

Acknowledgements

Without the aid and support of those people who were a part of my life during these last five years I would not have this moment; writing my thesis book. Among those people, several stand out and require special thanks.

...to my parents, who not only helped me when I needed money, but were also always there when I needed moral support.

...to my thesis professor, who has helped me make this a year of real progress for me as a designer.

...to my studiomates and fellow colleagues, whose constant input and commentary helped me keep going when it was not easy.

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Problem Definition

This project deals with a major addition to a turn of the century Beaux Arts Spanish Revival building and pump house that now houses a private art school outside of Louisville, Kentucky.

The Louisville School of Art (L.S.A.), founded in 1909, is the only BFA degree program in the Louisville area. In 1969, the school moved into the two-story building and powerhouse that it occupies today. An expanding enrollment and desire for improved facilities required the school to consider building additional facilities.

Site

The school's complex is situated on an 8.5 acre heavily wooded site in the center of Anchorage, a small suburban village on the outskirts of Louisville. Anchorage was developed by Louisville's wealthy tobacco and coffee merchants who, in the late 1800's, "became aware that it was a fashionable and delightful idea to have a country residence". The village still provides a "charming setting" for the "commodious country residence" set along its forest tree-lined wide country roads. In a 1916 study, the Olmstead Brothers of New York talked about the preservation of these qualities. Today, many of the residents of Anchorage would still like to see the village remain unchanged.



Main Building

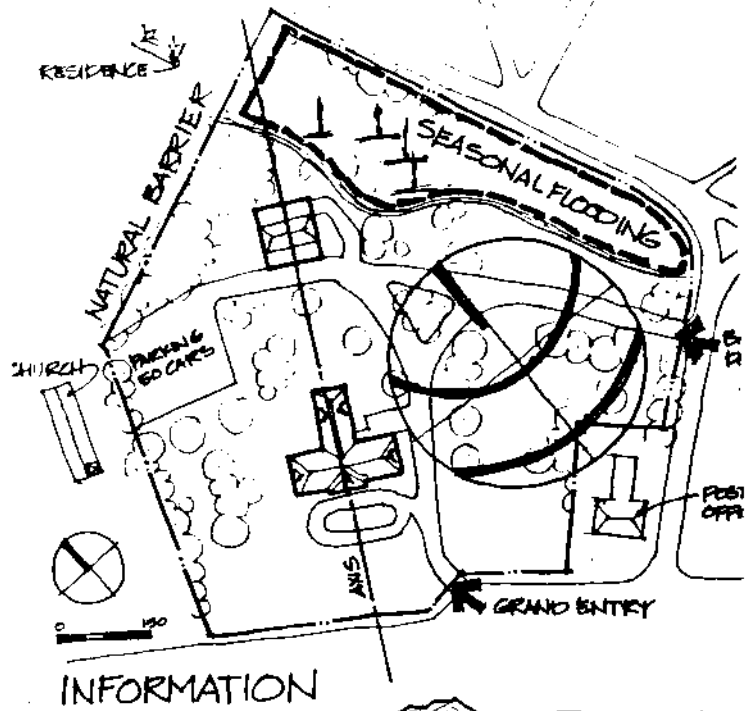


Power-house

In 1910, Citizen's National Life Insurance Company commissioned McDonald and Dodd Architects to design the front building and powerhouse that the Louisville School of Art has used for its campus these last five years. Dodd's large open rooms and use of natural lighting have adapted themselves well to the functional needs of an arts school. The main level houses the school office, library, and gallery, with the studios being on the story and a half top floor and in the powerhouse. Both buildings are organized along a north-south axis with the front building being at the high point of the ridge and the powerhouse located along the brook that sections the site. Changes to the existing site plan are minimal outside of an occasional line art sculpture working its way around a tree or along the side of the building. When Dodd designed these buildings he wanted them to figure prominently in the center of Anchorage. Any additions to the original buildings should do the same for L.S.A.; reflect its prominence within Anchorage and Louisville.

Program

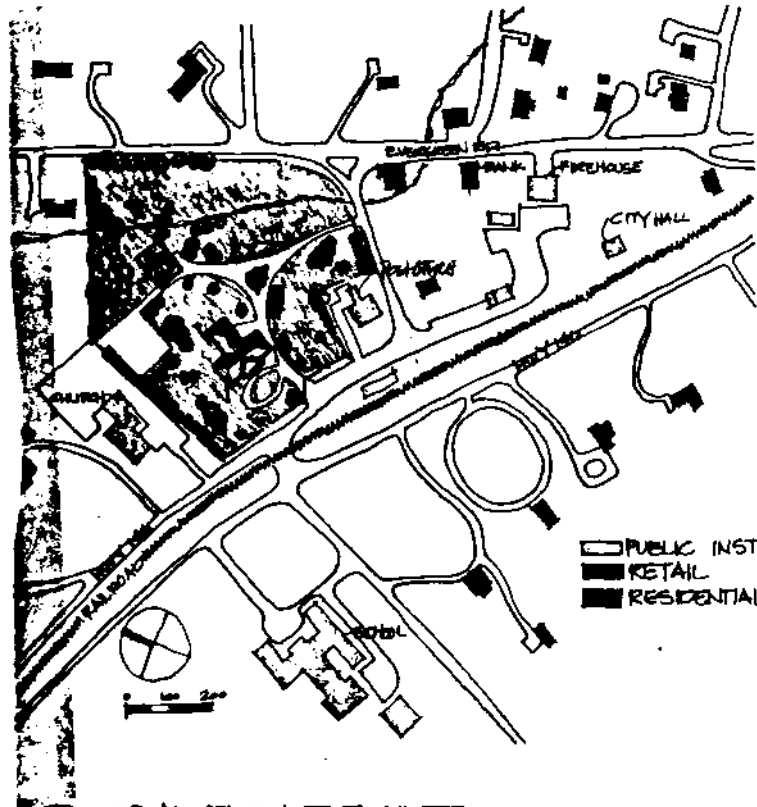
The expansion of the schools facilities will not only include expanded academic areas but also an enlarged gallery (6000 sq. ft.) with its own administrative area and provisions for housing the Junior Arts League (5,072). Along with



INFORMATION



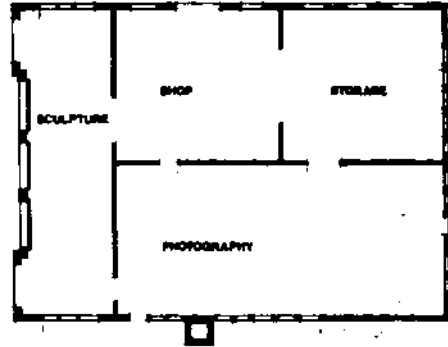
SITE ISSUES



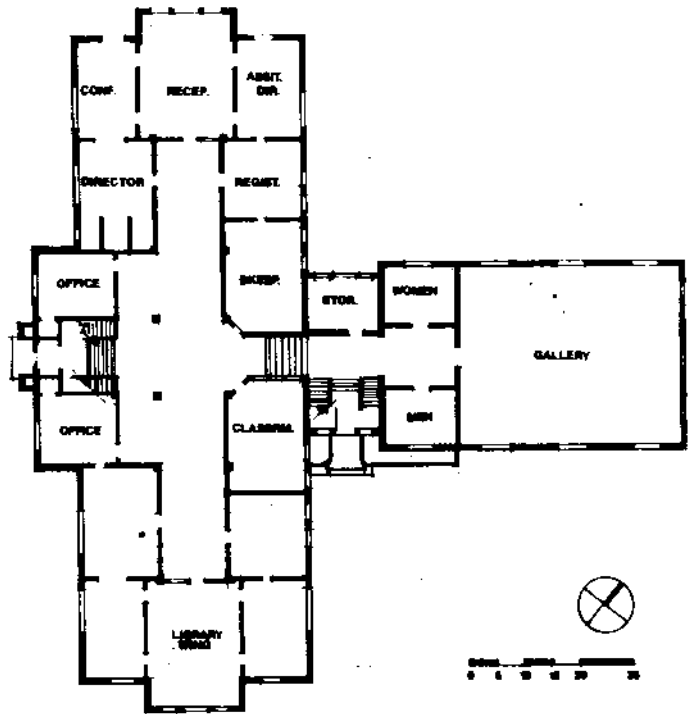
CONTEXT

these key public spaces are 20,000 volume library (8,322), the administrative office and two lecture halls, 200 seat and 100 seat respectively. Half of the project area (48,000 sq. ft.) will be devoted to ceramics, painting, sculpture, glass blowing, weaving, and other spaces. A small arts supply center (1,600) and snack bar/lounge (2,000) will be included in the program. This expansion of the school will mean doubling of the square footage on the site.

The design direction is a response to the site conditions and the programmatic needs of the art school.



Power-house



Main Building first floor

Concepts

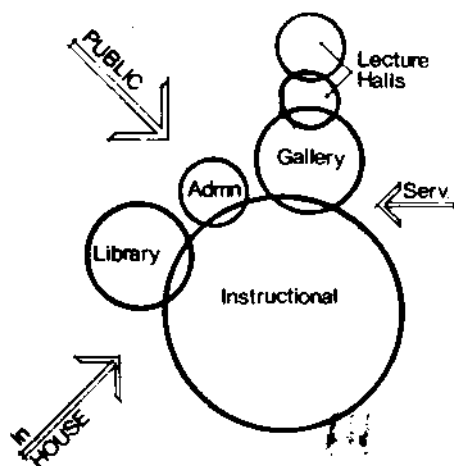
The direction taken for this project has been shaped by the variety of moods found in an arts school. The presence of the two existing buildings acts as a foil for this design to grow out of.

This design direction developed into a series of conceptual options. Several of these options were tested and the one that showed the most promise was developed.

Program Issues

This project could be divided into two groups of users, the public and the students, faculty and administrators. The public, who is composed of art admirers, school children, and lecture goers, will be short-term users, while the art students and instructors will be full-time participants in the building's use. Though there are two groups of users, to have a successful arts school there cannot be a separation between the groups. The public is the community that the arts work within and in keeping with this idea the arts school needs to be receptive and servicable for the whole community of users.

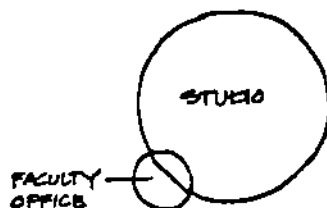
It is important that major spaces in the program, like the gallery, library, and lecture halls, lend themselves to ease of access for the public. Public contact with studios is desirable but should be controlled and directed.



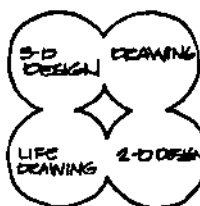
Access Diagram

Because of the dual users of the school there will be occasions when public and instructional activities will need to co-exist. Careful attention needs to be given to how the academic areas of the building meet with the public areas of building.

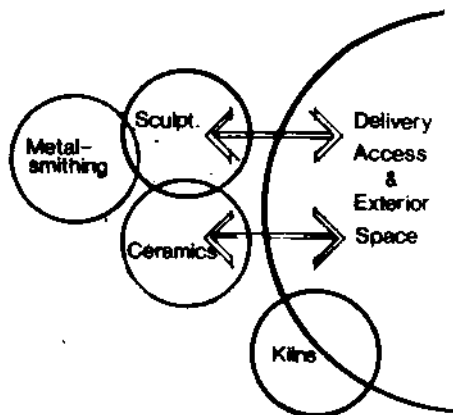
Within the instructional areas of the project, there are a number of strong relationships that need to be recognized too. These affinities are based on similarity of activities, a need for shared facilities, or where flexibility of space is needed. Clustering of the foundation studios will allow a variation in the size of those classrooms in accordance with the enrollment demand. To make the faculty more accessible to the students their offices should be located near their studio. Since the metalsmithing, sculpture, glass blowing, and ceramics studios all need an outside access for delivery and classwork, grouping them around the same space would be possible. Among the spaces listed in the program, a number do not wish to be located next to one another, like the sculpture studio and the printing studio. This incompatibility is based on a separation between dirty art areas versus clean art areas and public spaces versus academic space.



AFFINITY - studios



FOUNDATION STUDIOS



Affinities

Site Issues

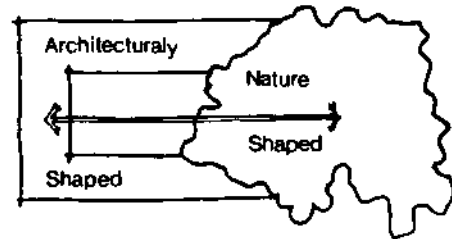
Anchorage has held onto the country village qualities that have made it such a fine setting for the Louisville School of Art since 1915. Respecting this existing character, yet making a positive statement about the L.S.A.'s facilities is an important project goal. Satisfaction of this goal is important to the success of the project. Architect, W.J. Dodd's design for the front building and the powerhouse achieved these qualities back in 1910. The expansion of these facilities for the village of Anchorage as Dodd's first design.

Emphasis should also be put on preserving the natural qualities of the site. The stream, mature trees (some as large as 14"), and rolling openness (there is a 16' drop between the two existing buildings) of the site blend together to give the existing buildings the serene setting that makes the site so successful as an arts school. Aligned along as north-south axis the existing building impose an order on the site. This order provides the stature indicative of an institution that is devoted to the teaching and advancement of the fine arts. Both of these qualities should be cultivated by the new design proposal.

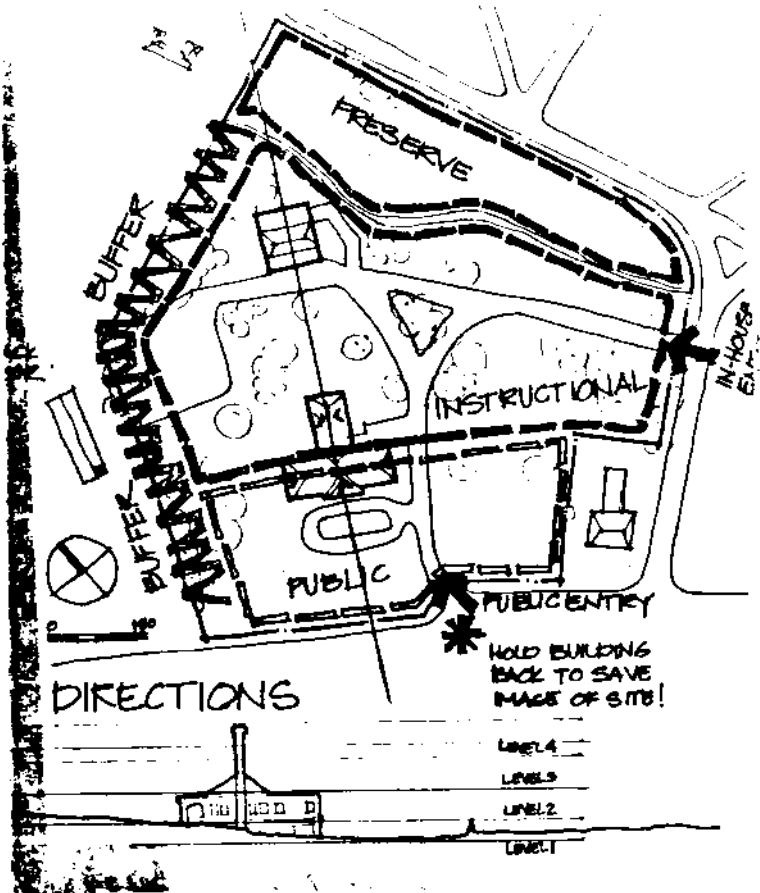


Design Directions

Walking about the site it is possible to experience the variety of spaces to be found. The architecture and landscape combine to shape working places, greeting places, contemplation places, and play places. Since the impact of architecture on the site will more than double with the expanded facilities, it is important to control how this growth impacts this variety of spaces on the site. Undoubtedly, it is not possible to maintain all of the existing spaces on the site but those shaped by the expansion should carry a range of "man shaped" to "nature shaped".



Using the east-west cross axis of the front building and the stream on the northern portion of the site the Louisville School of Art property can be conveniently portioned into three zones--public, private, preserved land. The strongest entry statement is at the southern side of the site along the ridge that crosses through Anchorage. An "in-house" entry can be found on the eastern edge of the site. Both of these entries will be maintained to service the two key zones of the site. To maintain the image of openness that greets the visitor of the school today it will be important to keep the new buildings intrusion upon the south edge of the site to a minimum. The preserved land lying between

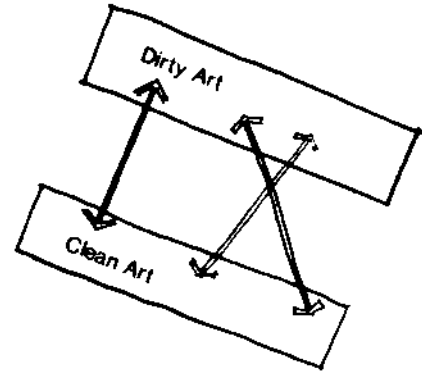


Site Analysis

the north edge of the site and the stream will be set aside for the pleasure and leisure of the community and school. It will also help keep a distance between the institutionally scaled buildings of the arts school and homes to the north. On the western edge we find a church which should meet the scale of any additional building quite well.

Looking at the spaces in the program that do and don't want to be together, we find that they can be broken up into two distinct groups--clean and dirty. Instructional areas like ceramics and metal work should be separated from the cleaner art activities like painting, and lecture halls or galleries. The existing buildings already use this pattern of zoning.

Since the arts school is located on an 8.5 acre site, it's expansion could take the form of another building or buildings on the site or an addition to the existing pair. A "campus" solution for the expansion of art school, with separate uses grouped in separate buildings, has been avoided. Two buildings are used because it is easy to separate them on the basis that one is clean and the other is dirty. But the number is kept to two since programmatic proximities and the local climate really doesn't make a greater number feasible. It also would be hard to locate parking in a reasonable area.



Direction

Concepts

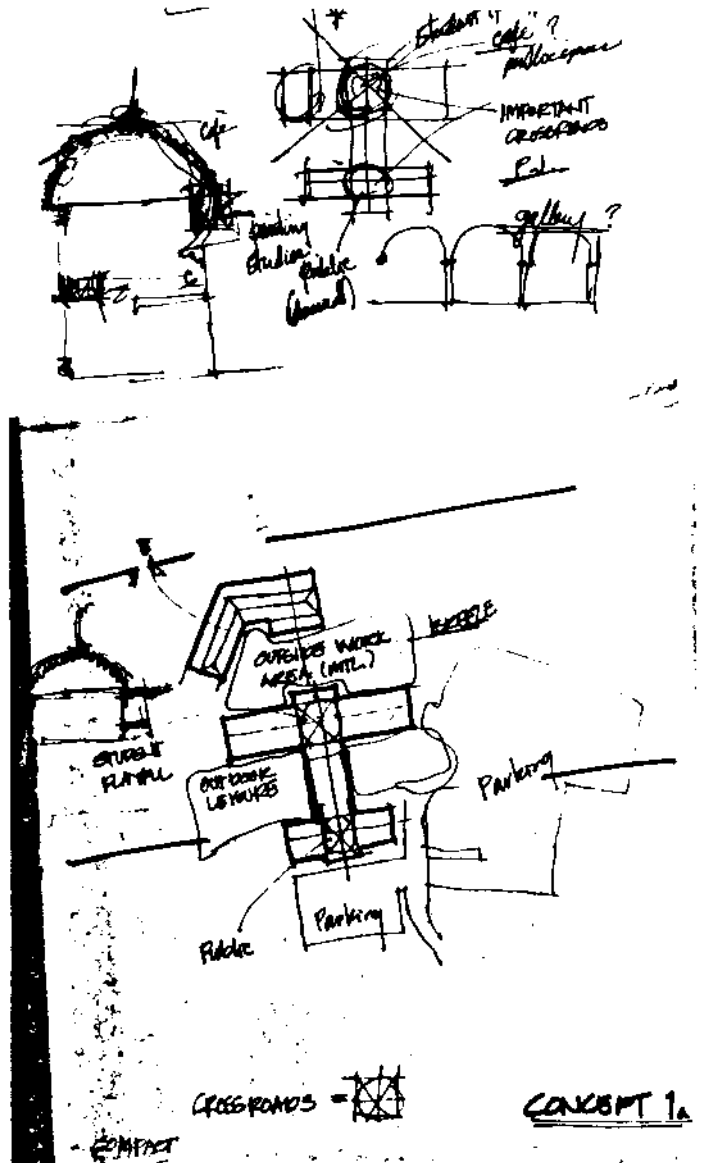
Since this is an addition to two existing buildings with a strong character of their own, how the new should relate to the old is a predominant issue. The two extremes are either a direct interpretation (reproduction) or a complete contrast. Since building on the existing qualities of the site was cited as a design direction a contrast is out. Some level of interpretation of the existing buildings qualities should cultivate a compatibility with the site.

Concept 1

The first five of these concepts are an obvious attempt as a literal play on the cruciform configuration of the existing site organization. In the first of these "ideas" a new apse is created which is for students as opposed to the existing which is associated with public. This notion of a new focus and entry for the building carries throughout most of these study sketches. The zoning of parking into two areas and distinction between outdoor leisure and the work area courts also follows through.

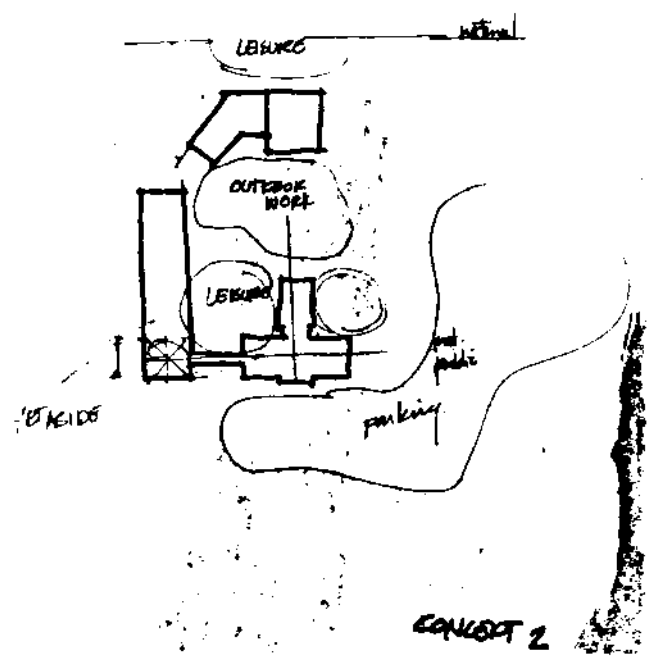
Concept 2

Closer to a distinct separation of existing and new, the next scheme puts a majority of the new classroom spaces in a new wing to the west. This approach does not allow for a strong intermingling



Concept 1

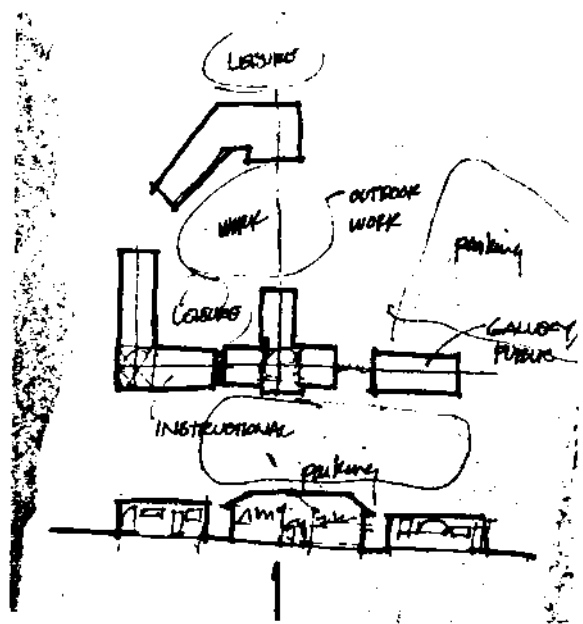
of school activities since the physical connection between the buildings isn't there. The grounds between the buildings could be used as labeled, but are poorly defined and don't act as unifying elements either. What is good here is the intent to minimize the impact of the new building on the ornate and prominent south facade of the existing building by turning the narrow face of the addition to the south.



Concept 2

Concept 3

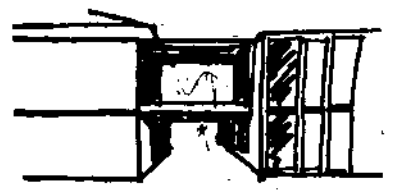
The problems with unifying the site in the last sketch have been looked at in another way in concept three. Here, the method of unity is based on keeping the symmetrical balance of the south facade by building along the cross axis of the main building. The plan configuration in this solution is even less of a whole than the last one though and also presents some problems with vehicular flow through the site.



Concept 3

Concept 4

These next two concepts try to incorporate the new have as a way to balance the treatment of the plan configuration. Placed on the axis of the existing plan, the whole project begins to attain a unity. The definition of spaces between the buildings is more precise. Following the axial organization of the two existing buildings concept four adds new weight to the north-south axis of the front building, goes with the same emphasis



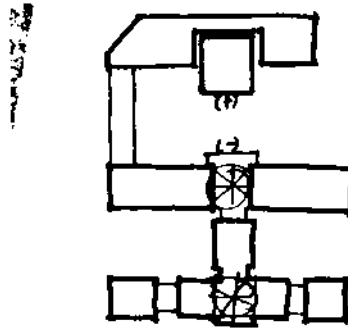
on the new cross axis and straightens out and balances the powerhouse addition. A bridge between these acts as an enclosure for the courtyard.

Concept 5

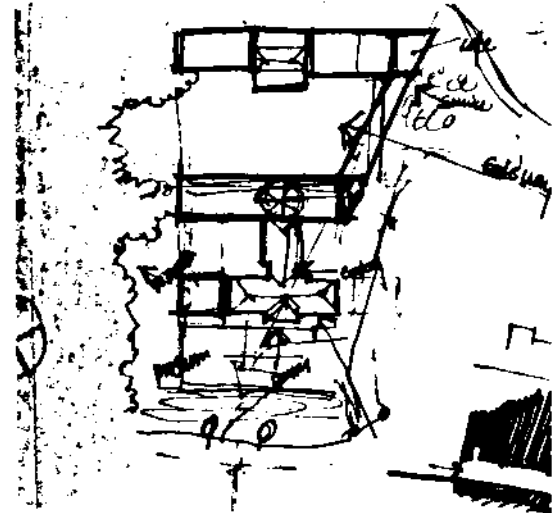
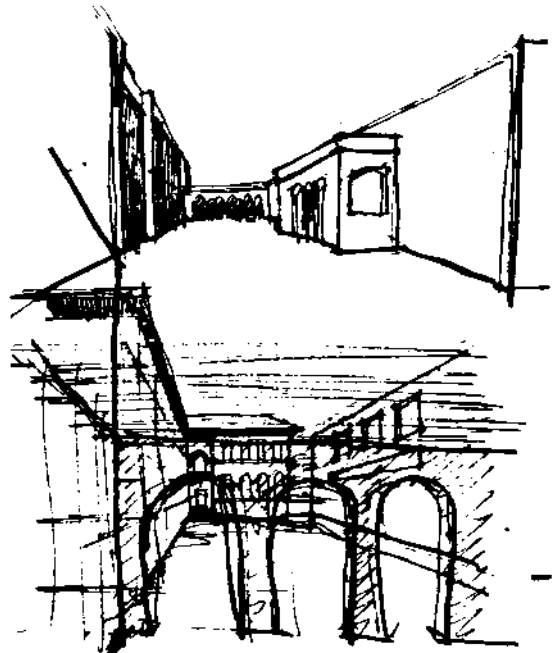
Looking at how circulation through the site may have a more literal effect on the shape of the building, concept five has an asymmetrical treatment of the cross axis and uses the bridge as a gateway into the major courtyard. Note the location of the asymmetrical element as the gallery, a prominent public space in the project. There is also a recognition of the need for a statement of entry for the main courtyard here.

Concept 6

This last scheme was looking at how rotating the last diagram would effect the impact of the addition on the site. Because of this pivoting a number of interesting appealing events happen. Suddenly all the major spaces of the building gallery, lecture hall, have, and library can be situated along one corridor. With this arrangement, the addition becomes a nice foil for the existing buildings to stand off of as well as the existing acting as a foil for the new. There is also a more defined statement of entry from the open areas of the site into the courtyard. This works well in reverse too. Given the slope of



Concept 4



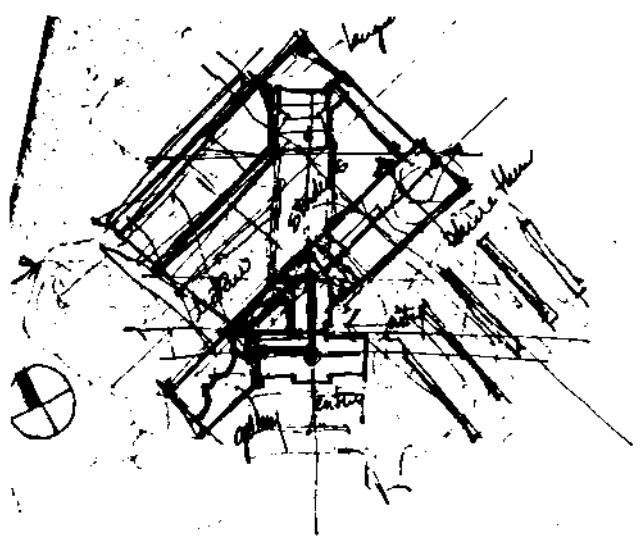
Concept 5

the site and the direction of courtyard the transition from architecturally defined to naturally defined is more direct.

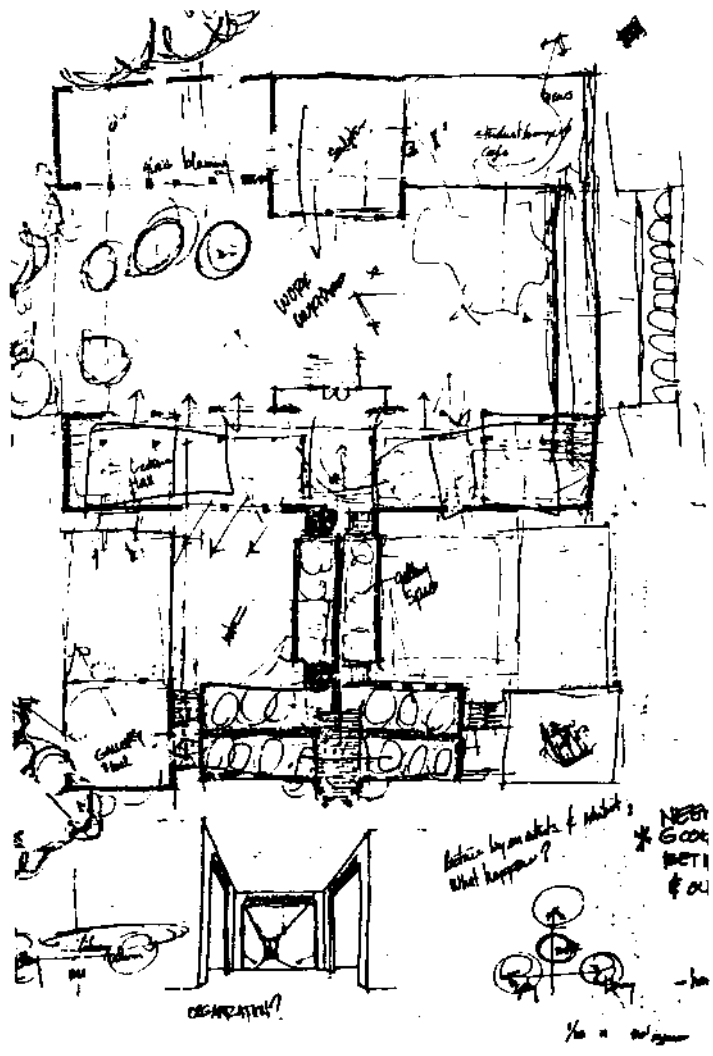
Test

To determine which conceptual approach would work the best, the last two diagrams were taken and developed further. The effect each of these concepts has on the site is very different. One follows the rigid right angle ordering of the original plan and the other dwells on a play between the right angle nature of the existing as opposed to the off angle twist of the new. For this test it was not only important to look carefully at the functional considerations, but also observe how the addition could become part of the spirited interplay of the arts school.

The off angle concept promised a better unity of the plan. Unlike this approach, the multi-courted plan does not offer the unifying focus of a single central courtyard. The separation between the gallery and lecture hall is not acceptable since the program notes a strong affinity between the two. Though the right angle approach offers a more distinct separation between the cleaner, social courtyard (to be used for receptions, etc.) and the school's working courtyard, the angular approaches courtyard can be zoned this way by manipulating the slope. The slope is a



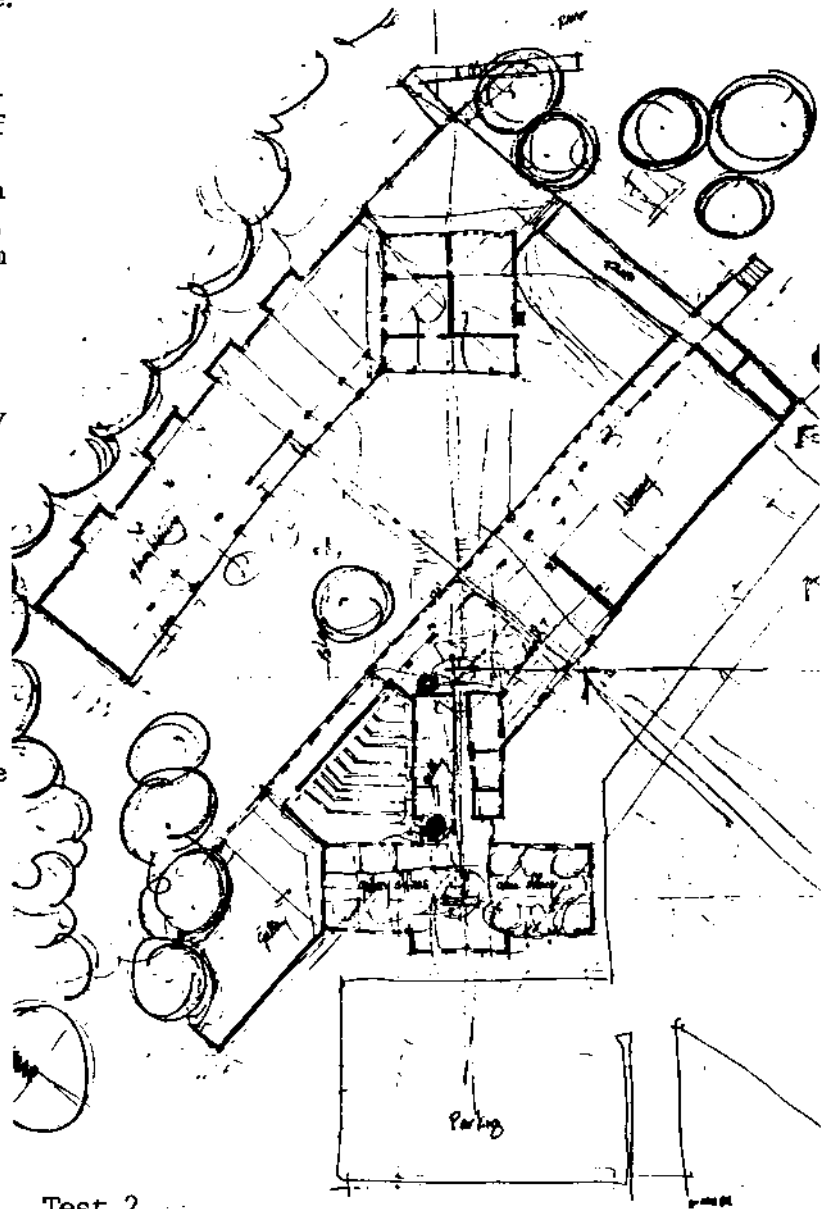
Concept 6



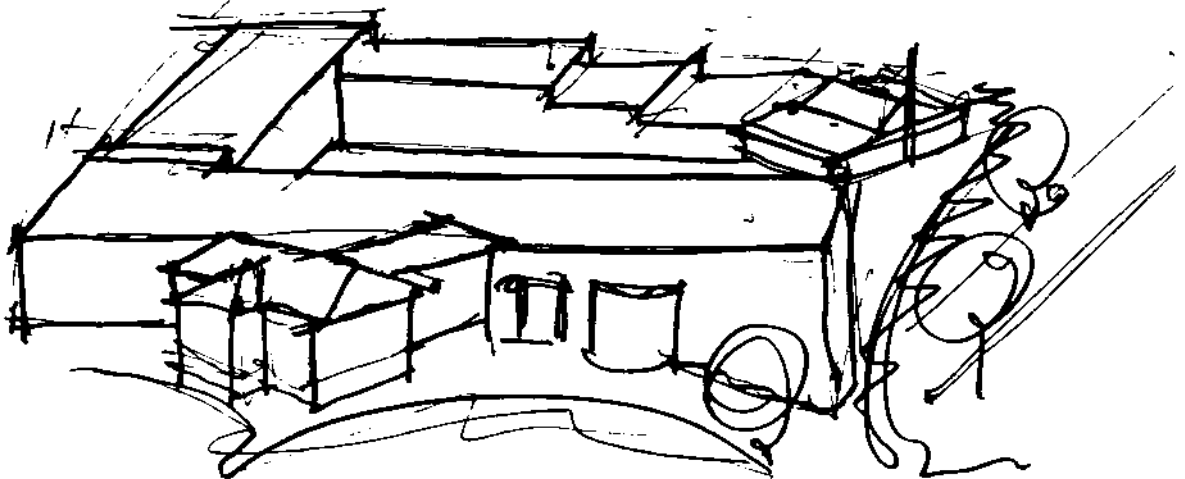
Test 1

problem in the first scheme. Since the distance between the new construction and the powerhouse is only seventy feet and the height of the addition is $3\frac{1}{2}$ stories on the north edge, due to a sixteen foot drop in grade, there is a definite problem with a balance of scale.

The off angle concept offers a better unity of plan while separating dirty art from clean art. It also provides a more distinct transition from architectural space to natural space. More importantly, the juxtaposition between the new and old reflects a change in the school as well as the attitude of the school. All of these qualities make it the more promising choice.



Test 2



Test 2

Development

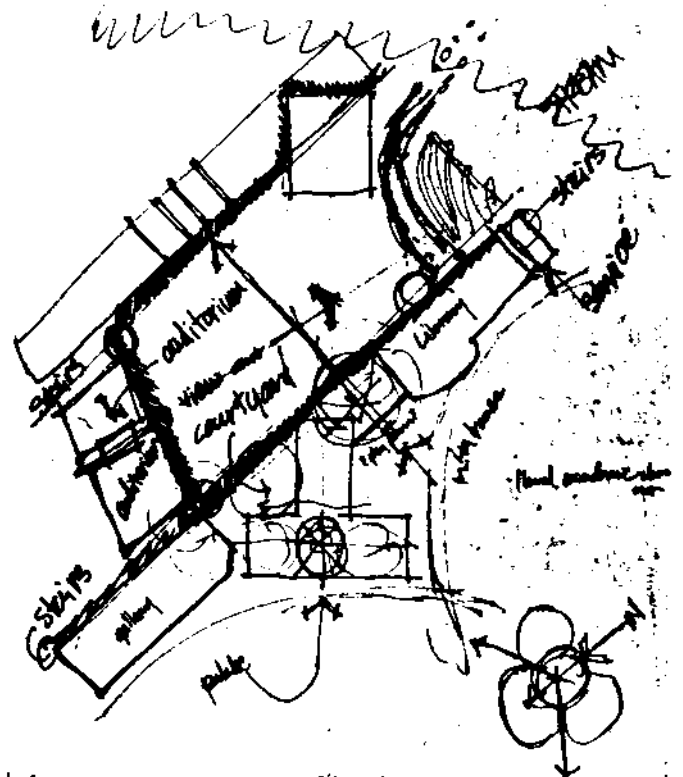
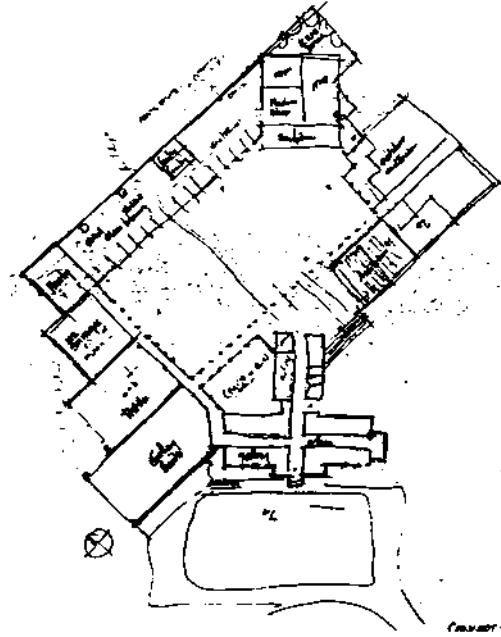
Here is where the programmatic needs and site issues are manipulated until they produce the promised qualities of the chosen design direction.

This is not a representation of the process used to develop the final design. It is merely a discussion of the issues that will play the most important role in determining the success of the project. These issues are broken down into four general groups: plan configuration, structural system/HVAC system, courtyard, elevations.

Plan

The concept test defined an outline for the resolution of plan configuration. Zoning, circulation, and the building footprint are to play off the parti; two opposing forms standing on either side of a court and standing askew to two existing buildings. All of the building's spaces are to be zoned along the arcaded corridor edging the courtyard.

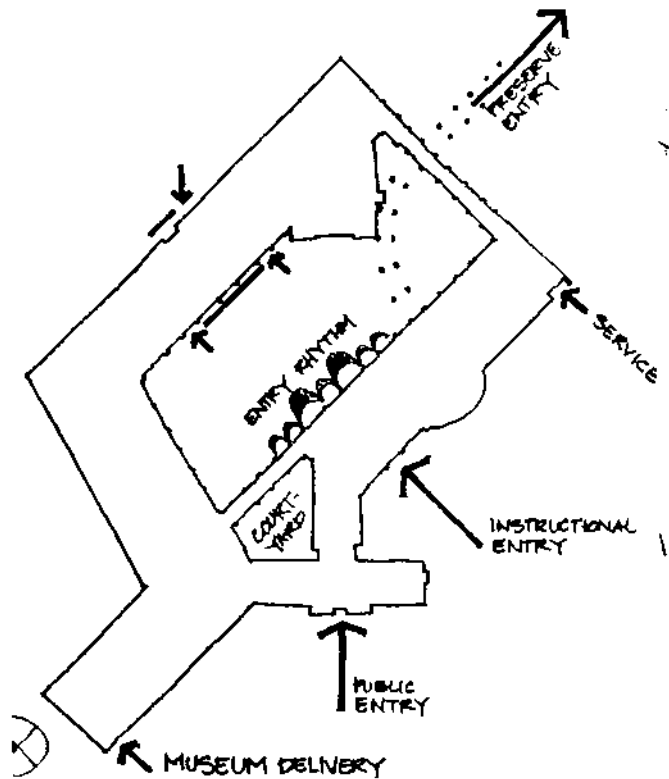
An important change in the building's footprint is the re-location of the base of the "U" to the western end of the courtyard. With this shifting of the building's spaces, the eastern end becomes an arcade and amphitheater that acts as a filter into the natural zone of the site. This



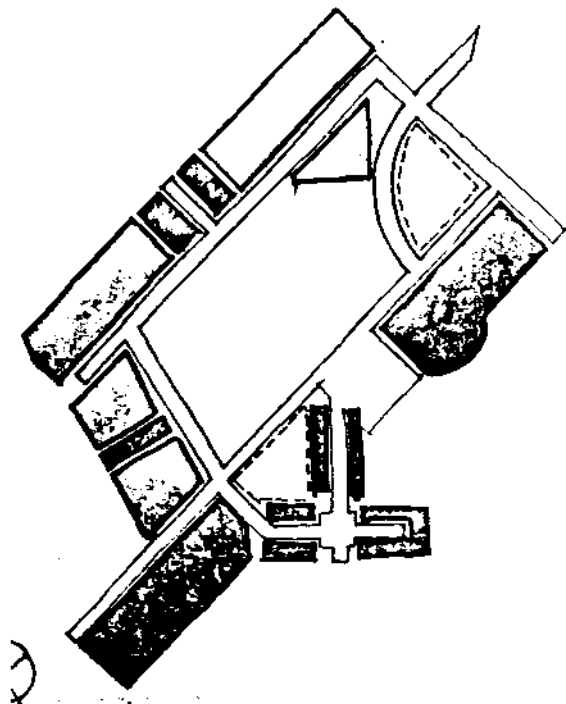
gives the courtyard a sense of enclosure while allowing a flow from "architectural" to "natural" space. The base of the "U" is set at an angle to help the transition from the two-story southern building down to the one-story pump house. This repositioning also gives the building more room on the site and removes the static quality from the courtyard.

Dirty and clean art studios are separated on either side of the courtyard. Ceramics, sculpture, glass blowing and metal-smithing are all centered around the powerhouse. The powerhouse houses all the common services and a shared flexible space. Originally the southern leg of the "U" was to house all the lecture halls, library, and art gallery. Another look at this zoning shifted the lecture halls to the base of the U. This location gave lecture goers better access to the gallery and interior sculpture court. It focused these large group activities at the high end of the courtyard and nestled them into a triangular court trimmed by the original building. Here, the junction of old and new makes an essentially strong statement. The remaining art studios can be found on the top level or second level of the project.

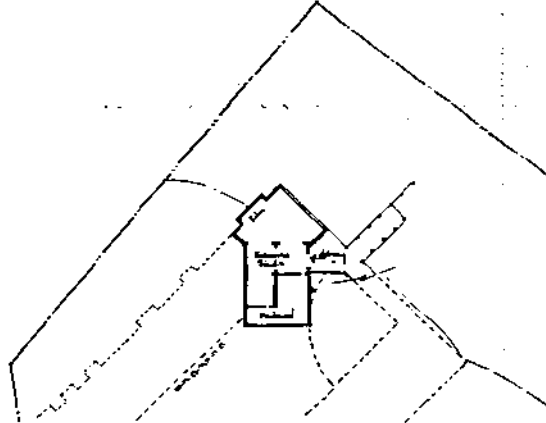
The two existing buildings act as ordering elements for the design. Centered about the powerhouse are all the common/



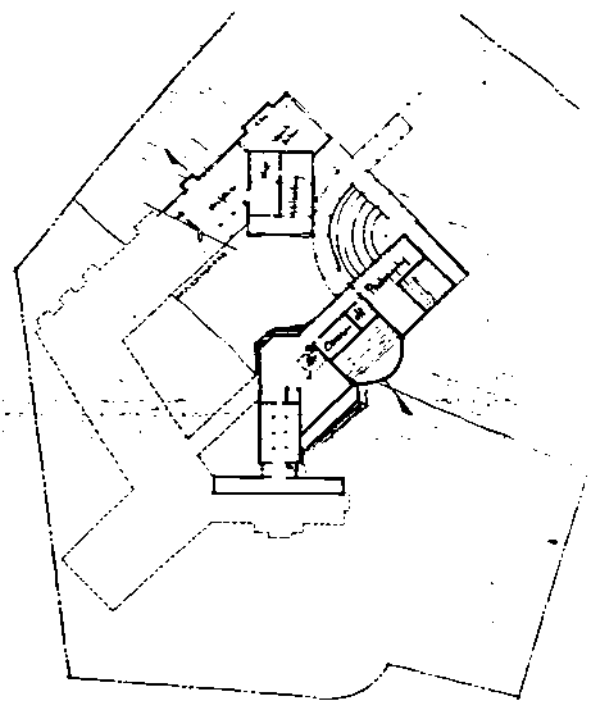
Building Footprint



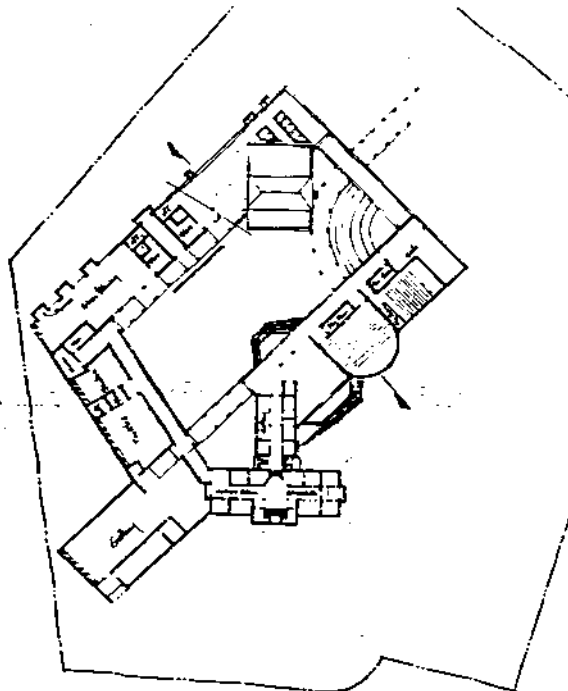
Circulation



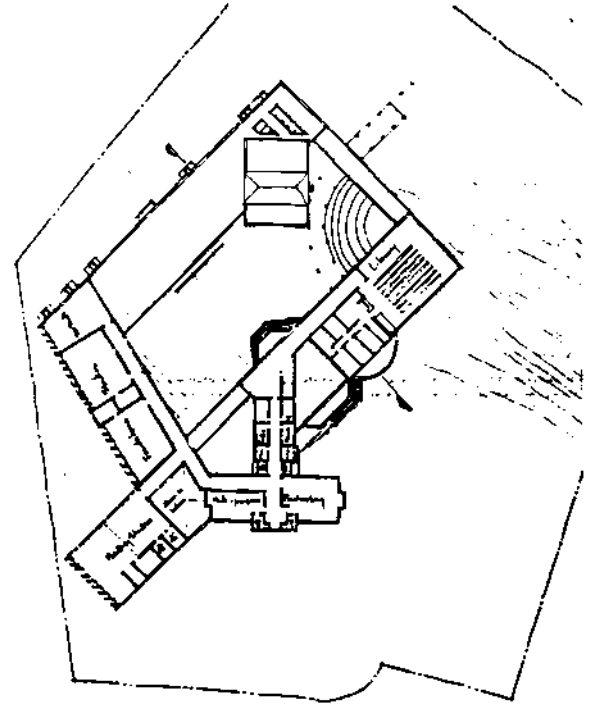
LEVEL 1 ⊗



LEVEL 2 ⊗



LEVEL 3 ⊗

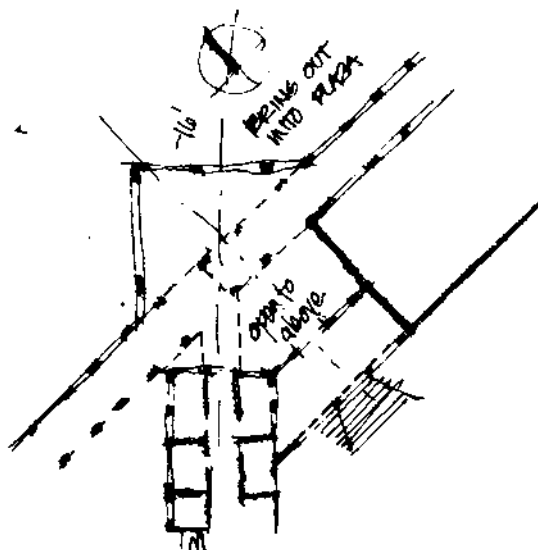


LEVEL 4 ⊗

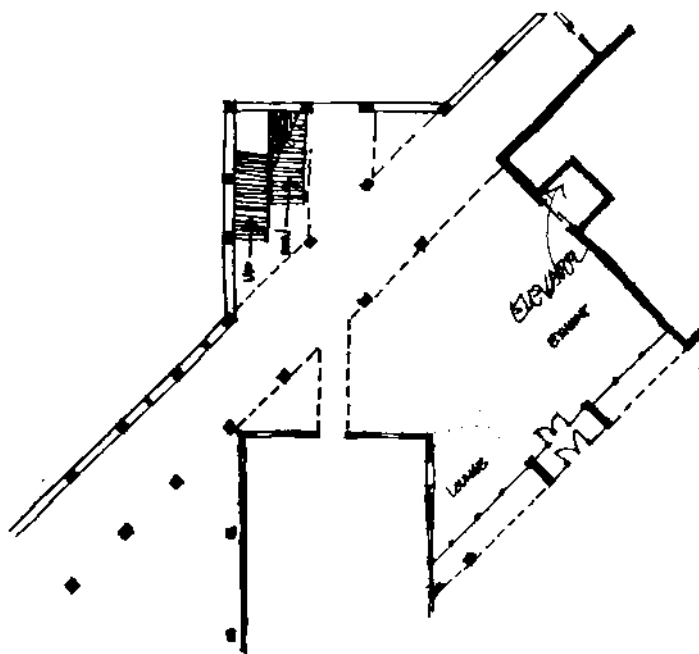
service spaces. The building also acts as a visual focus for the courtyard. Administrative offices for the arts school, gallery, and Junior Arts League can be found within the front building. Spaces around this building are broken into three activities: the public entry, an "in-house", and court. This court was first looked at as a place for a lecture hall, then an exterior courtyard, and now is an interior courtyard for sculpture exhibits and receptions.

A sixteen foot drop between the two existing buildings separates the first level of both these buildings by one floor. The project has four levels, with the lowest or first being where the ceramics studios are housed. Not all of these levels are common to the whole project. Level two is devoted to studio spaces, the cafe/lounge and the services spaces around the powerhouse. Public spaces are all located on the third level. This is the first level for the front building. Painting, textiles, and foundations studios are on level four.

Circulation simply rings the courtyard. The circulation of the front building follows its main and cross axis. A new monumental entry is located at the intersection of the existing axis and the addition; this is the nave discussed earlier, an elevator and a central staircase is located here. Since the elevator is intended for those situations

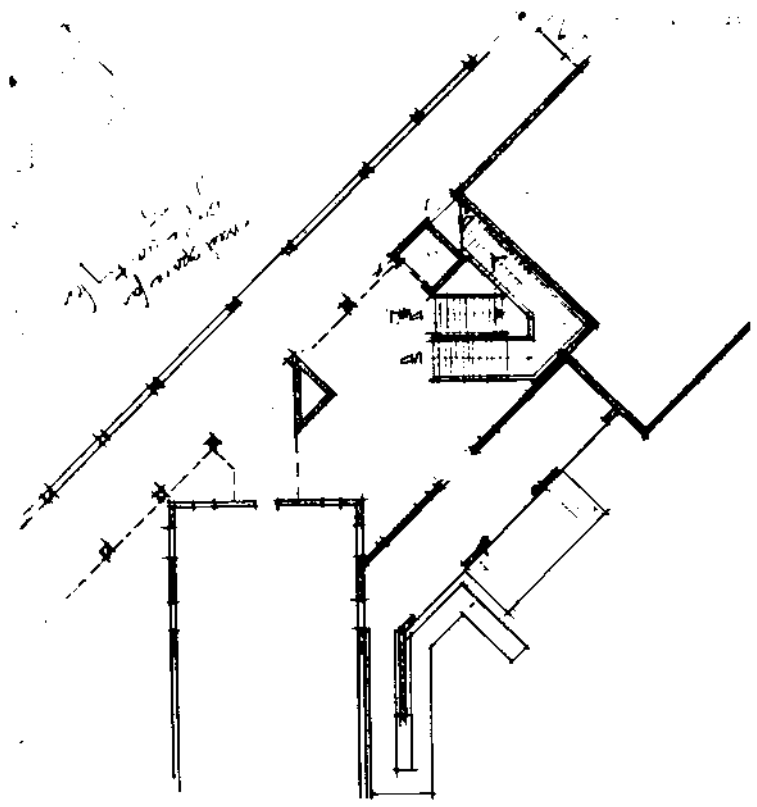


Lobby 1



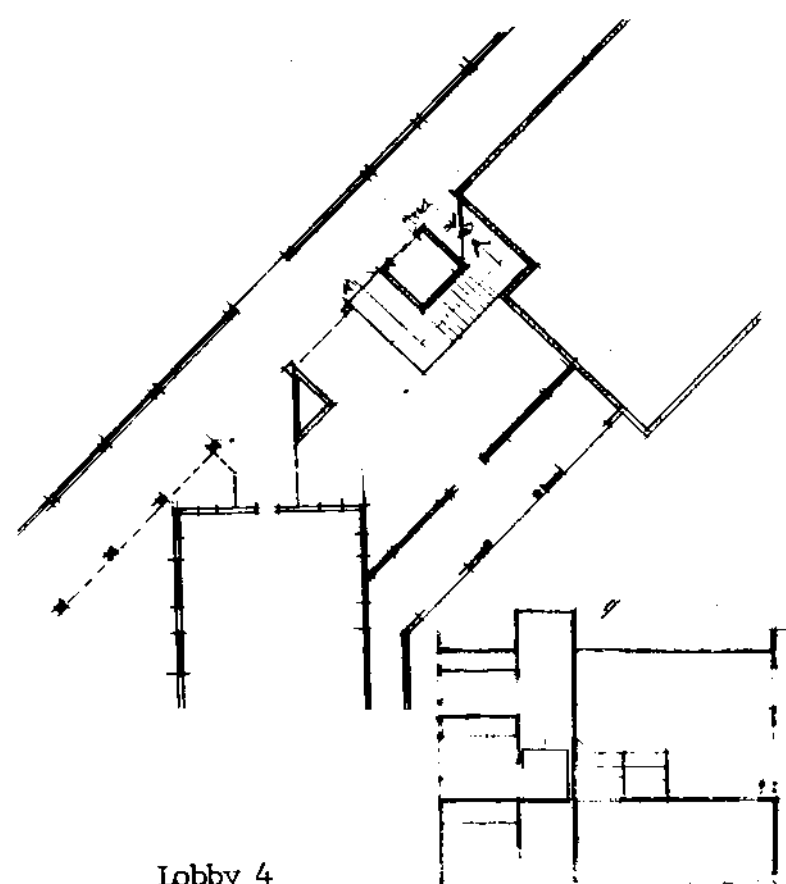
Lobby 2

where stairs are impractical (i.e. handicapped students, relocating furniture, etc.) emphasis has been put on making the stairs the obvious choice for floor to floor travel. Another issue in this space is the flow of people from the south, probably from their car, through the lobby and into the courtyard or some other portion of the arts school. Entering the building at this point involves a four foot rise. Getting onto the courtyard from this point means dealing with a ten foot change in grade. So, though this is a good location for this new entry node, it does present some problems with level changes.



Lobby 3

The staircase and elevator could be located in several places in the lobby; along the east wall, next to the existing building, or protruding into the courtyard. All three of these options have been studied as solutions to the design of this lobby. Since the existing buildings presence in the courtyard is seen as a positive influence on the lobby, stairs and elevators that obstruct its view are discouraged. With the staircase located off of the corridor and in the courtyard a mid-level landing could be used as an exit onto the courtyard. In this scheme the elevator was located off to the side. But the staircase took away from the impact the powerhouse had on the courtyard. Locating the staircase and elevator in

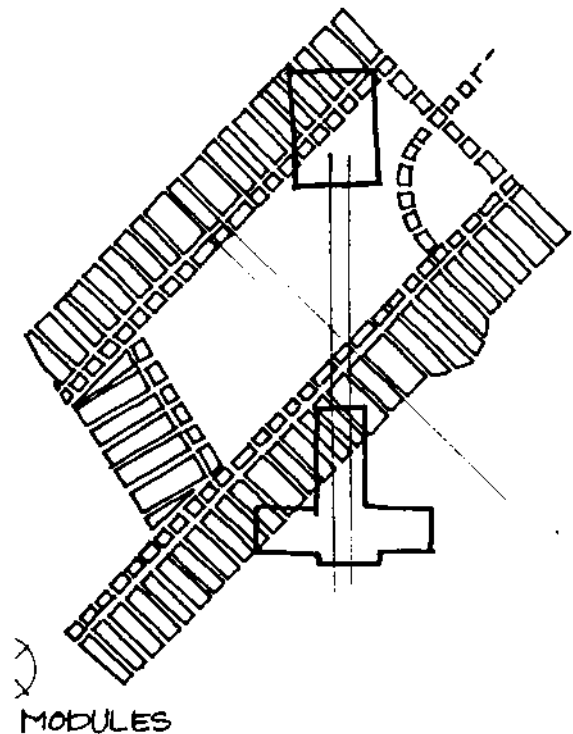
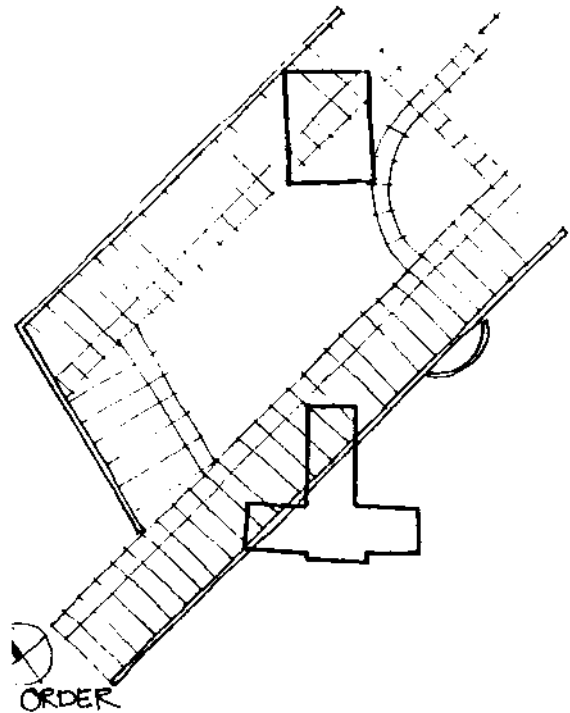


Lobby 4

or on the east wall did not fit into the circulation flow or add the lobby space. In the final scheme the staircase is wrapped around the elevator and mirrors the location of the existing building in the lobby.

Structure/HVAC

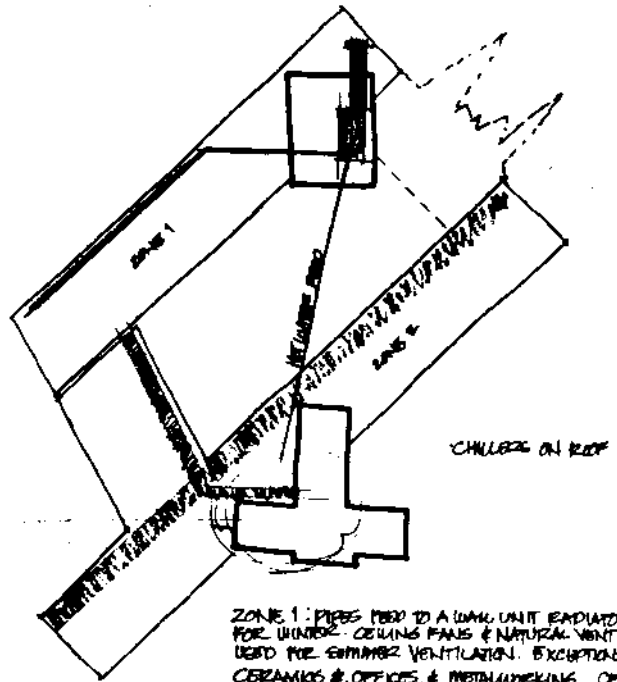
The structural system and mechanical services use the patterns of the concept and plan configuration to give them order. Space modules for the building are taken directly from the structural order. The structural order is derived from a relationship between the central corridor of the front building (the central axis) and its intersection with the addition. This produces a fourteen foot module, that is broken down into a seven foot base module, when the addition is held at a 45° orientation to the central axis. Out of this base module three types of modules are utilized in the buildings structure; an A module at fourteen feet, a B module at twenty-one feet, and a C module at seven feet. Entries at the lobby are denoted by an A-B-A-B-A pattern, while building junctions are defined by an A-C-junction-C-A pattern. These bays are broken into two modules; a fourteen foot depth for the corridor that rings the courtyard and a forty-five foot depth for the academic spaces of the courtyard. The lighter,



Structural System

more open skeletal structure that rings the courtyard is supported by a bearing wall at the outer edge of the building. This bearing wall gives a distinction between those spaces outside of the building and the more direct contact the courtyard has with the building. All of the building's structure is poured in place concrete columns, beams, and one way slabs.

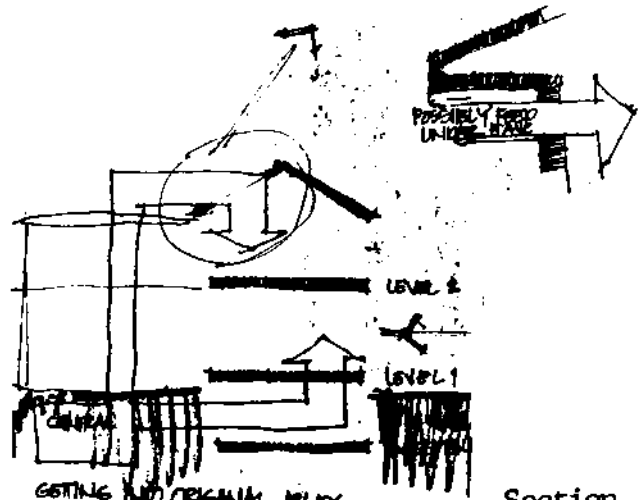
A two foot deep chase is located along the corridors where all mechanical services, like HVAC, water, electrical, and fire-safety, are placed. These systems are tuned to the needs of the two zones of the building, dirty art and clean art. Clean art zones of the building are fully temperature controlled, while the dirty zone of the northern portion of the building only receives two-pipe steam heat. Cooling this zone is impractical because of the heat produced by the furnaces, kilns, and ovens in the studios. Ventilation is enhanced in the studios with fans and extra operable sash (the whole project has operable sash). Localized HVAC is provided for the faculty offices.



ZONE 1: PIPES FEED TO A WALL UNIT RADIATOR FOR WINDOWS, CEILING FANS & NATURAL VENT USED FOR SUMMER VENTILATION. EXCEPTIONS ARE CERAMICS & OFFICES, & METALWORKING CENTRAL BOILER IN MAIN BLDG.

ZONE 2: CENTRALLY LOCATED FORCED AIR UNIT CONTROLS SPACE SO SYSTEM CAN BE SHUT DOWN WHEN WINDOWS ARE LEFT OPEN.

Systems



Section

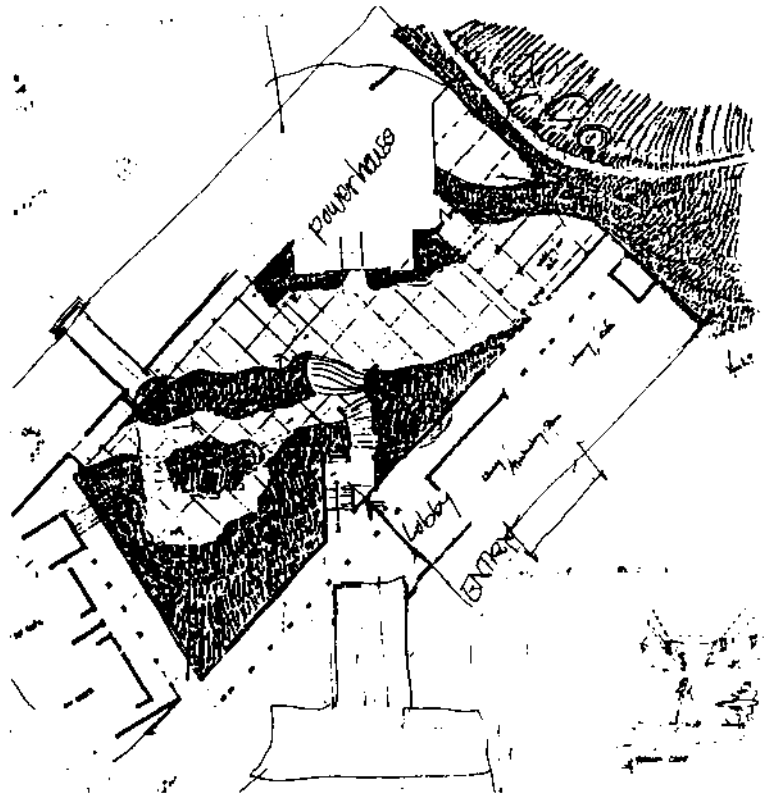
Courtyard

Four issues are dominant in the development of the courtyard; zoning, the slope (a twenty-six foot drop in a one hundred foot run), the stream to the east, and the courtyard's relationship to the build-

ing that defines it; the image of the courtyard. A dominant architectural feature in the courtyard is the powerhouse. Its break from the "U" shaped footprint of the building gives it a focus in the courtyard. The interplay between manmade and natural is another important variable. An early study of this interplay gave natural forms the balance of influence over the courtyard's design. But, since the emphasis was on the transition from architectural to natural and the buildings imposed several strong ordering elements, in the courtyard a more architectural approach was taken.

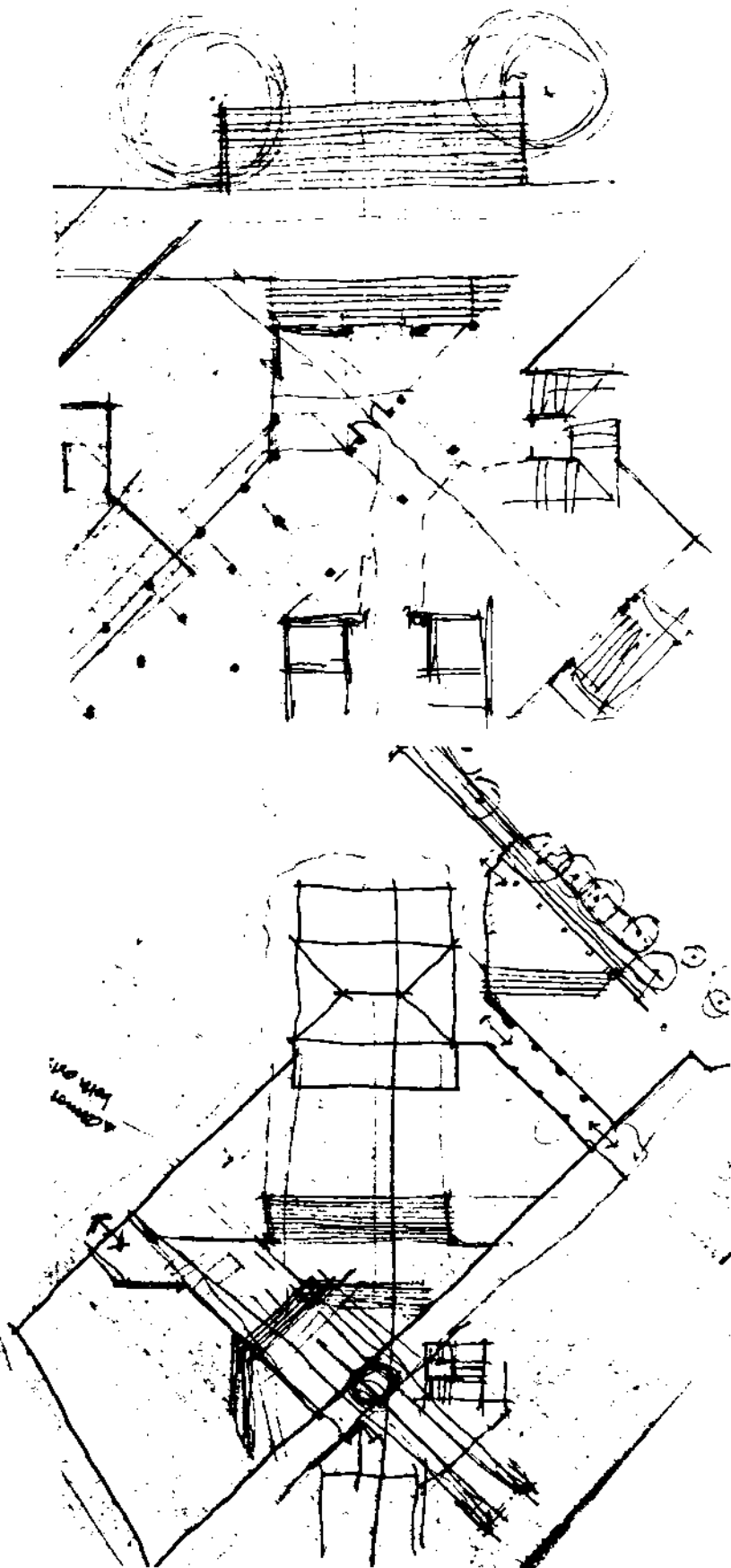
The activities inside the building that flanked the courtyard controlled the zoning. At the eastern edge the gallery and the lobby primarily view out onto the courtyard. Receptions for exhibit openings, student displays, and lectures would be held in those spaces at this end of the courtyard. During the temperate seasons of the year many of the school's guests may want to "step outside". This portion of the courtyard should lend itself to the leisure activities of students as well as guests.

At mid-court is a major circulation path. This is where faculty and students enter and exit the court on a daily basis. Several paths lead from the new nave or node discussed earlier to the glass blowing and sculpture stu-



dios or the powerhouse. An exterior work court with a hard surface, as opposed to the soft surface at the eastern end, for sculpture and other studios is also located here.

The east end of the courtyard is the open end of the "U". This is where the architectural space of the courtyard gives over to the natural space across the stream, ten feet below the midcourt of the project. On either side of this courtyard area the building houses the ceramics studio and the faculty-student lounge-cafe. Each has their portion of the courtyard, but are at different levels, the ceramics studio being at the stream or first level of the project. Access to the ceramics studio level of the project is by means of stairs at the east end of the courtyard or inside of the powerhouse. Since the stairs (the transition from-out of-the courtyard level to the stream level) are such a major event in the design, several efforts have been made to make this area special. Another event that is of importance here is the covered walk between the pump-house and the addition. This entry to this serves not only the flow of students and faculty, but the supply of material from the loading dock to the dirty arts spaces. An early proposal shows an amphitheater using the steps as its seating and the walkway-arcade as its enclosure. But this solution didn't make this area special or memorable. A later look gave the area its split-

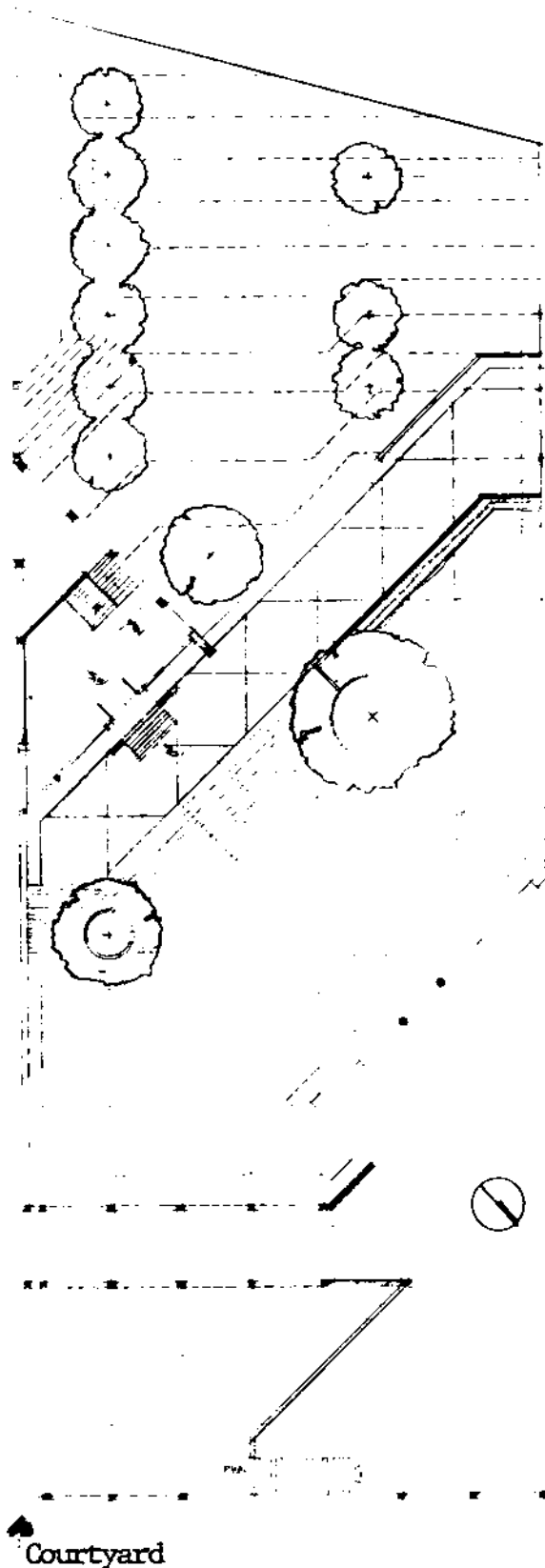


level arrangement, thus providing the ceramics studio a workable exterior area and the lounge/cafe an exterior vantage point. Final studies made the stairs a bank of stairs leading down into the stream and across to the natural zone of the site.

From the west end to the east end the courtyard drops twenty-six feet. This change in grade was negotiated in three locations; the leisure end of the court, the mid-court area, and the east end, which has already been discussed. At the leisure end the green is sloped and dished to create a subdued amphitheater for informal class sessions and group events like movies or lectures. Two level changes occur at mid-court; access to the court from the building and leisure level to mid-court level. The problems with a ten foot drop at this entry point has already been discussed under Plan Configuration. After the protruding form was abandoned a new approach to direct access to the courtyard was developed that incorporated a porch for the gallery court.

Elevations

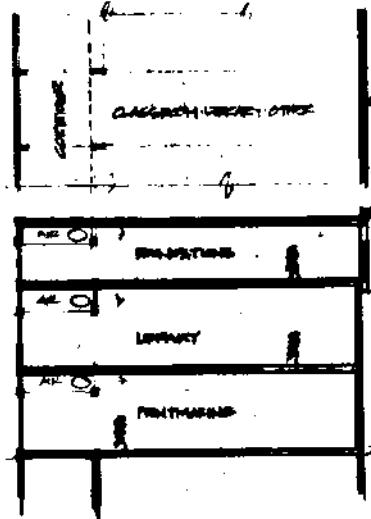
As with other parts of the additions development, the elevations were a response to the existing building. Since this project is an addition, it has the options of directly interpreting or contrasting the existing buildings forms and surfaces. The intent of this addition is to



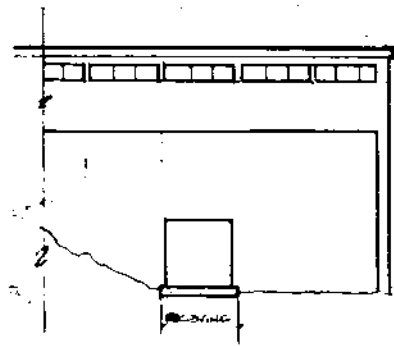
make a statement about a change in the arts school. In plan, the addition plays off of the order of Dodd's plan for the site. Facades for this addition will also play off of the patterns found in the existing facades. The statement here is not one of contrast, though that is an option, but more of juxtaposition of new within a framework influenced, not defined, by the past.

From the structural system we have a seven foot base module to work with in elevation. A direct connection between floors of the old and floors of the new dictates the floor to floor levels, with the main level's high ceilings serving the gallery and library well. Within the courtyard the facades builds off the open framework of the skeleton structure while they must carve their openings out of the more massive bearing walls of the outer face of the building. These ordering systems are the ground work that the elevations are based on.

From the parking lot the front building designed by Dodd can be seen standing against the south face of the addition. Early studies of this view show a fairly direct interpretation of historical forms and the existing buildings forms and surfaces. Different features were dropped and added as the facades were brought to the point where they worked together well as partners. First to go was the emphasis of the new entry node as a tower.

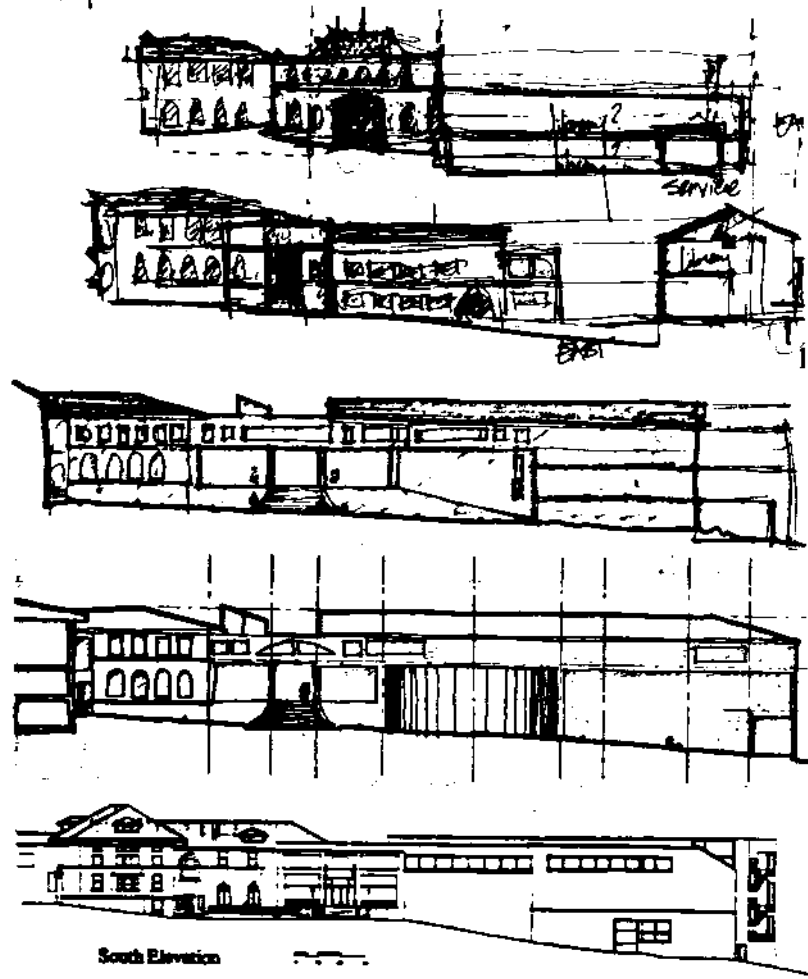


SECTION



SOUTH ELEVATION

Main Building



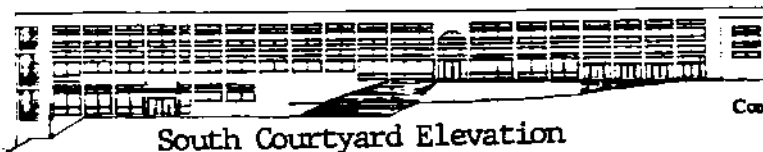
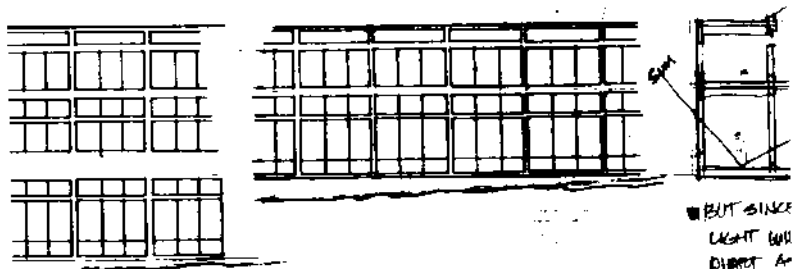
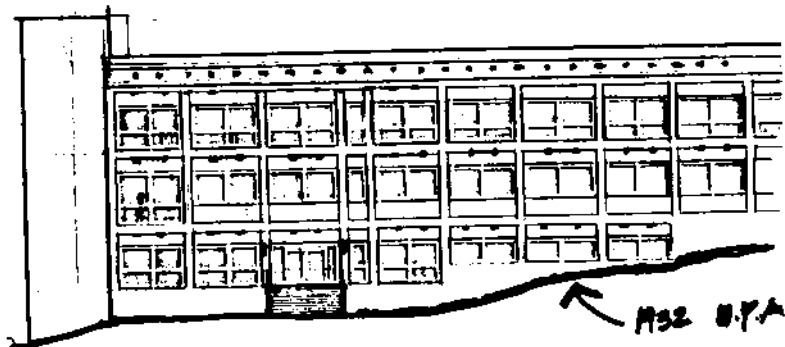
South Elevation

South Elevation

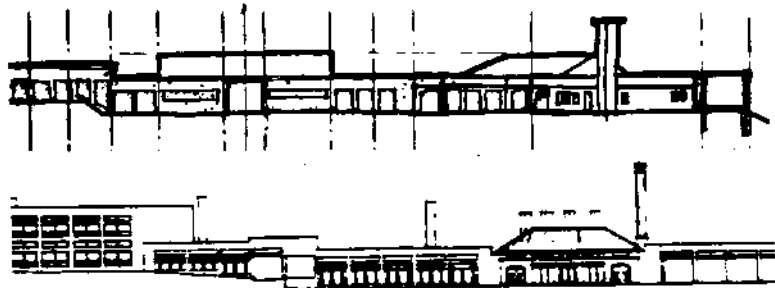
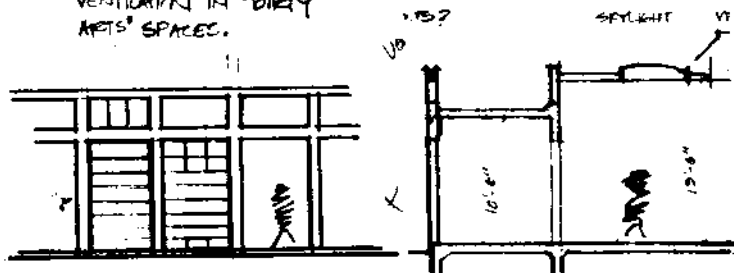
went through different levels of reinterpretation, provided a means to break up the mass of the south face. Sloped roofs were discarded because their construction would mean the addition of a fourth floor. It also allowed the addition to slip under the eaves of the existing, giving Dodd's building the high point on the roof line. This way it stayed a highlight. The A-B-A-B-A pattern of the entry nodes structure gives dominance to the monumental entry portico and its free standing columns and capstone.

The courtyard facade was a fairly direct interpretation of the structural skeleton. Window mullions divide each bay at seven foot intervals. A lower casement provides some natural ventilation. Entry onto the courtyard from the new lobby was a major area of study. One of the first solutions worked with the form that protruded into the courtyard. All of these studies looked at a form, semi-circle or gable, as an announcement for the entry. Early forms were free standing, but the final solution used a reinterpretation of the capstone on the other side of the building.

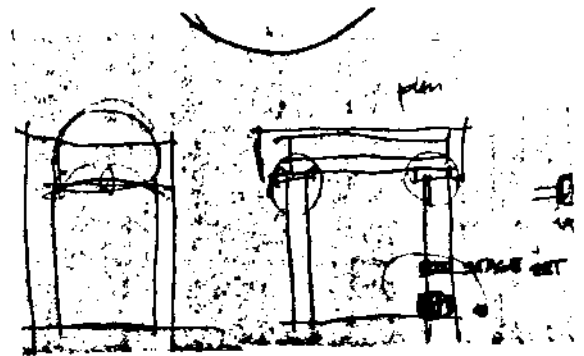
Turning the corner from bearing wall to skeleton framing is done at either end of the south building. At the ends there is a reinterpretation of the forms used for the addition's connection with the front building; the bearing wall falls off at an angle. For the connec-



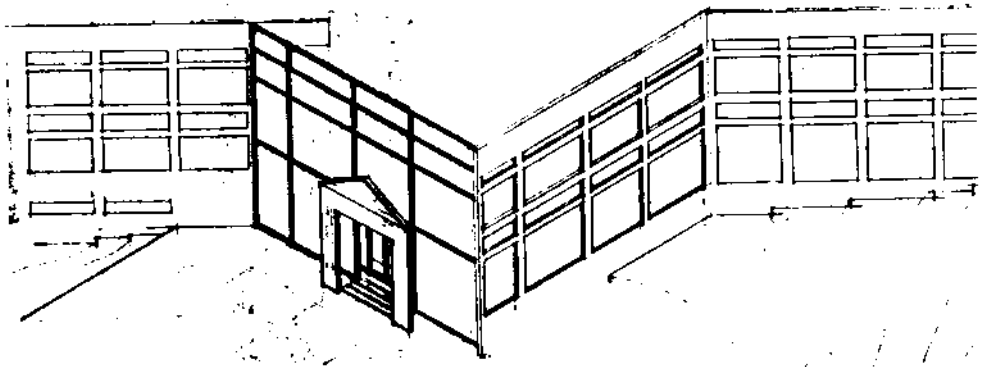
- GACKE DOORS SERVE BOTH AS ENTRY BUT CONTROL, BUT ALSO ALLOW FOR VENTILATION IN "DIRTY ARTS" SPACES.



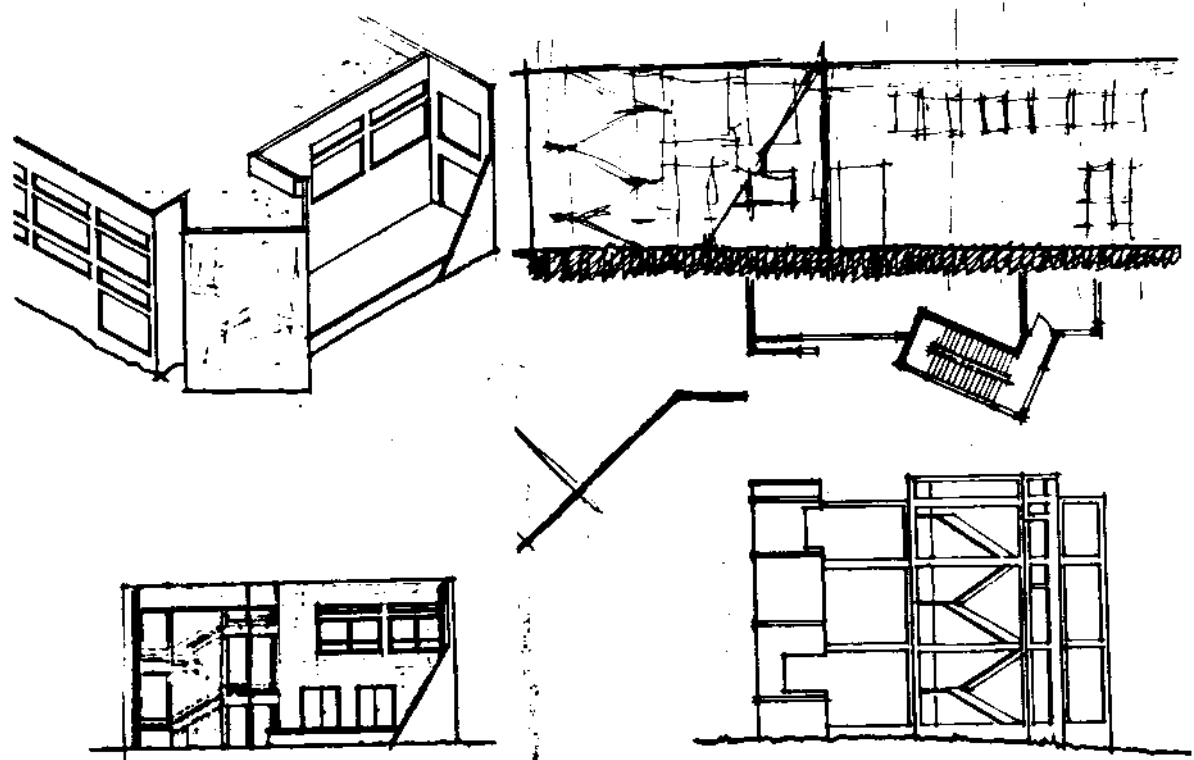
to the existing building,
thus avoiding a direct
collision between the two.
For the end one, structural
system fades into another.



Entry Statement

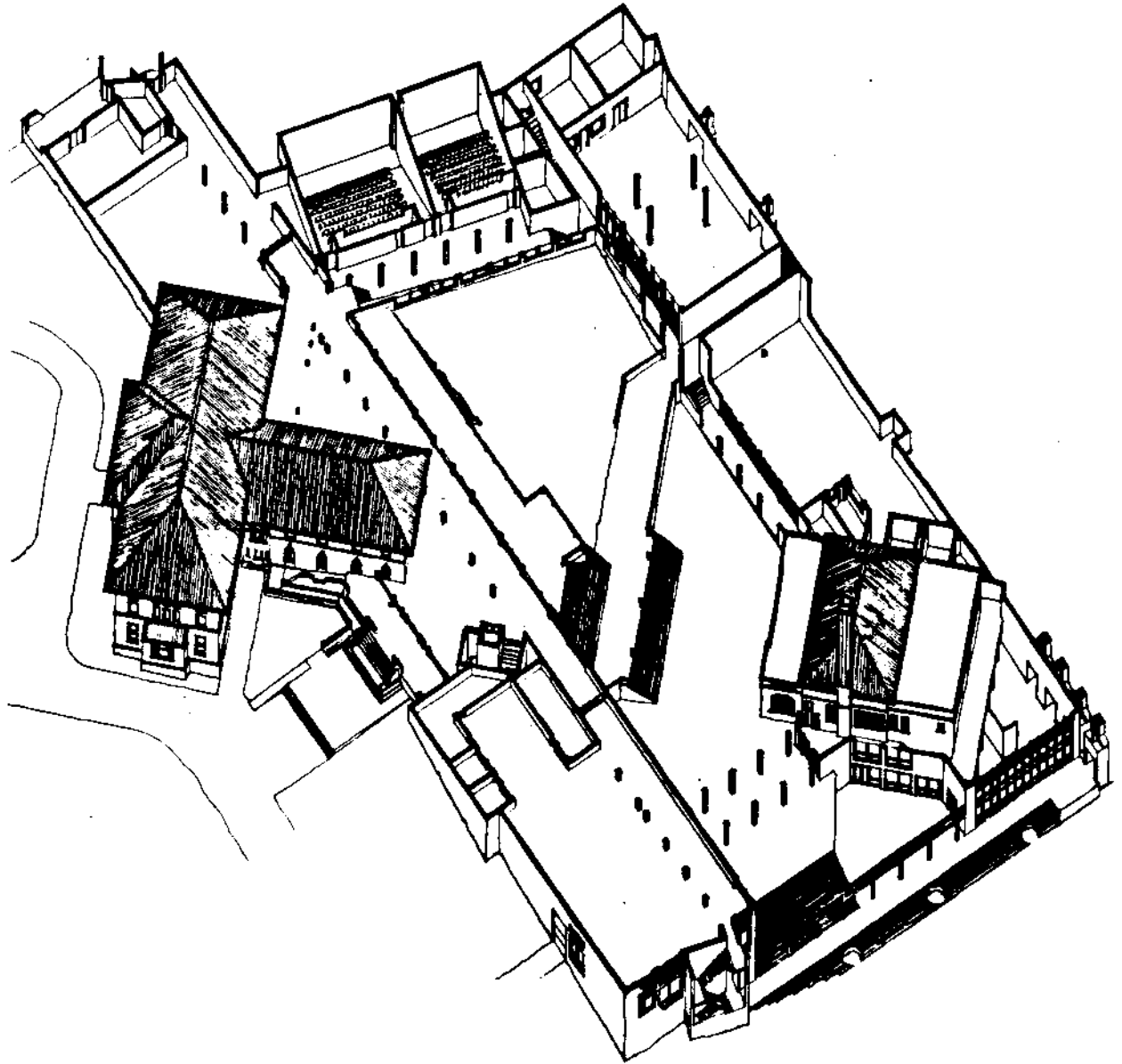


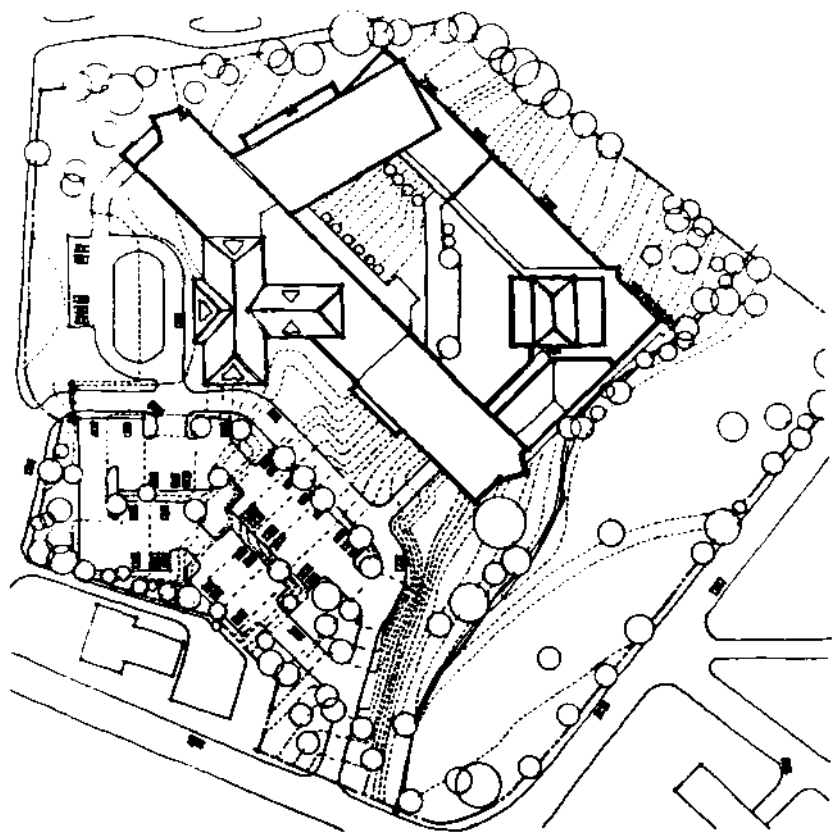
Early Courtyard Entry



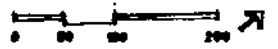
Stair Towers

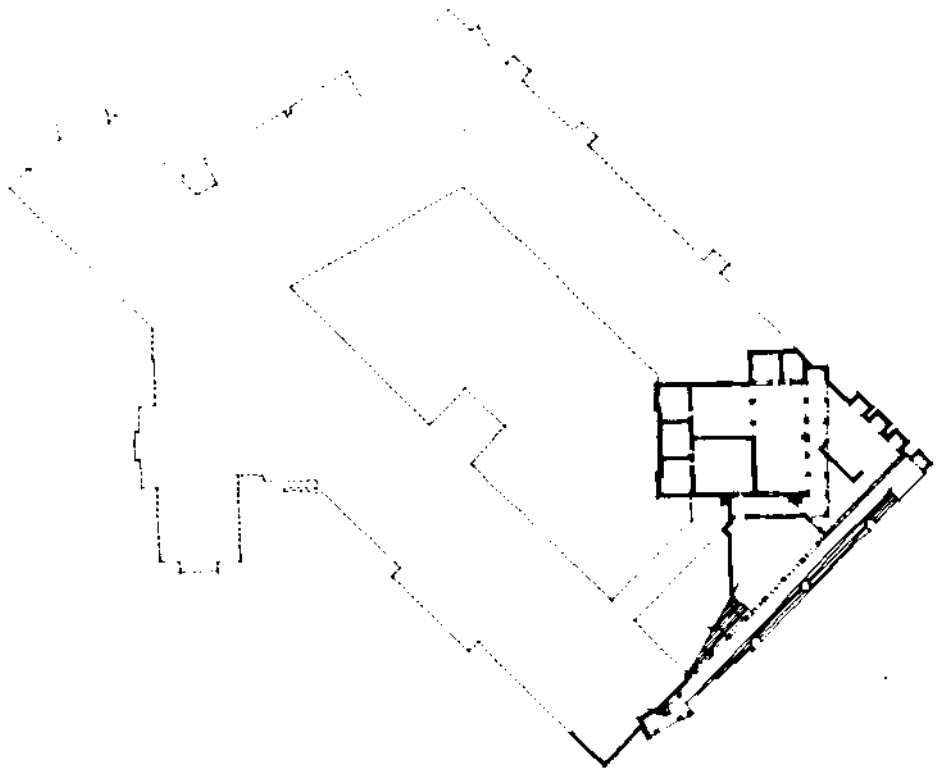
Final Solution



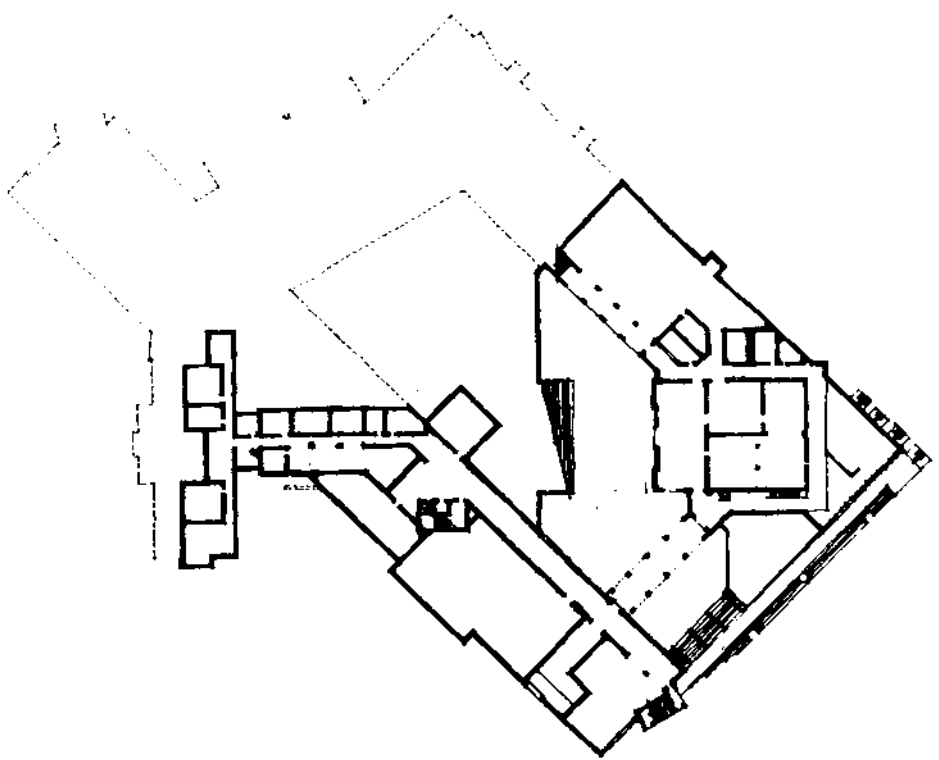
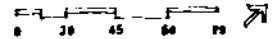


Site Plan

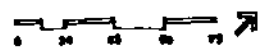


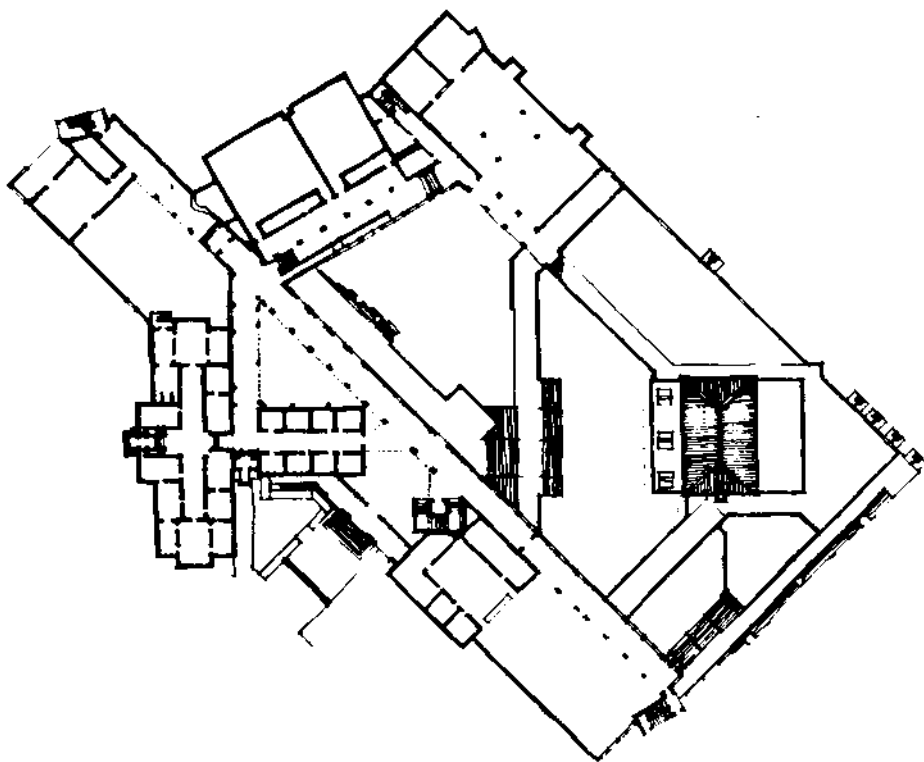


Level 1

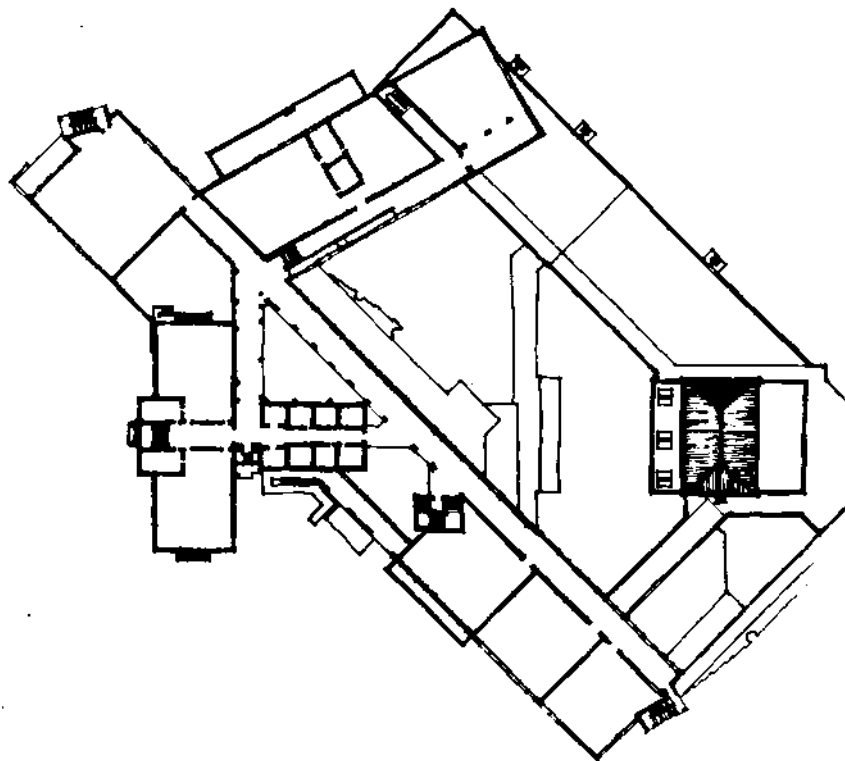
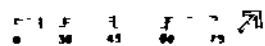


Level 2

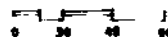




Level 3

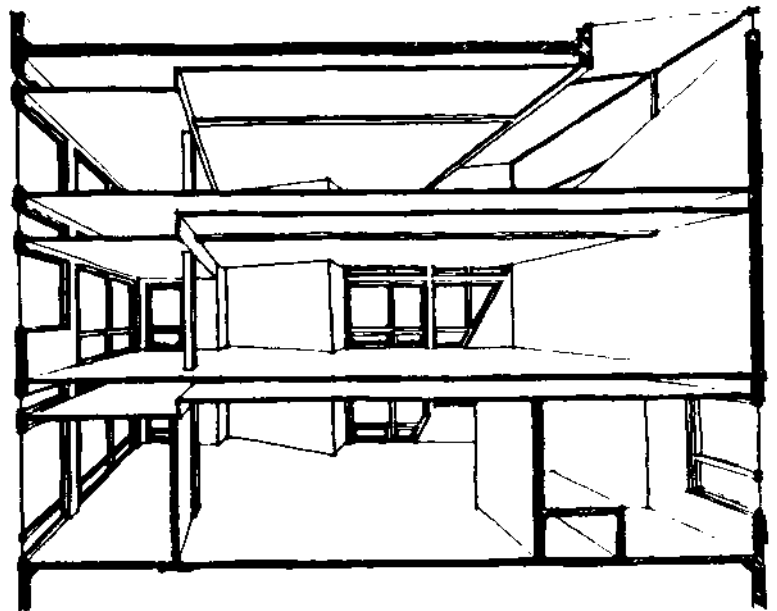


Level 4

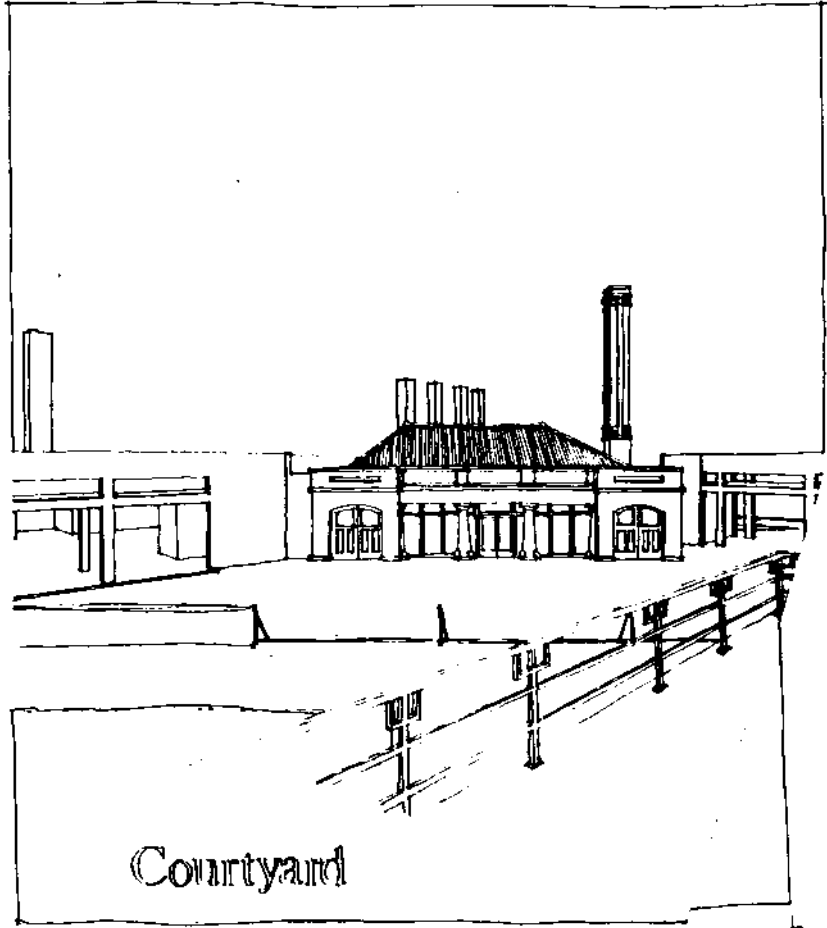




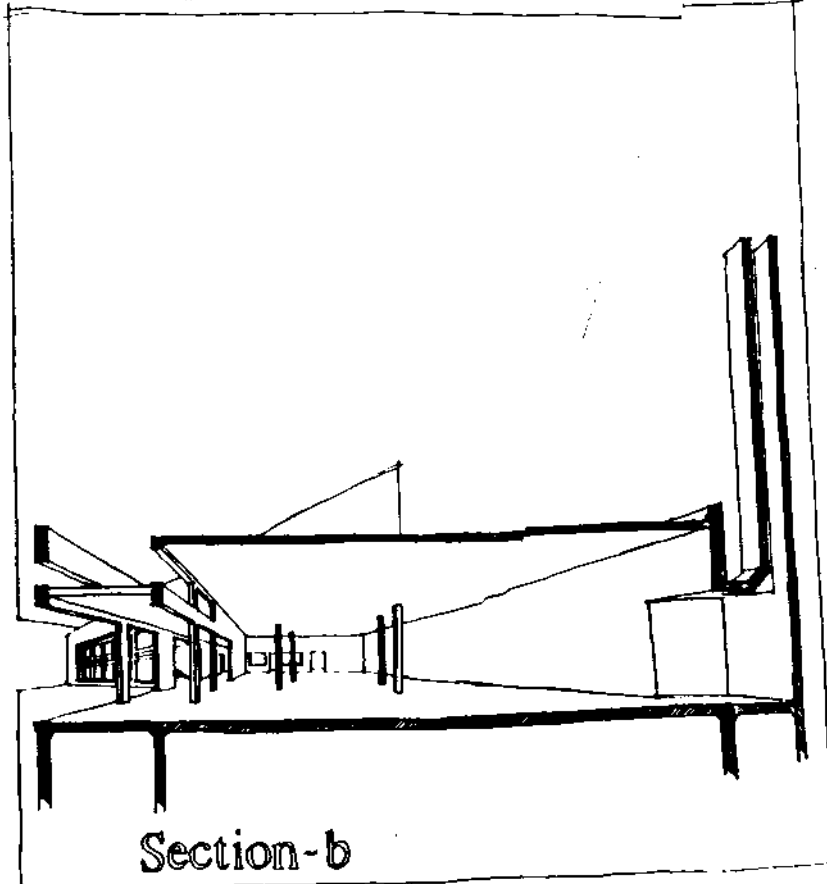
South Entry



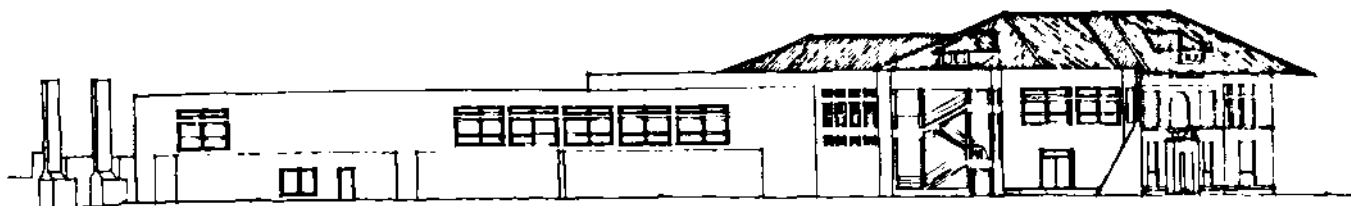
Section-a



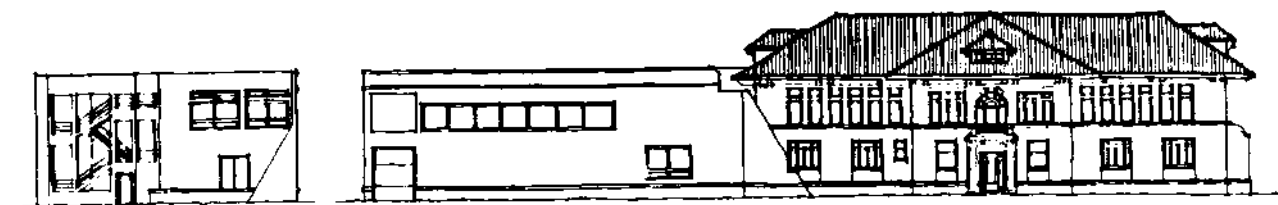
Courtyard



Section-b

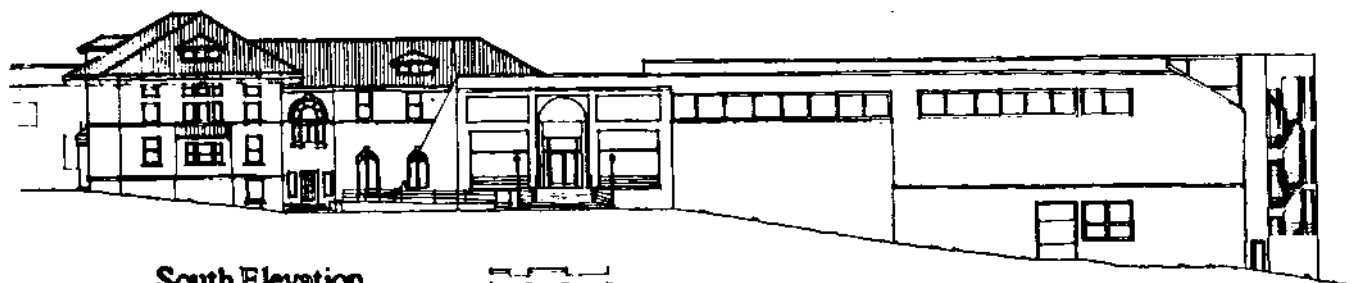


West Elevation

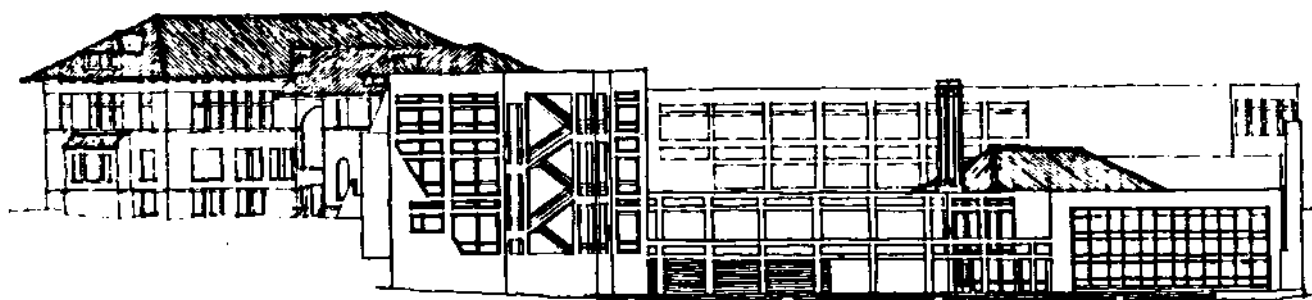


West

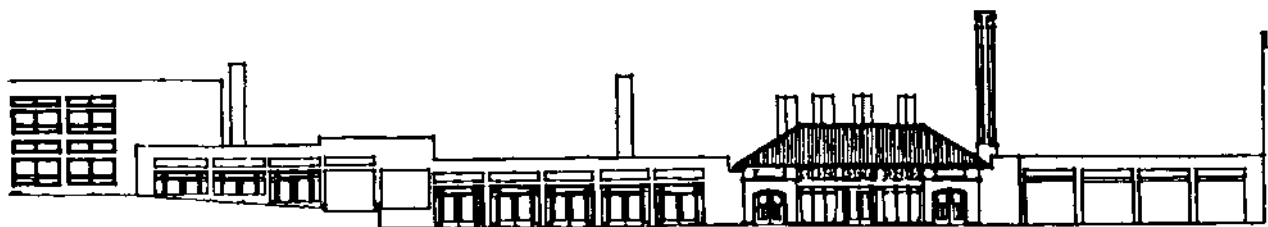
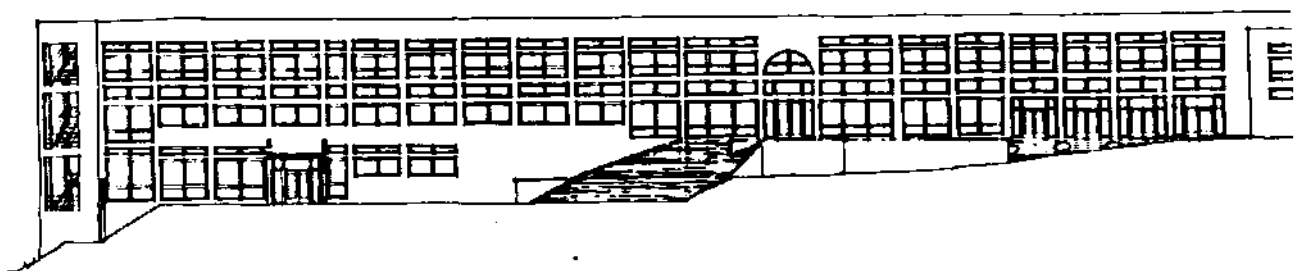
South Elevation



South Elevation



East Elevation



Courtyard Elevations

Appendix

Program

Administration

Director	300
Associate Director	180
Development	145
Registrar	180
Bookkeeper	110
Secy/Receptionist	200
Duplication	100
Files	100
Supply Storage	100
Workroom	400
Conference Room	400
Kitchen	100
Faculty/Staff Lounge	400
Faculty Offices/studio	2,500
First Aid	50
Student Lounge	400
Snack Bar:	
Kitchen/Grill	300
Seating	1,440
Subtotal	7,405
	10,578

Library

Seating	1,050
Snacks	2,100
Media Room	400
Vertical Files	300
Support:	
Librarian's Offices	300
Reference	100
Reserve	300
Circulation	150
Serial	100
Card Catalog	225
Cataloging Room	200
Repair	100
Acquisition	100
Storage	200
Supply	200
Subtotal	5,825
	8,322

Instructional

Foundations Studio	5,100
3-D Design Studio	1,500
Photography:	
B/W Printing	900
B/W Film-Wash/Dry	200
Color Printing	200
Color Film-Wash/Dry	150
Studio Lighting	400
Studio	500
Special Techniques	250
Movie Editing Room	300
Mounting	200
Storage	100
Ceramic Studio:	
Wheel Throwing & Hand Building	2,000
Kiln	800
Glazing	600
Clay Mixing	400
Drying	100
Raku	100
Painting Studio(s):	
Divided Studio	1,500
General Studio	1,500
Workshop	400
Matting Water Color	150
Air Brush	150
Storage	150
Indiv. Painting Studios	400
Sculpture Studio:	
Casting/Welding	1,700
Wood & Stone Carving	1,000
Machine Shop	800
Plastics	250
Plaster	100
Ceramic Shell	75
Wax Work	75
Metalsmithing Studio:	
Benchwork	900
Raising	800
Casting	200
Blacksmith	150
Electro Forming	100
Polish	100
Storage	150
Printmaking Studio:	
Silkscreen	650
Intaglio	600
Lithography	600
Relief	300
Paper	300
Photo Printing	225
Other	300
Supplies	100

Textiles Studio:	
Off-Loom	1,000
Floor Loom	700
Fabric Printing	800
Dye Area	500
Storage	300
Equip. Checkout	1,000
Supply Store:	
Store	800
Storage	200
Lecture Hall:	
Seating	2,000
Projection Room	100
Classroom	800
Seminar Room	400
Theater	1,500
Subtotal	34,025
	48,607

Service Programs

Junior Art League	
Office	300
Multi-purpose Studio	2,500
Storage	750
Subtotal	3,550
	5,072

Gallery

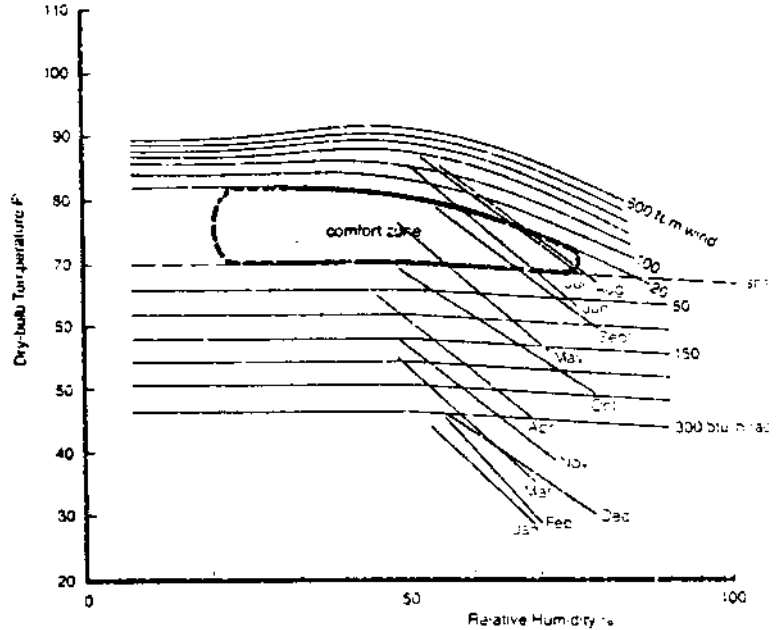
Galleries	6,000
Receiving/Shipping	600
Preparation	1,000
Kitchen	100
Storage:	
Art	600
Display	200
Offices:	
Director	145
Registrar/Curator	110
Secretary & Staff	360
Security/Receptionist	110
Subtotal	9,225
	13,178

Total Net Area	60,030
Total Gross Area	85,957

Site Data

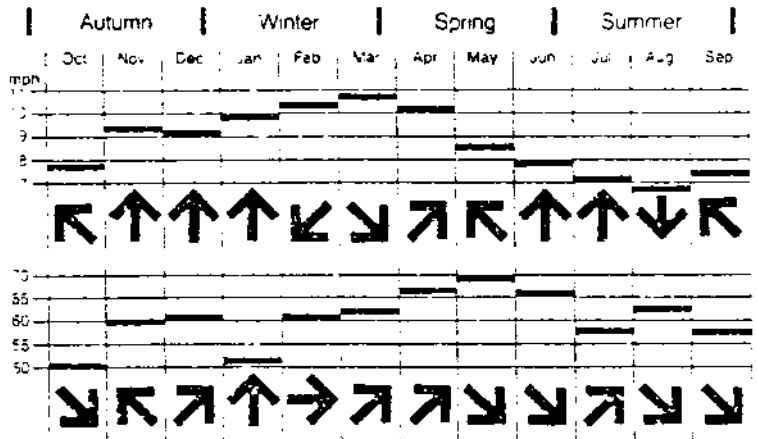
Bioclimatic Chart

The bioclimatic chart, which graphically depicts the temperature and humidity of a particular region in relation to North America comfort levels, indicates that the summer months in Louisville are nearest the comfort zone, while the winter months are uncomfortably cold. Comfort can be achieved when temperatures and humidities are lower than the comfort zone if there is sufficient solar radiation (300 btu/hr), and when they are higher, by sufficient air movement (600 ft/minute). During three winter months (December, January and February) mechanical systems for heating are required.



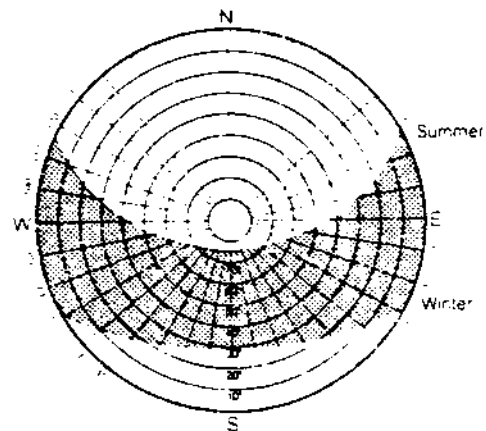
Winds

For most of the year winds tend to be from the south in the Louisville area, switching around to the north primarily in the winter. Velocities range from 6.8 mph to maximums of 67 mph during storms.



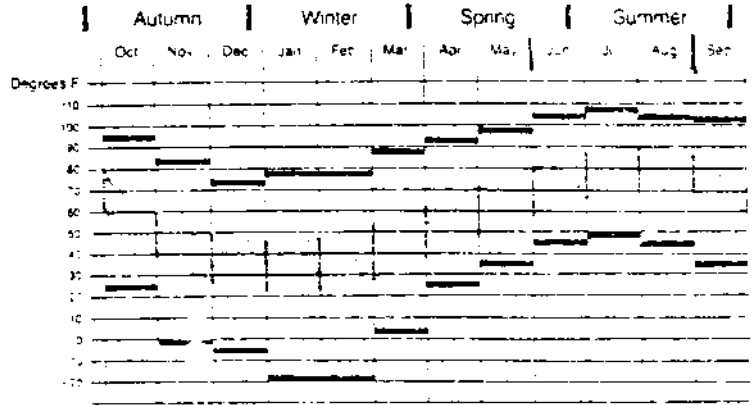
Sun Path Diagram

The sun path diagram shows the sun's position at sunrise and sunset, and plots its path, for the longest (summer) and shortest (winter) days of the year. The point at the intersection of the path and the north-south axis records the sun angle at high noon.



Temperature

In Louisville, temperatures vary seasonally. In the coolest month (January), daily temperatures range between 21 degrees F and 45 degrees F. In the warmest month (July), they range between 90 degrees F and 68 degrees F.



Precipitation

Precipitation averages 3.48 inches per month. Snow is common during the winter months, averaging 4.1 inches in January.

