childrens' theater growth has needs for larger workshops, storage, and projection areas.

The main theater remains connected to the childrens' theater and has balconies and production rooms used for video tape and television filming.

There is no enclosed stage. The audience and stage area is

covered by the exposed existing roof truss and floor joists left in place. This becomes a gangway or catwalk for all the categories of lighting. Acoustics is improved by the additional floor to ceiling height.

The stage is completely convertible, made up of a series of 3.0 rectangles. There are no safety curtains, but there is a small fly space on tracks adjacent to the hose tower. The ingress remains the same as in Phase II and the egress changes to new locations in the rear of the theater. Seating is provided for 125 - 225 by varying patterns to suit many types of stage layouts.

One of the greatest difficulties in changing over productions in repertoire is the accurate resetting of lighting equipment. It is proposed that more than two theater companies may use the CWT during one week. To meet this difficulty it would be possible to install all the lighting apparatus in triplicate - the actual lanterns and wire. The control system would be common to all three circuits. This is not really as expensive as it sounds. The lighting controls needs a permanent base for operation with clear sight lines. The hose tower, with small modification, offers many opportunities for lighting control position, sight lines and vertical access to the loft. Phase I lighting are two control positions, one for the main acting area and one for children's theater on the 2nd level.

Associated Accomodation

The intensive use of the theater and the possible housing of multiple companies requires exceptional backstage accommodation. Multiple use dressing rooms with shower facilities, studios, storage, eating area, ^{and} technical workshops. The existing design of the theater with all of the auxiliary services placed on the south end of the existing building, provides the maximum space for these services and all of them with an outlook on the real world. There are other technical points to consider. Special means of ventilation, quick means of cleaning, good sound proofing, resetting and other practical work to go on while performances are in progress.

Structure of the Building

A structure capable of responding to the foregoing demands, leads to a number of complications. The building is already of necessary heavy construction. Many things must be suspended from above, not just the usual items over the traditional stage area. For example, in order to hide a good deal of flats, sets, lighting, ventilation, heating, etc. a suspended ceiling is desirable. This causes obstruction to sight lines and masks the retractable machinery in part. It is fortunate that CWT is already gifted with a suspended ceiling. The 2nd level in CWT is composed structurally of heavy beams and joists suspended from the roof truss, high above. This makes an ideal structure for the technical support that is needed and is completely free of internal supporting columns or pillars. This gives freedom for the various arrangements and conditions that prevail

for each performance.

The main entrance in Phase I is in the present position, the front door. The main entrance in Phase III is at ground level rear, which runs along side the old building and connects to the new ticket and lobby area. There are connections to other facilities including a restaurant, studios and training areas which naturally form a link around the site and provide an outdoor performance area. From the entrance lobby there is access to rehearsal, dressing, and green rooms. Most dressing rooms and work areas are on the 2nd level.

Finishing materials generally should be chosen with care for easy maintenance consistent with fitness for their usage and adaptability. There is always a task that needs to be done or an idea explored. The studios involved in research and practical experiment with the young and old are the core of the working environment. Special consideration should be made in location selection for natural light and access to heavy materials and tools.

Summary of Spaces and Areas

For convenience in planning, particularly in its possible use as a check list, a summary of the major and minor spaces which have been discussed in this thesis are given in the table CWT Requirements, Phase III.

Along with the categories is given an appropriate net floor area. The actual area which is satisfactory is often dependent upon the shape that emerges in the design process. Therefore, in some cases a range is given. The range is workable to the needs of an efficient space.

All the requirements of the client, some of which were not met in Phase I, and II are fulfilled in this phase.

Requirements

**PHASE III
CWT**

Yes

Explain briefly
how provided

No

Explain briefly
why impossible

Number

Approximate
area in net
sq. ft.

A.

Philosophy

1	Flexibility	through design program		
2	Openness	" "		
3	Access to community	above + paths		
4	Simplicity	through design		
5	Fiscal economy	above plus materials, prog		

B.

Functions

1	Main stage area	expansion, flexible w SSA	1	2025
2	Secondary stage area	at 30 and south extension	1	500
3	Seating area	integrated with MSA		
4	Fly space	expansion adjacent to LC		
5	Dressing areas	additional space not req		
6	Storage space	At 12 throughout new const.		
7	Workshop fabrication	additional space not req		
8	Loading area	no change from existing		
9	Rear projection space	" "		
10	Lighting controls	" "		
11	Lighting storage	" "		
12	Rigging	expansion of tracks	x	400
13	Seating types	use of existing		
14	Ticket office	no change with use		
15	Theater Marquee	already provided		
16	Management offices	" "		
17	Rental space	provided at north end	dividable	2000
18	Lobby	no change with use		

19	Green room	at south east extension	1	1200
20	Coat room	no change with use		
21	Metal working shop/studio	at north edge, at 16	1	1000
22	Classroom/general	at 19, group B	1	600
23	Classroom for children	at 29, group B	2	600
24	Arts and projects spaces	at 17, group A	1	1500
25	Primary/special materials	at 27, group A	1	1000
26	Library office	additional space not required		
27	Library workroom/study	at 27, group A	1	250
28	House storeroom	at 13, group A	1	100
29	Projects storeroom	at 21 and 15 group C	1	400
30	Multi-purpose space/assembly	by location of new const	1	5000
31	Gallery/multi-purpose	at 13, group A	1	1500
32	Restaurant/Cafe	at 19, group C	1	1100
33	Childrens Theater	at 27, group B	1	2250

C.

Circulation

1	Aisles	flexible with perform
2	Entrance	three major entrances
3	Egress	provided for group A, B, C,
4	Stairs	" "

D.

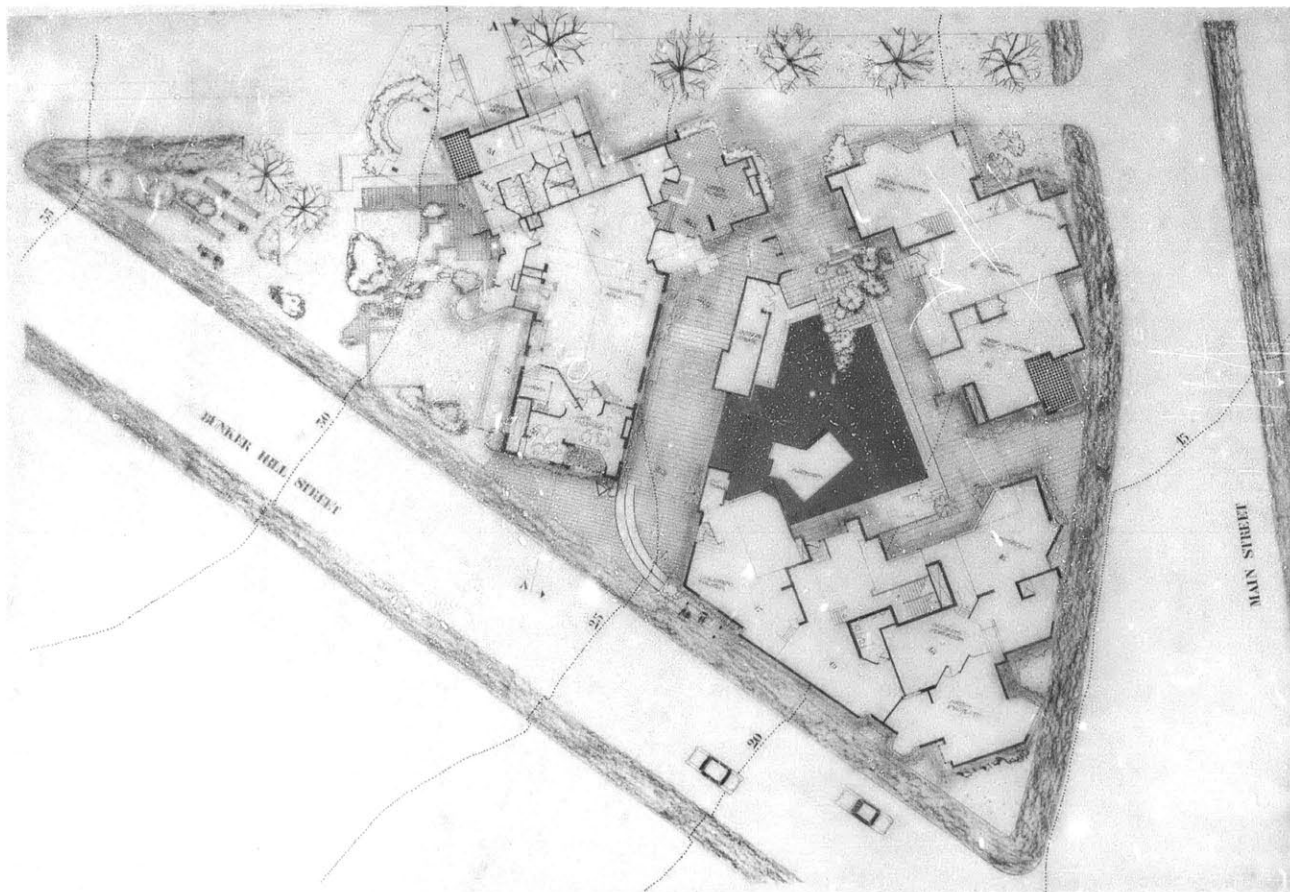
Safety and Health

1	Heating and ventilation	new mech plant for group A, B, C
2	Plumbing	sinks, lav provided in B, C, A
3	Electrical	standard supply
4	Fire and Building Code	changes will meet regs
5	Accustics	reasonable

E.

External

1	Landscaping	new plans for group A, B, C		
2	Lighting	new equipment		
3	Parking	Southwest expansion		
4	Assembly/Performance	provided by location of new const	1	5100



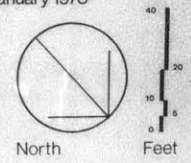
CWT

Plan 30
 PHASE III



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CWT

Plan 45

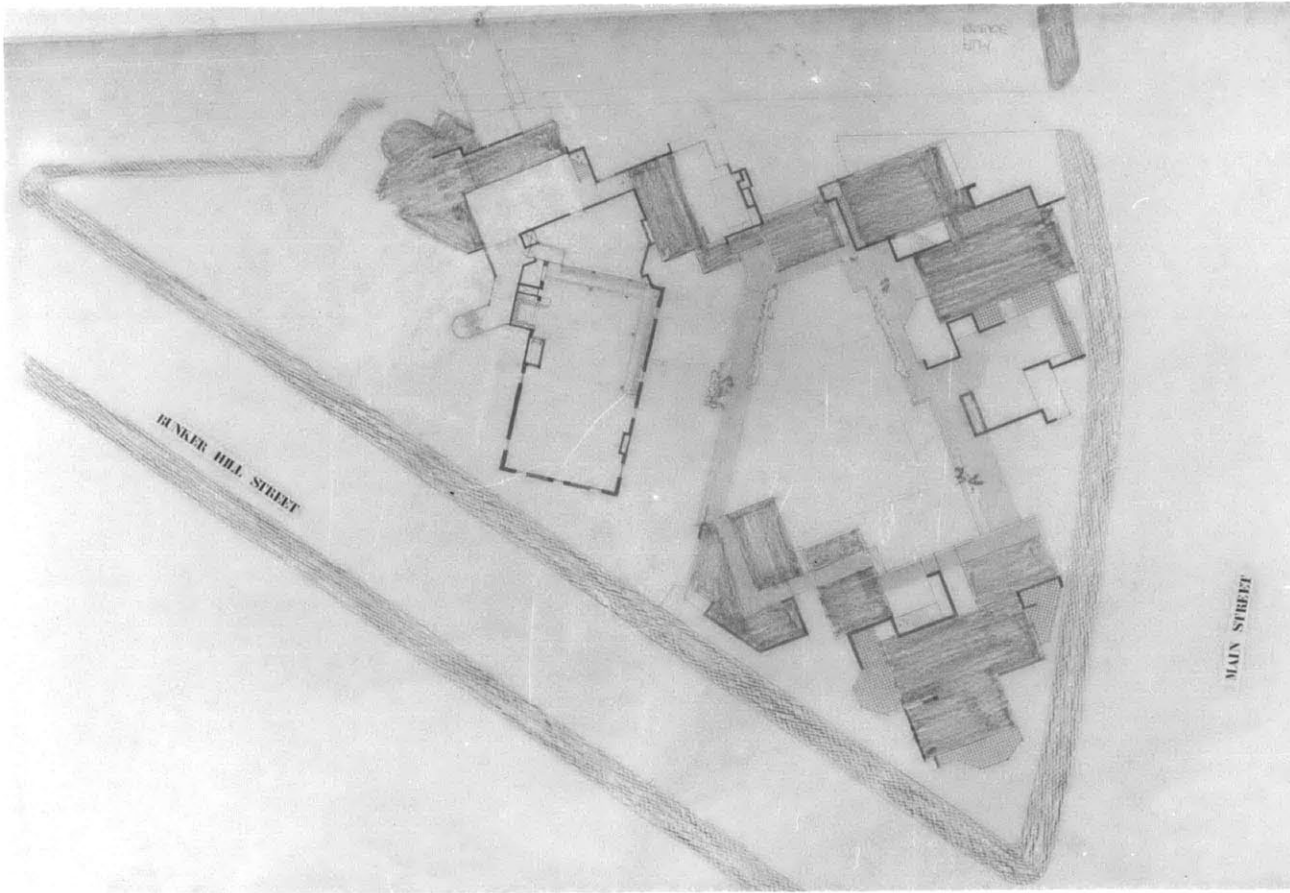
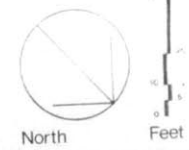
PHASE III

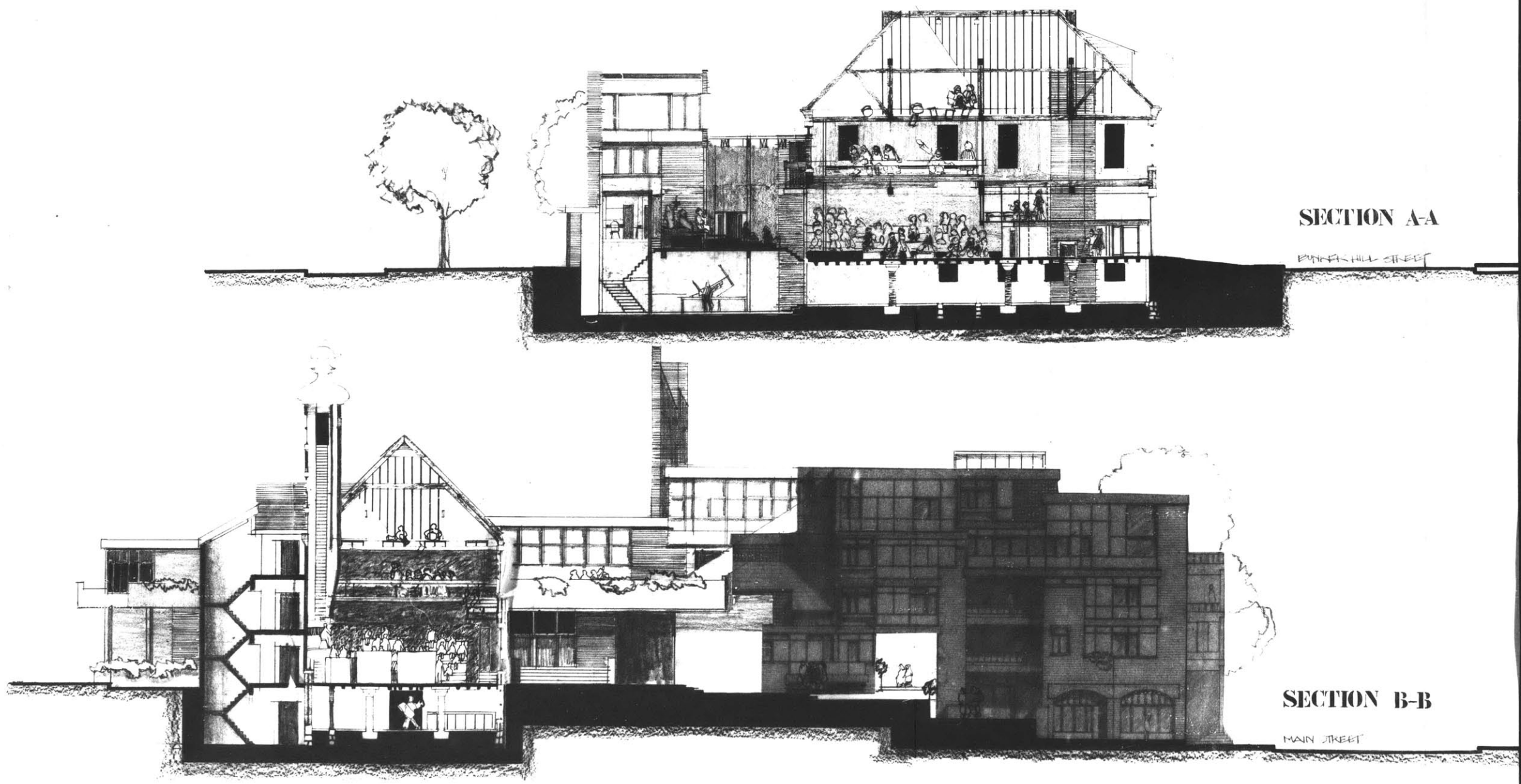


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SECTION A-A

SECTION B-B

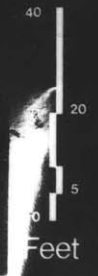
CWT
Sections



Charlestown Working
 Theater:
 New uses for old
 spaces

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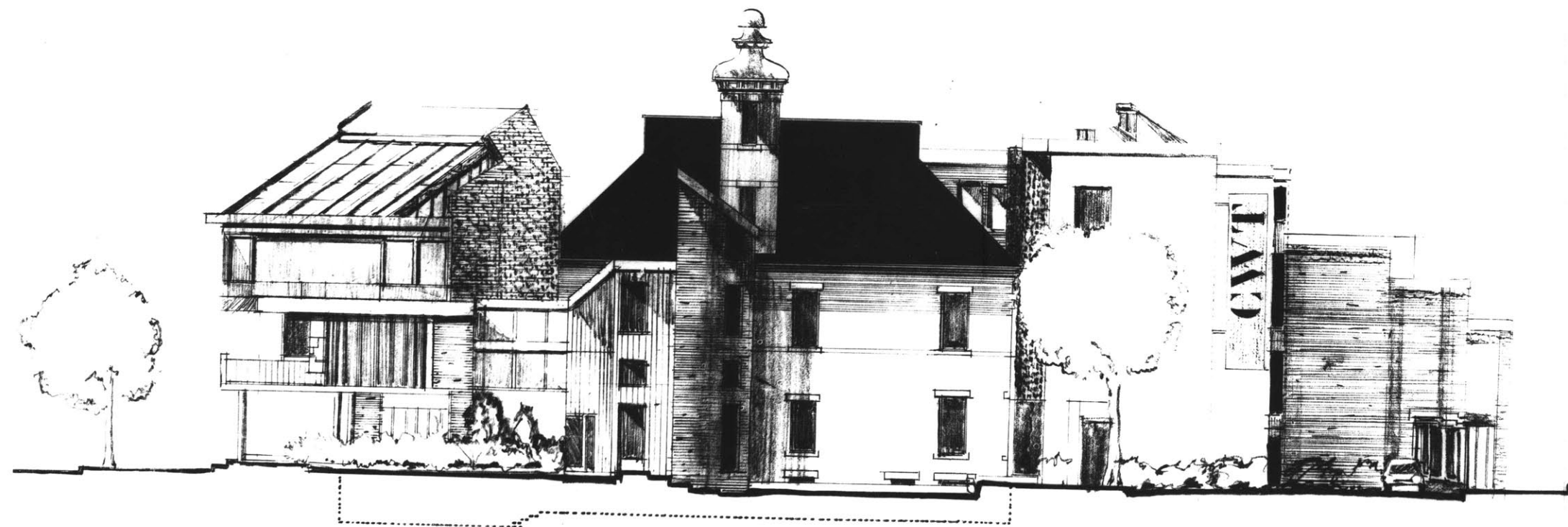
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CWT

Elevation NW

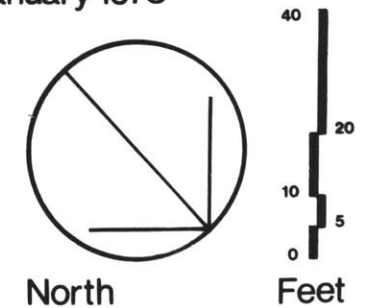
PHASE III



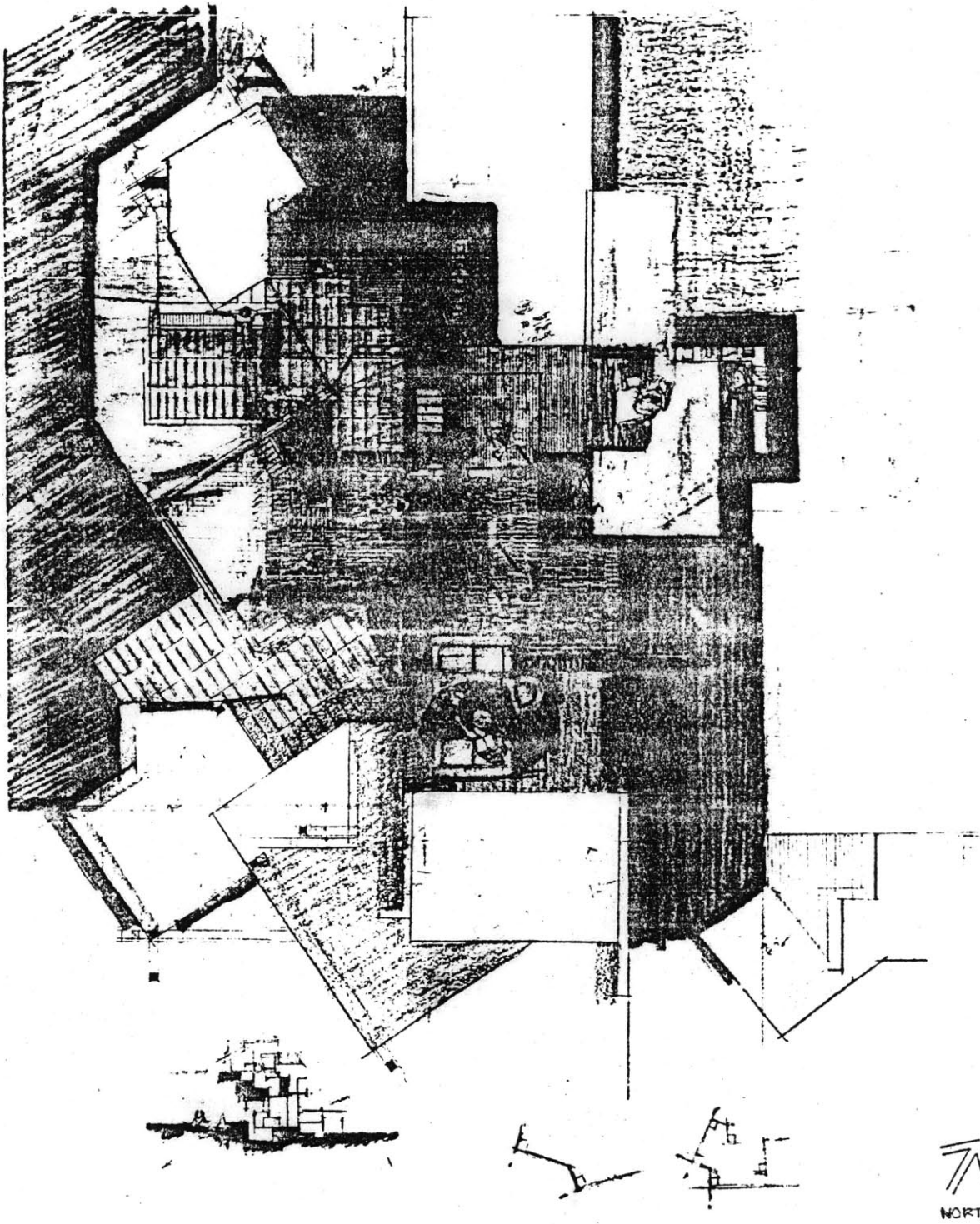
**Charlestown Working Theater:
New uses for old spaces**

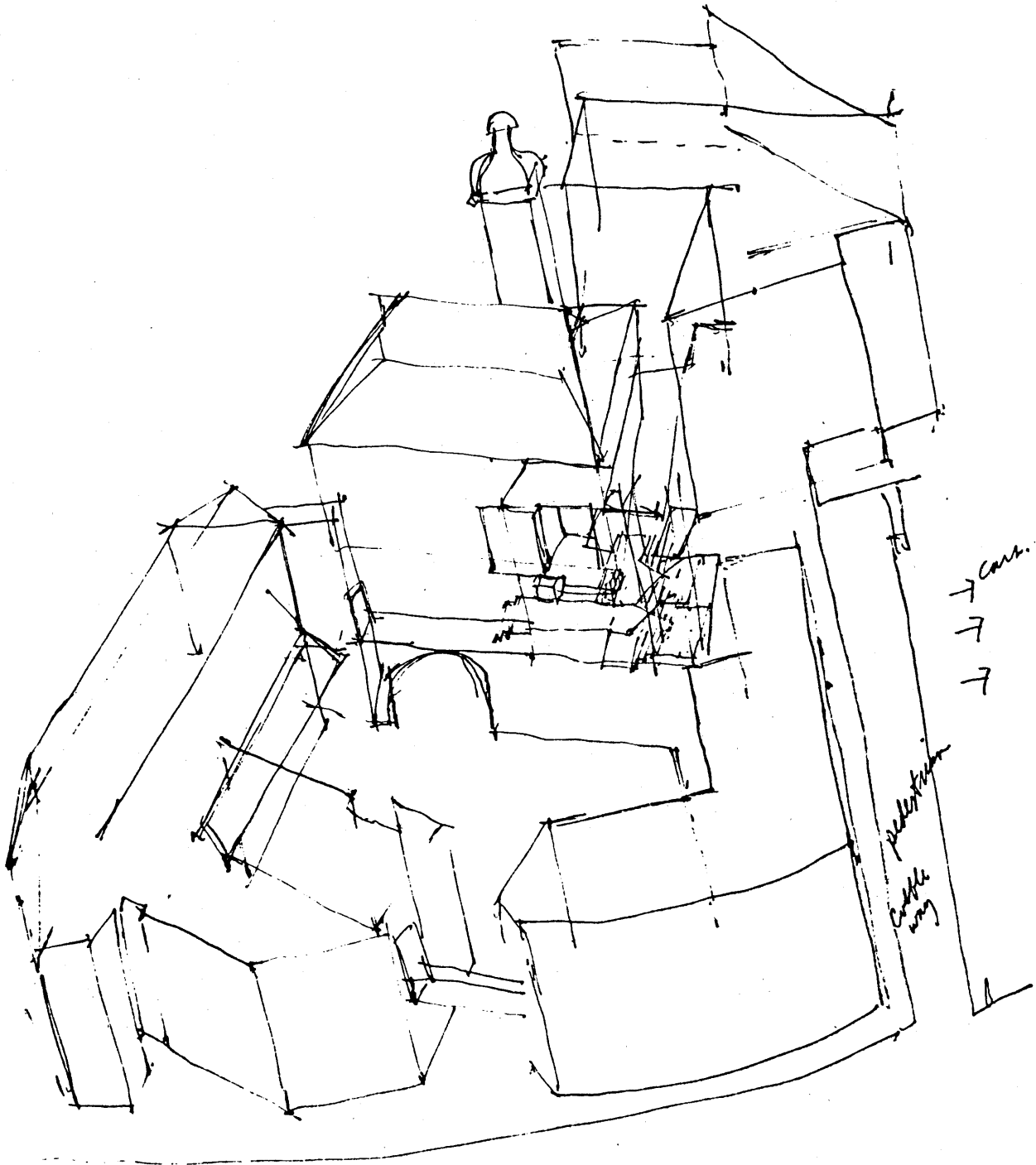
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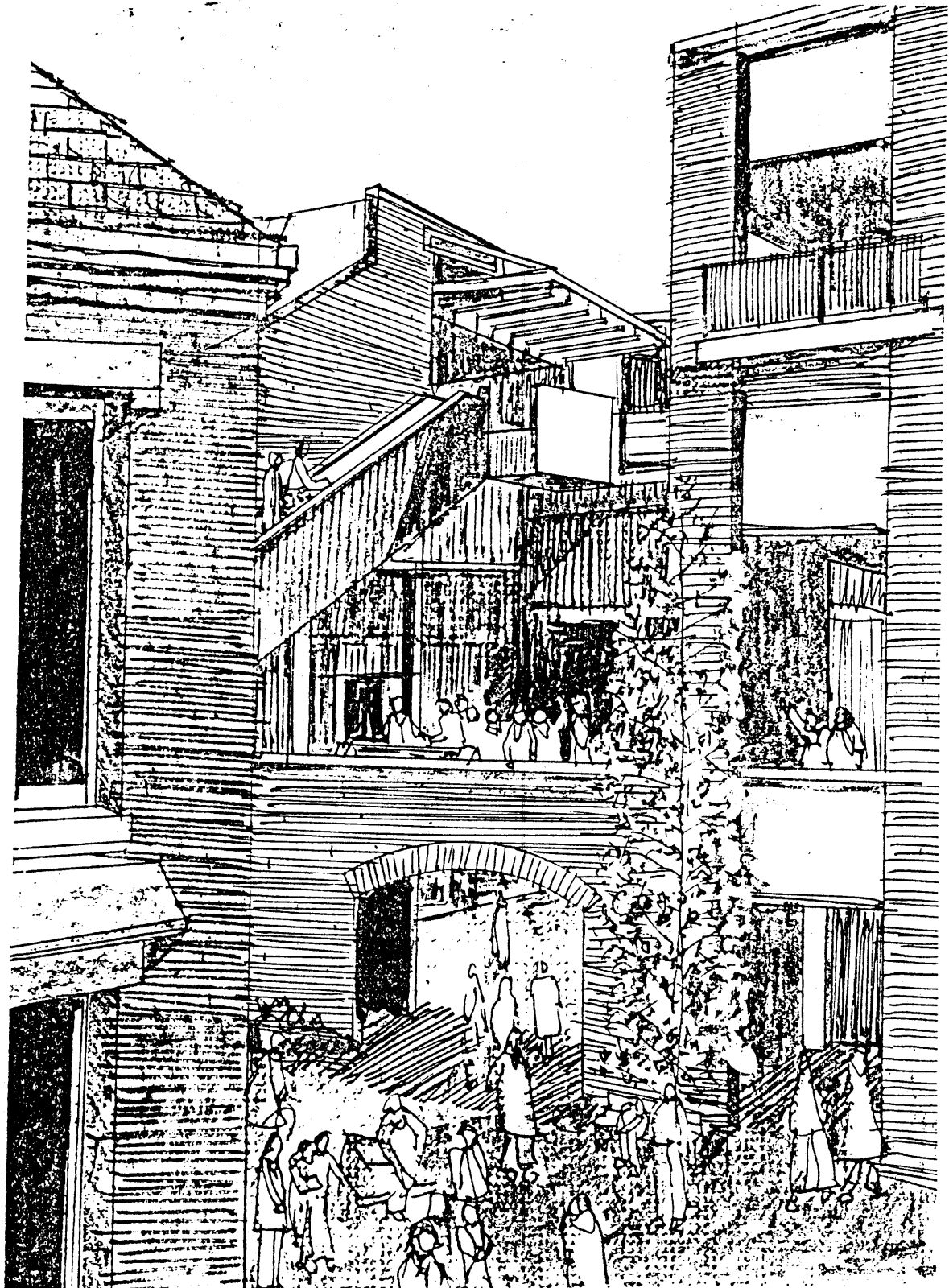
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Lobby, ticket and office area
plan at 36







Part III: Bibliography

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Part IV. Appendices

Working Notes

What is the Value of an Adaptable Theater?

Historical research is not a matter of dates and names or reviving a theatrical technique. It is a matter of increasing one's knowledge for solving a problem that is going on today by finding out a little of the tradition of one's predecessors as they solved their problems. There are two definitions that apply to an adaptable theater.

The adaptable space: Must be designed for several uses, one purpose would be a theater, another instructional or training areas, dancing, lecture, exhibition, community meetings, etc.

The multiple-purpose theater: Some purposes: drama, impromptu, puppet shows, multi media presentations, concerts, etc.

In the Elizabethan period in England, the surviving builder's contract dated 1613, for the Hope Theater, had to be built so that its stage could be taken away and the whole place used as a bear baiting pit. -- (Richard Southern. The History of Adaptable Theaters, 1962). There are many examples throughout history of buildings built especially as theaters but whose owners foresaw that they could not be used all year around. Consequently, they could be used (with little adaptation) for other purposes -- sports contests, balls, or magistrates courts appeared as agreeable uses. From the physical point of view a theater could be used for many activities outside the production of plays.

Another example of how adaptable theaters originated was when players on the great hall of a house had to experience the problems of variations in the places where they played. The solution lay in making their plays and presentations adaptable. The choice of presenting was usually open stage. The designer established the nature of the space and methods by which an environment could be created.

A frequently submitted argument is that as contemporary dramaturgy becomes more psychological and internal it demands a more intimate relationship between the spectator and performer.

Why Must CWT Theater be Flexible?

1. Like any other useful function of the people, economic, religious, social, theater's chief power is the deep inner feeling and the power one feels, when others in the human race are performing associated actions or events that have happened in their past. The forces are strong, the community relates, the human feelings are mutual, and in agreement about some particular notion or philosophy. The CWT philosophy is just as notions and community feelings change, CWT Theater must physically change to accommodate new types of productions that serve as an experiment to the community.

2. Theaters generally lacks variety in space - you always sit and face the stage in the same direction, entrances and exits for

audience are usually the same and boring! etc. etc.

3. What are the contributing factors to successful theater? Why do theaters die? Basically due to cost and other medias, i.e. film and TV. When a theater is required to be really adaptable and flexible, safety problems become difficult. One difficulty is to introduce the flexibility of the stage. Another is segregating circulation for scenery and properties, and another would be to keep open paths for public ingress and egress when stage and scenery are consistently recycled in design. All of this is hard to reconcile. The flexibility of keeping open scenery and properties can occur when the scenic designer has found a non-combustible or at least an inherently non-flammable or self-extinguishing substitute for flats.

"If you want to set the theater free you must decide what kinds of freedoms you want. To obtain freedom you must be prepared to make sacrifices." Why did the Boston Public Common Theater die? Technically acoustics and society changes but theaters don't.

The main question to ask - Can an adaptable theater have an adaptable stage. Only when one has decided the variability of the stage can one design a changeable theater. Rule 1 - you cannot design a seating area satisfactorily unless you have first decided on the form of the stage that associates with the seating.

Performers in the past have not required a variable stage, or, as R. Southern points out through his research on theaters that it was used "very rarely indeed." However, CWT's needs are different.

Major problem of designing adaptable theater for CWT.

The primary function of a theater is to bring a live performance and an audience together. Architecturally a theater is at its simplest when the audience area and performance area physically and spacially relate.

The European solution for a multi-purpose theater was a theater committed to the proscenium concept, with permanently fixed relationships between stage and auditorium, but whose meeting of stage and auditorium is uncommitted - is not fixed. There are three examples. One, the uncommitted area is capable of manual or mechanical manipulation for conversion to a full stage by thrusting into the auditorium; two, by adding seats and increasing the seating pattern to the proscenium; and three, by fully depressing the uncommitted area by mechanical conversion into an orchestra pit.

What are the Components of Adaptable Theater?

Types of Production

The many different types of activities that are to be housed within

the same space determine a measure of flexibility that will be essential. However, there is a limit to the degree of adaptability which is possible within the existing CWT building without seriously compromising the success of the primary purpose of the theater. A list below indicates possible scenarios for types of activities that may occur during a year. The design for the flexibility of the stage and seating area are based on the following scenarios:

Drama

The number of performers associated with a performance could be from two through twenty. Shakespeare histories have many casts, many extras. This implies a proscenium stage form.

1. realistic drama
2. experimental drama
3. naturalistic
4. expressionist
5. traditional

Recitals

A musical performance with solo singers and instrumentalists may number from two through fifteen.

Multiple Use

This occurs when more than one performance has to be accommodated during

the day, childrens matinees in the afternoon, drama in the evening. It is economically sound to make full use of the building and theater area that will serve the community and provide a wide range of activities. It will become increasingly important in the future to accommodate different theater companies that may maintain a repertoire of several productions which may change every night.

Other uses for the space: ballet, pantomime, singers, dancers, chorus. Chamber, jazz, pop and folk music will normally be limited to ten or twelve musicians.

Theater in Round

The performance area is surrounded on all sides by the audience. Entrances are made through the audience or from under the stage. There may be elements to visually close on a background area. Sight lines must be maintained. The quality of an open stage performance could be obtained within the building which has the means to shut off an acting area, or part of it for the purpose of deploying scenery, if desired. The separation of the lobby area from the seating area must be maintained for accoustical and distraction purposes.

Children Theater:

1. Will serve as a means of introducing the young child to the nature of live theatrical experience.

2. Provide the older child with opportunities of becoming familiar with the modern and classical repertoire of the theater.
3. Contribute to the enjoyment and education of every day life. The design of the theater should express the essential nature of the art. It is a place intended for the exercise of the imagination. It must work technically as a unit, and be visually satisfying.
4. To allow children the freedom to create their own drama in an environment supportive of that activity.

The Basic Design of the Theater

The theater has to be adaptable for many purposes and many kinds of presentations. The building must make the most of live actors and live audiences interacting. In planning a performance one must begin by providing a space in which an action can be reinacted if the object of theater is to recreate a specific activity. The actors and audience together share the occasion. There is a need for three elements to create the drama - the envelope, the center of the performance space, and the audience around the center space.

A decision should be made on relative distribution of space in order to arrive at a design solution for the design of the theater. Some assumptions:

1. The actor is contained within the audience.

2. Theater is a place for imagination.

- Should the acting area be placed on the level floor?
- What is acceptable vertical sight lines?
- The theater should be designed to allow for different variations of stage and staging.

In phase III the theater is arranged for use with larger ceiling height to accompany the following:

1. The central acting area can be isolated by a curtain from above (retractable) and by side curtains.
2. Lighting is used on tracks mounted to the existing joists.
3. What are fixed elements, unfixed?

Lighting

In phase I the tin ceiling is removed and the wood joists are exposed.

The mysteries of a moveable floor to create an auditorium could also be sloped for theater, or made flat for dancing were known in the 15th and 16th centuries. What have people done in the way of building a theater specifically designed for one type of theater show, but capable of being rearranged in the form of a stage and auditorium to be made equally suitable for a totally wide range of types of production - one expensive answer is the LOEB Theater.

The major problems of designing for an adaptable theater in the existing building is not different only complex because of the integration of all the functions and needs of the CWT. There are a few important issues which must be considered before the program can be discussed.

Limitations
and
compromies
occur.

To adapt a theater from performance in the round with changeable scenery to performances on an open stage (Elizabethan) without changeable seating, stage and scenery is difficult. Is changeable scenery the basic factor which makes the design of a fully adaptable theater difficult? Or is it the seating?

Only one
rule about
theater
planning.

Do not design an aspect of any new theater until you have first agreed on the kind of use or uses which is intended of the theater space. In other words - "don't plan any theater upon theory, only upon practice." (Bud Whalen, CWT Member - 1977.)

Integrated Energy Use Notes:

Architectural ingenuity can do much to save fuel in the winter and provide lower temperatures in the summer without special solar devices. In the Northern Hemisphere large windows facing south or southwest and southeast, admit solar radiation directly to the inside of the building where it is stored in the heat capacity of the walls. A wide projecting roof over the windows can be arranged to admit most of the solar radiation in the winter. Other building data design and shelter design values are important in saving fuel and maximizing heating and cooling efficiency's -

Some simple expedients for component heating and cooling with the sun and landscape are possible -

Site Selection:

SSE scope for maximum sun. Middle or lower middle of scope is preferable to prevent excessive wind effects and to avoid cool air pockets.

Planning Structure:

The layout should provide sheltering effect against winds. Larger building units could be grouped together but spaced to utilize

sun-heat effects. Joining of houses exposes less surface to heat loss.

Public Spaces:

Wind sheltered, open, with periodically shaded areas.

Landscape:

Varying typography shapes street layouts and space utilization into an irregular character.

Vegetation:

Evergreen wind-breaks in NE-SE direction at a distance of 20 times the tree heights are useful/desired.

Shelter Design:

Two living units under one roof have joining qualities and sharing facilities. Adjoining buildings have the lesser advantage of heat loss.

General Layout:

Conservation and economy of heating is about three times as important as provision for summer comfort. The extreme conditions both in winter and in summer suggest double role solutions of separated

zones. Entrance spaces with storage of clothing is desirable.

Plan:

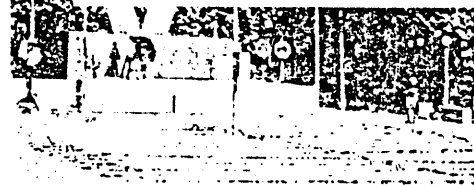
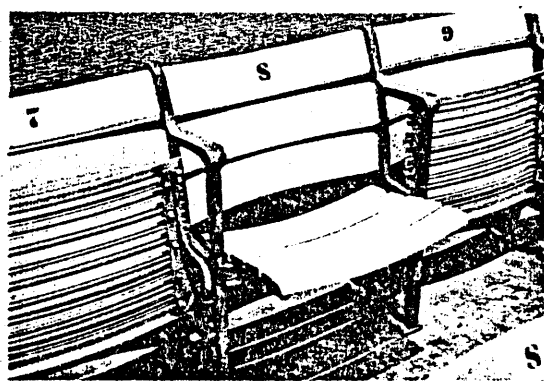
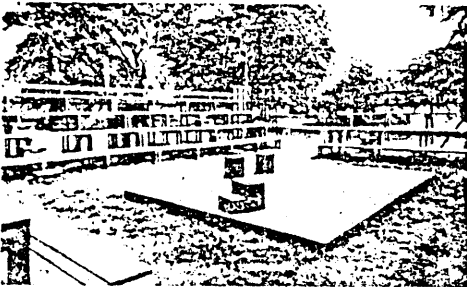
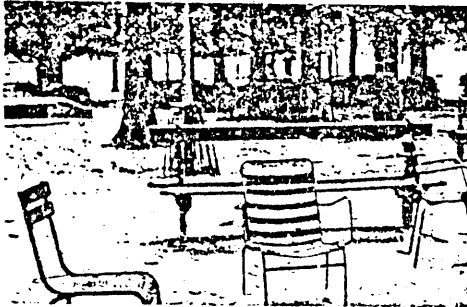
Design mainly determined by conditions prevailing in cool and cold months. Indoor living period represents 70% of annual hours. Plan through compactness, provision for summer comfort with additional living areas and utilization of outdoor spaces is essential.

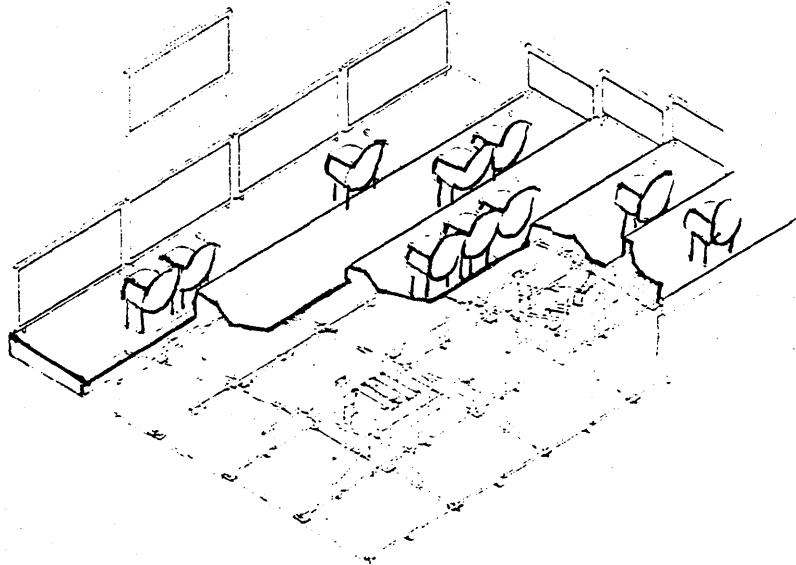
Form Volume:

Structures, depending on living requirements, should have minimum exterior surface. Proportion of 1:1.1-1.3 lengthened to an EW axis gives optimum effects.

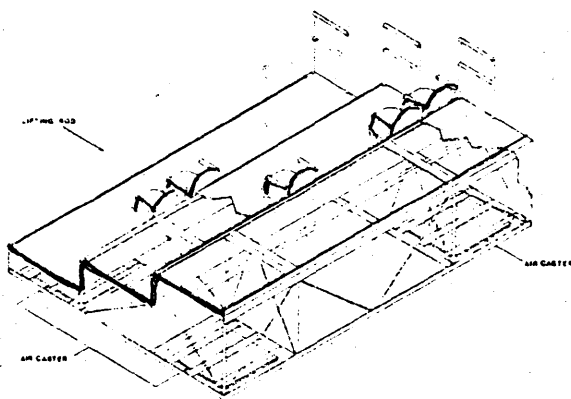
Orientation:

Optimum sun orientation lies 12° E of South. Prevailing wind pattern (NW-SE) may orientate free standing buildings.





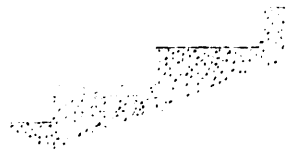
Modular seating system, multiple, mechanized, wheel-caster power-jacked and driven. [G. C. Izenour Archive]



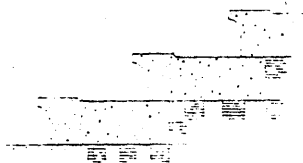
Modular seating system, combination, manual and mechanized, air-caster-raised for manual linear movement and electric-hoist lowered [G. C. Izenour Archive]

Classical Seat dimensions

Theater	Tread	Riser
	in. (cm)	in. (cm)
Argos	35.4 (90)	12.1 (31)



Epidaurus	28.7 (73)	13.0 (33)
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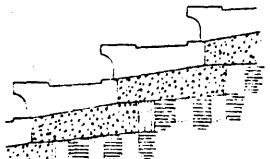
Priene (ecclesiasterion)	26.0 (66)	15.9 (40)
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Side	24.3 (62)	16.5 (42)
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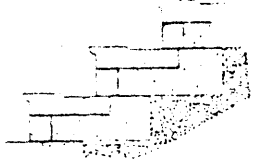


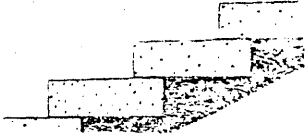
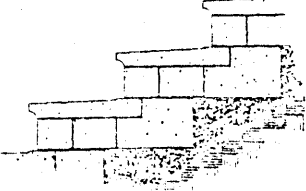



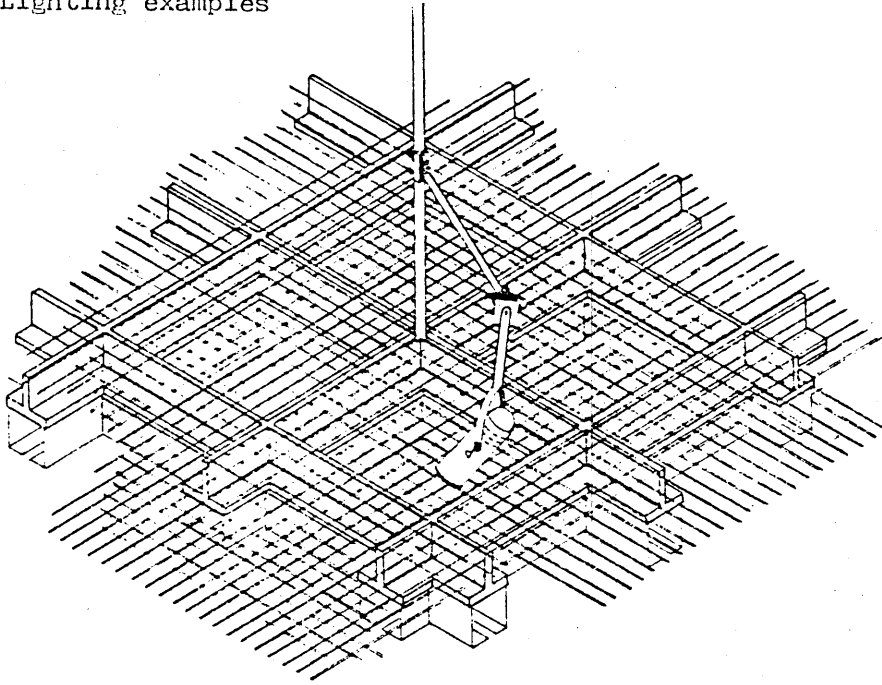
Dionysus	30.0 (76)	13.0 (33)
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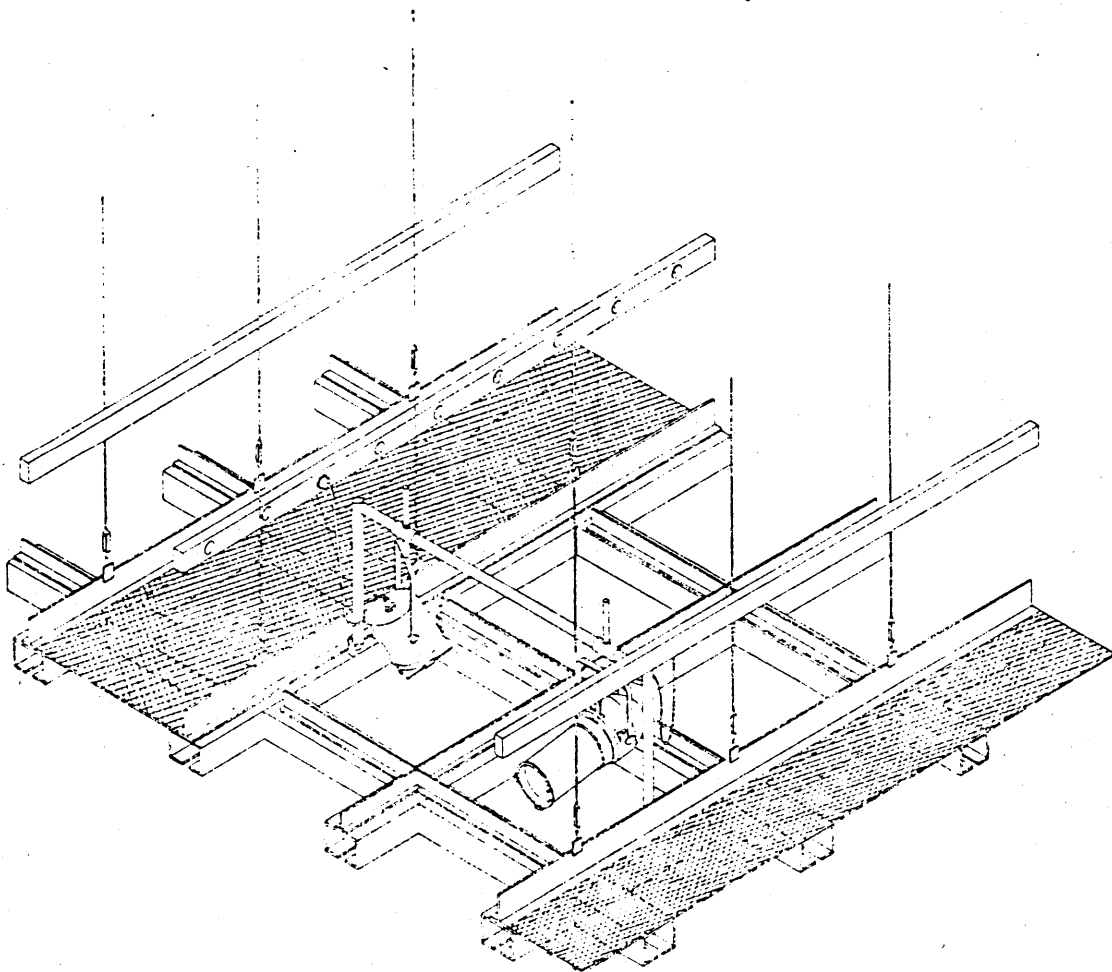
Epidaurus	Seat depth	Seat height
	in. (cm.)	in. (cm.)
	19.5 (50)	18.9 (48)



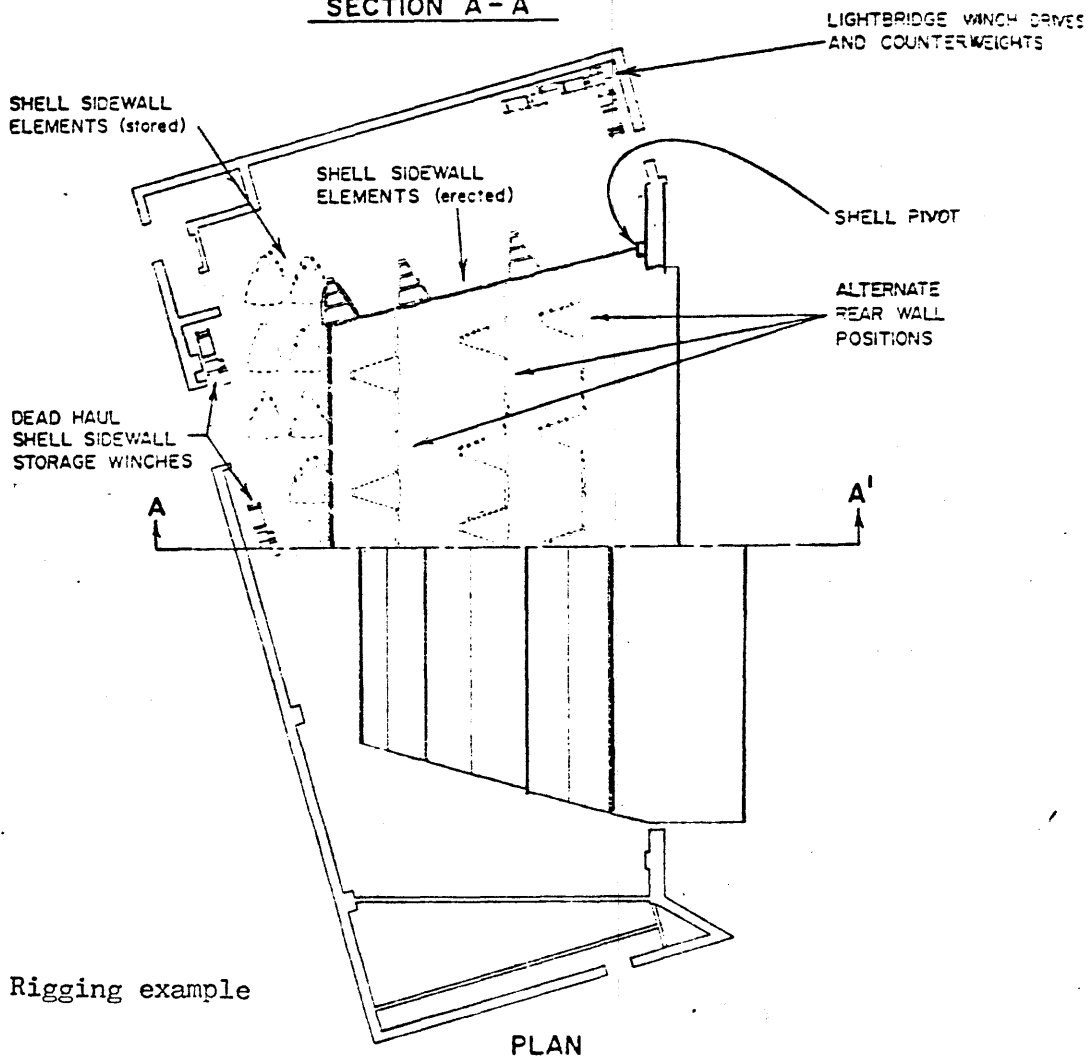
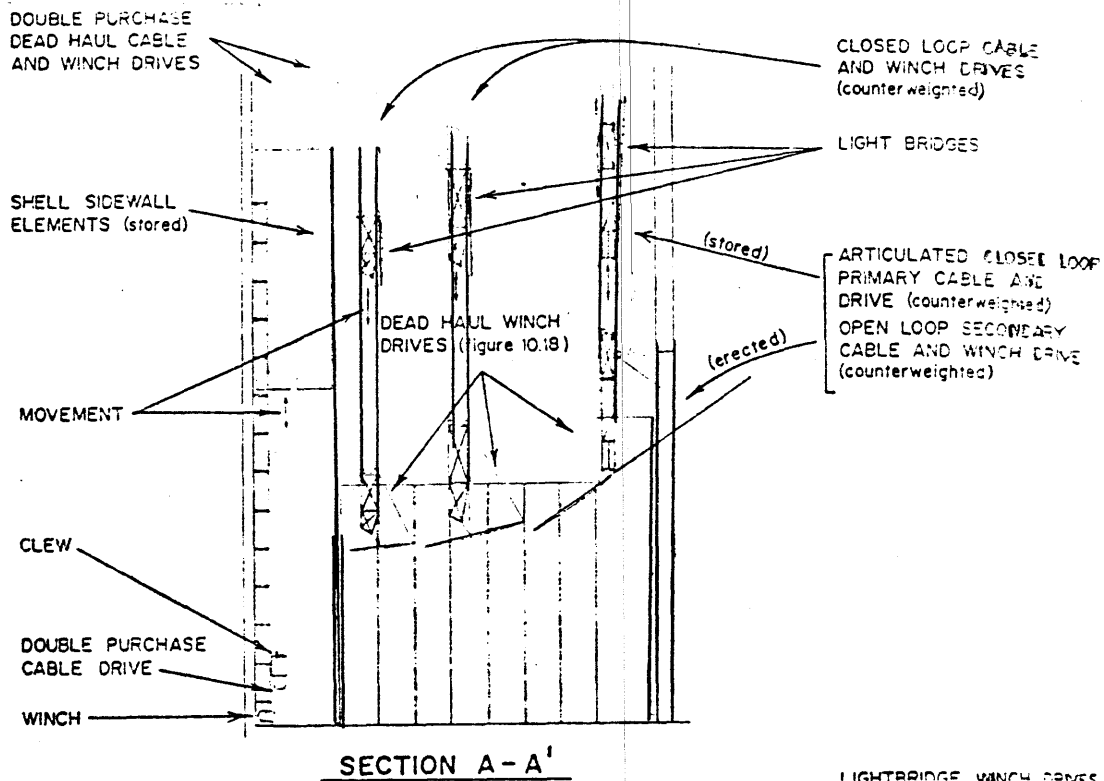
Theater	Tread in. (cm)	Riser in. (cm)
Pompeii (odeum)	26.7 (68)	17.0 (43)
		
Aphrodisias (odeum)	24.9 (63)	15.0 (38)
		
Aspendus	26.0 (66)	17.0 (43)
		
Ostia Antica	29.0 (74)	12.0 (30)
		
Caesarea	25.6 (65)	17.3 (44)
		
Aphrodisias (odeum)	Seat depth in. (cm.) 18.0 (46)	Seat height in. (cm.) 14.0 (36)
		



Modular lighting grid system, tensioned wire type.



Modular lighting grid system, catwalk-bogey type. [G. C. Izenour



Rigging example

The year was 1939, and the scene the Ritz Theatre in New York City, where the Federal Theatre Project's long-running children's hit "Pinocchio" was playing. This particular night, though, instead of getting his wish and turning into a real live boy, Pinocchio slumped to the stage at the end of the play. The stage hands came out, tore down the sets, and built him a coffin, which bore the inscription: "Killed by Act of Congress, June 30, 1939."

Thus ended the brief and turbulent history of the Federal Theatre Project (FTP), one of the U.S. government's first attempts to get involved in the arts. Though it lasted only four years, the FTP and the people who worked for it had a profound influence on American theatre.

Recently, a revived interest in the FTP has been fueled by the discovery of a vast collection of archival materials in an airplane hangar in Maryland. Now housed at George Mason University in Fairfax, Virginia, the FTP collection—scripts (more than 7000), production notebooks, posters, photographs, clippings, and internal files—is open to scholars and the general public for research. A comprehensive history of the FTP would fill more than one Ph.D. dissertation, but even a casual glance through the archives reveals some interesting notes on the pitfalls of mixing politics and the arts too closely.

The goals—"free, adult, uncensored theatre"

In January 1935, President Roosevelt proposed a radical New Deal solution to the problem of the unemployed: put them back to work instead of merely handing them checks. Congress appropriated \$5 billion to be used for the gigantic Works Progress Administration employment programs; by August, Hallie Flanagan, who had run the Vassar College Experimental Theatre, was appointed to head the WPA's theatre arm. At the outset, she enthusiastically declared:

We live in a changing world: Man is whispering through space, soaring to the stars . . . the theatre . . . must become conscious of the changing social order.

And Harry Hopkins, head of the WPA, promised "free, adult, uncensored theatre."

Unfortunately, however, the Project was conceived with two quite different purposes in mind: First, it was to be an emergency relief project, aimed at alleviating the disastrous effects of the economic depression on the theatre.

(Actor's Equity estimated that there were 5000 unemployed actors in New York City alone.) Yet at the same time, it was to be good theatre that would lay the groundwork for a permanent national theatre.

Hallie Flanagan hoped to create a network of regional theatres which would develop plays on local subjects at prices the public could afford to pay. Since it existed on federal subsidies, the FTP did not intend to compete with Broadway as



Looking Back on the Federal Theatre Project

When the U.S. government started producing plays as a relief measure during the Depression, politics quickly got into the act.

by Claire S. Chow

a commercial venture; rather, it would produce regional and experimental drama outside the traditional domain of the commercial theatre.

Flanagan also intended to produce professionally respected theatre, addressing relevant issues of the day. One result was the "living newspaper." This new form used pantomime, skits, music, radio broadcasts, and little elaborate scenery to dramatize current social problems. It resulted in such plays as "Spirochete," about the struggle to conquer syphilis; "Power," about the consumer's relationship to the utility industries; and "One-Third of a Nation," a dramatic indictment of housing conditions in the U.S. with local variations for different cities.

areas, especially New York City, to parts where their talents were needed. But Washington answered with a resounding no. Thus New York City became a major center of activity while many other parts of the country were virtually untouched by the FTP.

Relevant theatre brought up a second major problem, once again involving Washington. Flanagan wanted good theatre whether or not it was controversial; Washington wanted safe theatre, whether or not it was good. The conflict erupted early. New York's first planned production was "Ethiopia," a subject chosen partly because Mussolini's invasion of that country was going on at the time, and partly because a large African operatic company had been stranded in the U.S. and qualified for relief. But before the play opened, Washington issued a memorandum saying that "no one impersonating a ruler or cabinet officer shall actually appear on stage." Elmer Rice, then director of the New York division, saw this as a clear example of censorship and resigned.

Despite all the memoranda and the periodic administrative reorganizations and cuts ordered by Washington, the FTP eventually did create an extensive organization, ambitious and professional. There was a National Service Bureau in New York City that handled a wide variety of administrative and behind-the-scenes needs. Its employees read, wrote, and revised plays; dealt with royalties, union negotiations, and public relations; and provided a national bank of talent and materials, lending actors, props, sets, and scripts. The research department conducted audience surveys and delved into such topics as English drama and the history of the black theatre.

At its height, the FTP employed 13,000 people in 31 states. It produced 830 plays, including "It Can't Happen Here"—Sinclair Lewis' anti-fascist novel adapted for the stage. FTP's biggest popular success, "It Can't Happen Here" opened simultaneously in 21 theatres in 17 states, was translated into Spanish and Yiddish, and eventually grossed \$800,000 at 35 cents a ticket. Even such stage giants as George Bernard Shaw and Eugene O'Neill became so caught up in the spirit of public theatre that they released their plays for a \$50 weekly rental fee. Said Shaw, "I am not making a public-spirited sacrifice; I am jumping at an unprecedentedly good offer."



Mr. Wind in the FTP children's play, "The Revolt of the Beavers," looks innocent enough, but Brooks Atkinson labeled the play "Marxism à la Mother Goose," and it drew fire from Congress.

Achieving the goals Flanagan set, however, meant overcoming some almost impossible obstacles. WPA's controlling bureaucratic structure in Washington, for one thing, often made life with the FTP very frustrating. Plans for regional theatre were thwarted largely by relief regulations, which stated that individuals could not be transferred from the location where they originally signed on. FTP administrators had hoped to move some of their actors from metropolitan

photos: Library of Congress and George Mason University

"This Marlowe. Is he a Communist?"

Though the political content of some FTP productions raised the hackles of various Congressmen almost from its beginning, FTP's troubles began in earnest when the House Committee on Un-American Activities, under the chairmanship of Martin Dies, started its investigation in August 1938. The committee had three primary accusations to make: 1) the FTP was inefficient; 2) it employed a large percentage of non-relief amateurs; and 3) it was subversive, Communist, and indecent. Flanagan replied to the first charge by pointing out that the FTP had returned \$2 million to the U.S. Treasury from admission fees. Also, 90 percent of the Project's personnel were on relief rolls, and many were members of theatrical unions. The third charge clearly reflected the committee's driving obsession.

Committee members viewed Flanagan's trips to Russia to study theatre with dismay and distrust. They wanted to know if it were true that she had praised Russian theatre. "The Revolt of the Beavers," a children's parable about selfishness that Brooks Atkinson labeled "Marxism a la Mother Goose," was read as an overtly Marxist statement intended to subvert young minds. And most memorably, Representative Joseph Starnes wanted to know about "this Marlowe. Is he a communist?" When Flanagan answered that she was referring to Christopher Marlowe, he asked her to "tell us who Marlowe is, so we can get the proper references." She told the committee: "Put it in the record that he was the greatest dramatist in the period of Shakespeare."

Six months of sensational charges and testimony at the hearings boiled down to one terse offering by the committee, a paragraph stating its belief that "a rather large number" of FTP members were Communists, and that many had felt it necessary to join the Worker's Alliance (a left-wing union) in order to keep their jobs.

Even so, the damage was done. Mere association with the committee did irreparable damage to a project already considered a liability by the WPA. The WPA itself was in a tenuous political position in the late 1930s, and elimination of its most controversial offspring, the FTP, might placate anti-New Deal forces. It is not surprising, then, that the following year when it came time to vote on the WPA's appropriations, the House Committee on Appropriations voted to cut off funds for the FTP.

The appropriations hearings were concerned primarily with the nature of the FTP as a relief project. The committee charged that many actors had a tendency to regard their jobs as careers, many did not meet professional requirements, and so on. Flanagan carefully answered these charges with documented evidence to the contrary, and theatrical groups, celebrities, private citizens from all over the country voiced their overwhelming support of the Project, but to no avail. When the fiscal year ran out, Pinocchio died and so did the FTP.

Legacy of the FTP

The FTP is vulnerable to criticism on many grounds: It had its share of management problems, it had actors who were simply incompetent, and it produced a number of mediocre plays. The relief goals of the Project, while entirely laudable, sometimes interfered with the theatrical goals. For example, what should be done with an old vaudeville actor who had been out of work for ten years but still qualified for FTP relief?

And yet, many good things came out of the FTP. It gave a tremendous impetus to the development of black theatrical talent since blacks for the first time were given a large-scale opportunity to take part in all aspects of production. Black playwrights were encouraged to express their feelings about social, racial, and economic issues—and did, in such plays as "Turpentine," which included a scene where "the bossman" makes advances to a black turpentine worker's wife. The FTP also brought a rarity for the time—mixed casts on stage.

The FTP set out to cultivate a black audience as well. Its publicity arm advertised in churches and staged plays in locations accessible to blacks as part of a larger scheme to create a mass theatre-going public. It planted the seeds of ideas that matured later—free Shakespeare in Central Park; traveling dance, theatre, and opera companies staging low-cost performances; and small community theatres catering to a local audience.

National Public Radio, too, is a direct descendent of the FTP's more than 6000 radio productions. It happened that CBS and NBC gladly donated time to the FTP, not so much from public-spirited generosity, but rather to fill up vacant time slots. The range of radio shows was wide—everything from an Ibsen cycle to a series on the history of women.

Another area Hallie Flanagan stressed was children's theatre, a field the FTP helped make a serious theatrical concern. Since Broadway was not interested, the FTP was free to innovate on its own without worrying about cries of competition. (This charge later became a problem with the adult theatre; after initially deriding the Project, Broadway eventually came out with accusations of competition.)

Such plays as "The Revolt of the Beavers" and "Pinocchio" introduced theatre to thousands of children who had never seen a play before. FTP companies sometimes played to children who were living in abject poverty, and in one instance the actors discovered a little girl trying to smuggle home a puppet. She refused to give it up, saying that it was the only thing she had ever owned. So they changed their tactics temporarily and spent the afternoon making dolls for the children. In countless ways, the FTP touched the lives of the people that the commercial theatre simply could not reach.

And finally, there are the actors, directors, and dramatists themselves. Some credit the FTP with giving them their start in theatrical professions, and many

felt a keen sense of camaraderie and excitement about their involvement. Joseph Cotten, Arlene Francis, Will Geer, E. G. Marshall, John Huston, Joseph Losey, Sidney Lumet, and the late Doris Humphrey and Charles Weidman were some of the now famous names associated with the Project.

Burt Lancaster appeared in the circus, a division of the FTP that included vaudeville and other entertainments. Buddy Rich worked as a drummer in musical productions. John Houseman and Orson Welles collaborated on several plays including "Horse Eats Hat," a popular farce, and "Dr. Faustus." And Arthur Miller worked as a play reader, an arrangement allowing the FTP to hire playwrights to review scripts that might be worthy of production. Had playwrights been hired simply to write plays, they would have lost royalty rights to the government, but this way they could be paid and remain free to write on their own time.

Obviously, all this would not be quite as noteworthy if it had not been accomplished under government sponsorship. The FTP represents one of the first attempts at arts management by the U.S. government. Unlike the present day Theatre Program of the Arts Endowment, which dispenses funds to professional theatre groups, the FTP took on the tough—and perhaps unworkable—task of producing its own plays.

In the end, the FTP was a victim of its own contradictions. Art and the politics of relief—like oil and water—are compatible only for short periods of time. Perhaps Hallie Flanagan was right, though, in her own account of the FTP when she wrote that this was "the beginning of a people's theatre in a country whose greatest plays are still to come."



Historical View of Theater: Working Notes

Past and Prejudice

Emerging social forces created CWT and the design process which led to its final form. Does the theater collide with contemporary prejudices? The theater is not a monument.

The theater has its roots in the modern movement and the idealism which guided the movement. The theater confidently concerns itself with operations of Brecht philosophy and reflects this to the community in present circumstances of conscious theater which existed in the late 60's continues to thrive in a slump.

1. How and why did the building come out of its present form?
2. What ideas lie behind it?
3. How does it relate to the history of architecture and theater design?
4. What are its strengths and weaknesses?
5. What are the layers of the building?

Lord Oliver, Former Director of National Theater.

"I worked at Chichester in order to discover how the open stage worked."

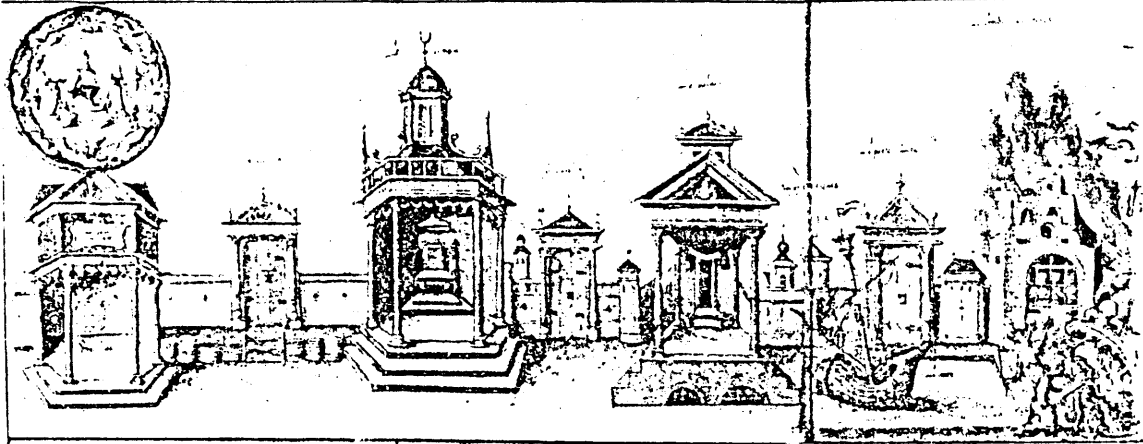
Theater must be made in terms of: Function Siting Supervision
Social Values Form

One goes to the theater to enjoy a play. This requires an environment which offers the maximum comfort and convenience and the minimum interference between audience and actor. (sacred)

CWT is not a temple and the policy of CWT is that it should be a very open building.

LES THÉÂTRES URBAINS AUX XV^e ET XVI^e SIÈCLES

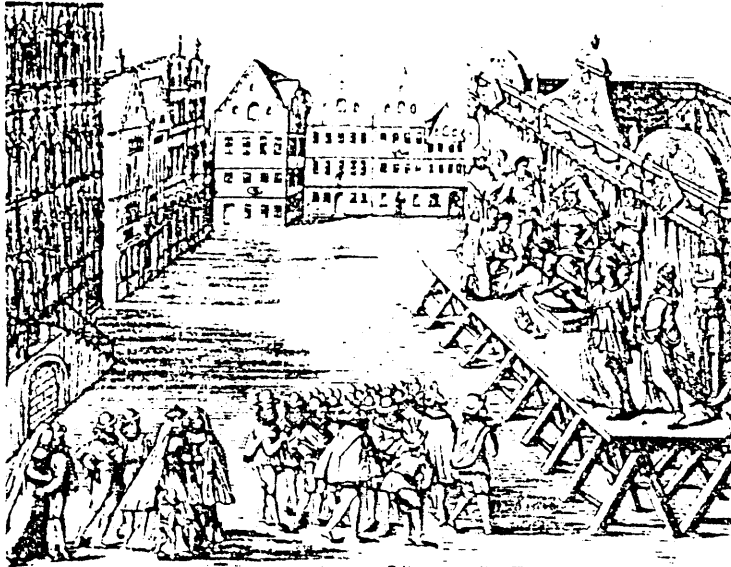
1. Jean Fouquet. Le martyre de sainte Apolline. 2. Le Jugement de Salomon représenté par les Chambres de Rhétorique à Louvain après l'Ommegang (vers 1550). 3. Plan attribué à la Passion de Donaueschingen (1485). 4. Schema du théâtre par Blackmore Evans « The Passion Play of Lucerne ». 5. Plan de la Passion de Lucerne. 1^{er} jour (1583). 6. Plan de la Passion de Francfort vers 1350. Reconstitution de J. Petersen. 7. Entrée de François I^{er} à Lyon, 1515. Tableau vivant: le Jardin de Milan. 8. Le Colisée de Rome. 9. Hubert Cailleau. Portrait du théâtre ou hourdement où fut jouée la Passion à Valenciennes (1547).



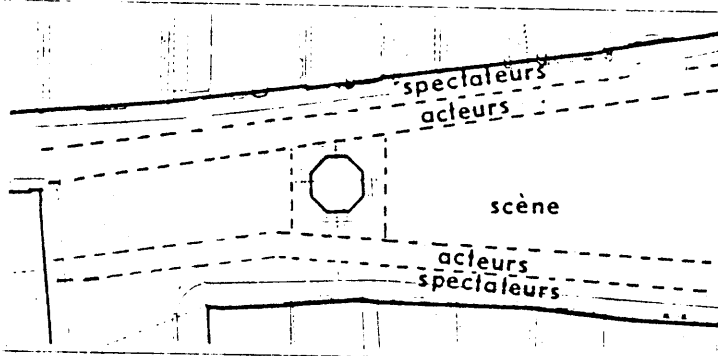
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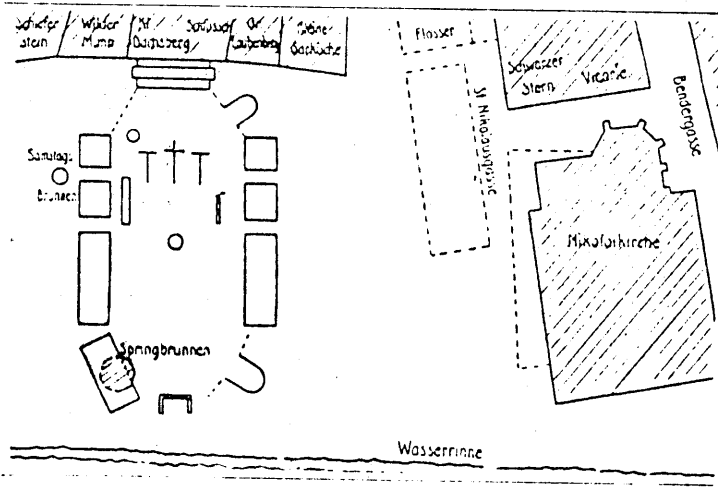
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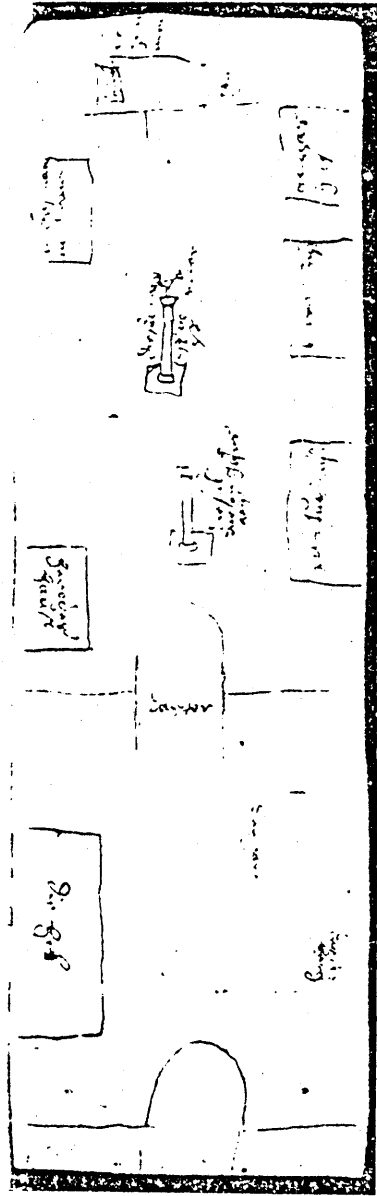
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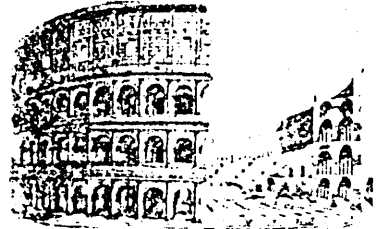
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5



CITY THEATRES IN THE 15th and 16th CENTURIES,

by Elie Konigson.

The multiple aspects of traditional performances reveal that urban space was used in various ways, not merely as an environment but as an organic part. Little by little the link between the theatrical place and the street, the square, the whole city becomes evident. Royal entries were pageants organized to welcome a sovereign to a city. The person honoured progressed along a route dotted with stages where certain scenes were acted as he rode up. The changes in street scenery follow the evolution of visual arts, for example the Italian influence with false perspectives, classical scenes etc. giving the illusion of a perfect city. During the same period mysteries became more popular, performed mainly in squares. In the beginning there was no one platform but the whole square was used, along with suitable balconies, fountains etc. All the actors were visible all the time, the public either stood or watched from surrounding houses. Theatres with the public on three sides were popular in France and England. Often the action moved into the audience space. The Donaueschingen passion illustrates the type of theatre with a stage. Most of the scenery was on the two longer sides, the actors turn their backs to the audience. They moved from one set of scenery to the other as the action required.

The Valenciennes mystery play was the most progressive type of Middle Age theatre. The audience faced the stage sitting in tiers. The stage had a back wall with doorways. Scenery consists of a few elements which were transformed into various objects. Hoisting gear is complex and housed in a special superstructure. In 1550 the Judgement of Solomon was presented in Louvain on a trestle stage with a façade backcloth. Curtains were used to give the impression of an interior or a distance.

PETER BROOK.

I don't get on with architects although I am frequently in touch with them. If we talk about theatre building, we are faced with total misunderstanding which, because of its very magnitude, becomes stimulating. The root of the matter here is the human aspect of theatre activity. The theatre is not a science, its sole gauge is life and life cannot be pinned down.

Life corresponds to our experience either personal or in the community, therefore it cannot be the reflexion of something pure. It is this quality of impurity which is important. Life is composed of all kinds of elements which move around dynamically in contradiction and conflict. We must keep this impurity in the theatre because it is the seal of life. My only reference gauge is the experience of man.

When the theatre is healthy it is never the expression of a point of view, only minor authors try to organize a world of their own. Shakespeare on the other hand drew together the elements which made the performance into a real world. Here we find the basis of the theatre—the microcosm seen by the macrocosm. His work goes far beyond the usual sense of the word "author". In the real theatre, this kind of author does not exist. The producer, the stage designer, the author, each one has an essential function, to create a world to be lived, shared and understood—the microcosm-macrocosm action. The quality of the world to be created is linked with its scale. All factors, especially those of contradiction are involved. Unity destroys the theatre, that which flees unity is appropriate.

The theatre has been changing over the last few years and not in the places set aside for it. Have we examined the reasons for this? The bourgeois theatre was in harmony with its function but the buildings have now outlived this, leaving a useless inheritance. New theatres built to-day rarely bring together conditions necessary for life to break out, whereas in improvised places, life can explode. Why are planned theatres inadequate?

When a spectator watches an actor, he sees a human body. What must the background show to be in harmony with the requirements of the creation of a microcosm? This question goes deeper than mere scenery. There are two possibilities, the living or the abstract background. If we take the backcloth away the actor is alone to get his message across, the spectator can imagine the background. But we must ask ourselves, does man without a background exist? Instead of acting against a neutral space, why not act in a place marked by life—a street, a garage. This is the very principle of Elizabethan theatre.

A short time ago I produced "A midsummer night's dream" at Stratford-on-Avon. We tried an experiment which consisted of doing our rehearsals in front of audiences, first children, then students, later audiences of all ages. The actors had to improvise all along and rediscover the kinds of conditions Shakespearean actors met. Back at the theatre we decided on an invisible white backcloth with bright coloured costumes. This complied with one of our old convictions that the kind of scenery is dictated by the theatre and not by the play. We have acted in jeans and sweater against a blank wall but we have also discovered that a production takes on a life of its own when acting outside the theatre. Costume and props belong to the theatre and not to the play.

Acting in natural surroundings is free, in the theatre it comes under restraint which however is stimulating. There is at the present time a movement which tends to conclude that theatres are a bad influence and useless. Our first reaction would be to ask architects not to build any more. But we must examine both sides. By leaving the theatre we lose acoustics and concentration. Street theatre raises many technical difficulties. By wanting freedom, we put communication, concentration in the balance.

Architects must understand that for the moment we avoid them only to meet up with them better. Theatres will have to be built but the most difficult part is to find a place of concentration where each gesture can have its meaning. For this we need elements which are still inexistent which must be worked out not only by architects but also by actors. While the actor improvises, the place can be improvised. But the day will come when the theatre will rediscover a meaning, then the problem of its architecture will be solved immediately.

There is already a field where architectural research can be useful. In 1968 we started experiments on the best place for the audience. The architect must try to put himself in the producer's shoes or even more so in the audience. If an architect with a theatre to design spends six months going from one entertainment performance to another, he will come to understand the difference between one set of relations and another. He will understand what is theoretical, geometrical, illogical. Instead of paper and pencil he will start designing with a piece of cardboard and a tin soldier. There is only one way to open science to the theatre—by using as a basis, the apparently non-scientific data which are its own.

Luciano Damiani, scenographer.

Throughout history theatre design has been modified to form, at the end of the 17th century, the type of theatre where the actor and the audience are separated, the spectator does not join in, he watches. The first crisis changing this came in 1876 for Wagners work, resulting in the design of the Bayreuth theatre by Semper and Bruck. The structure of the auditorium is modified to suit new social, ideological and aesthetic criteria, boxes are abolished, the orchestra is out of sight, the audience is in direct contact with the stage. This is the beginning of a new theatre design—the German style. Many other architects followed up in an endeavour to avoid rupture between the stage and the audience. Modern theatre is at the same time helped and hindered by technical progress—the advantage being easy changes of scenery, etc., the disadvantage a more rigid design to house the necessary equipment. Theatres for drama are usually smaller than opera houses because there are fewer performers and the actor must make himself heard.

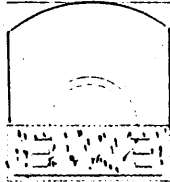
The wall between the stage and the audience is the most decisive element in the separation between actor and audience. The height of the stage not only defined the height of this wall but also the longitudinal section of the floor and the stage linked by rules of visibility. The longitudinal section of the modern panoramic stage defines, along with the height of the proscenium, the section of the pit. The lower the stage floor compared with the pit, the steeper the slope.

In recent years new theatres have been based on a common formula the mean ratio between capacity, visibility and acoustics. We have pushed this formula aside. Various requirements call for research on transformations to the stage and the auditorium. The best examples of traditional and modern should be examined. We must make use of auditoria in all their dimensions, limited only by the physical possibilities of actors, abolish the raised stage and its traditional proscenium and extend certain stage techniques in the auditorium, also stage-type lighting, make the technical installation more flexible, modernize the stage decoration. The safety curtain should not be disguised but if made of polished steel would become a mirror for the audience. The atmosphere in the auditorium should be stimulating and dynamic but neither mundane nor austere.

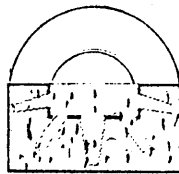
Modern Theater

LATE
RENAISSANCE
1550 — 1650

SINGLE VISTA STAGE
(Serlio)



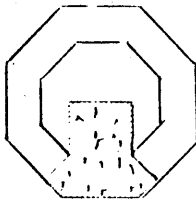
MULTIPLE VISTA STAGE
(Palladio)



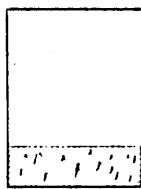
PROSCENIUM STAGE
(Alhottii)



THEATER OF SHAKESPEARE

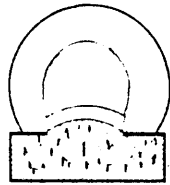


GRANDE SALLE



BAROQUE
NEO-BAROQUE
1650 — 1870

HORSESHOE-SHAPED AUDITORIUM
PROSCENIUM STAGE

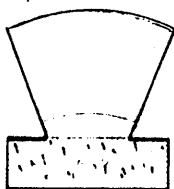


THEATER OF THE
RESTORATION

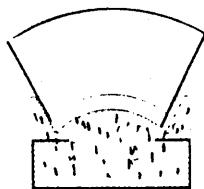


CONTEMPORARY
1870 — 1970

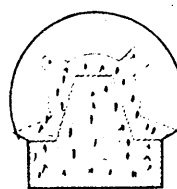
FAN-SHAPED AUDITORIUM
PROSCENIUM STAGE



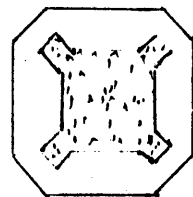
FAN-SHAPED AUDITORIUM
PROSCENIUM, APRON,
CALIPER STAGE



PARTIALLY ENVELOPING
AUDITORIUM
THRUST STAGE



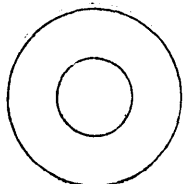
FULLY ENVELOPING
AUDITORIUM
IN-THE-ROUND STAGE



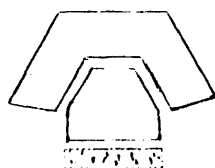
Ancient Theater

CLASSICAL
78C-400AD

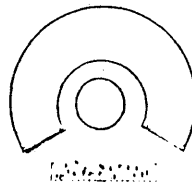
PRIMITIVE



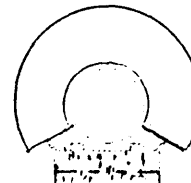
GREEK ARCHAIC (IKRIA)



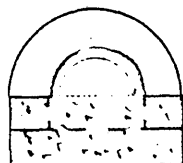
GREEK CLASSICAL



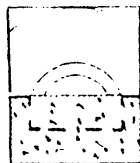
GRECO-HELLENISTIC




ROMAN




GRECO-ROMAN ODEUM



 AUDITORIUM

 ORCHESTRA

 STAGE

NO SCALE

This graphic reference table shows the basic ground plans of ancient and modern theaters.

[G. C. Izenour Archive]