

Spring 5-31-1992

## Every day art : demonstrating a new approach to visual arts for children

Abigail Andrea Jones  
*New Jersey Institute of Technology*

Follow this and additional works at: <https://digitalcommons.njit.edu/theses>



Part of the [Architecture Commons](#)

---

### Recommended Citation

Jones, Abigail Andrea, "Every day art : demonstrating a new approach to visual arts for children" (1992).  
*Theses*. 1269.

<https://digitalcommons.njit.edu/theses/1269>

This Thesis is brought to you for free and open access by the Electronic Theses and Dissertations at Digital Commons @ NJIT. It has been accepted for inclusion in Theses by an authorized administrator of Digital Commons @ NJIT. For more information, please contact [digitalcommons@njit.edu](mailto:digitalcommons@njit.edu).

## **Copyright Warning & Restrictions**

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be “used for any purpose other than private study, scholarship, or research.” If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of “fair use” that user may be liable for copyright infringement,

This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve violation of copyright law.

**Please Note: The author retains the copyright while the New Jersey Institute of Technology reserves the right to distribute this thesis or dissertation**

Printing note: If you do not wish to print this page, then select “Pages from: first page # to: last page #” on the print dialog screen

The Van Houten library has removed some of the personal information and all signatures from the approval page and biographical sketches of theses and dissertations in order to protect the identity of NJIT graduates and faculty.

# E V E R Y   D A Y   A R T

Demonstrating a New Approach To Visual Arts for Children

Design Concept by: Abigail Andrea Jones

## A B S T R A C T

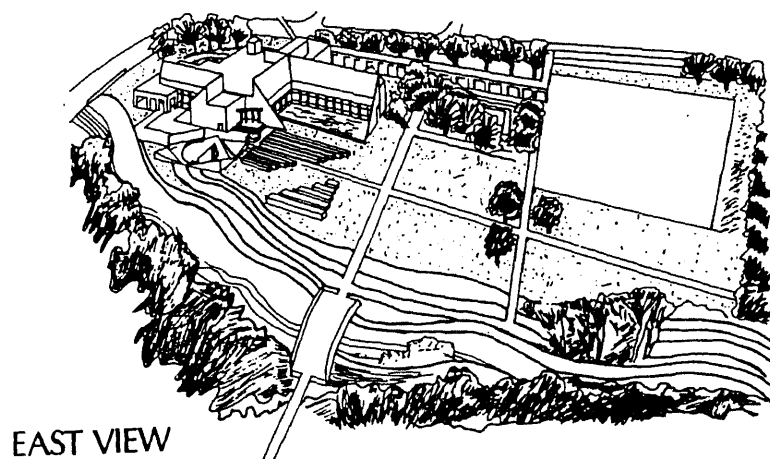
Known phenomenal techniques found in the psychology of perception are combined with the architectural design of five non-classroom art environments in which children experience and understand visual arts. The art environments are: (1) Land Marks, (2) Art Marks, (3) Color Connections, (4) Art Openings, and (5) Art Amplitude. Drawing from research conducted on cognitive learning theory and information gathered from site visit interviews, cognitive learning concepts were incorporated into the design of the art environments. Five categories of perceptual phenomenon were used as the bases for the architectural design of a visual arts center for children. The categories are: (1) General perceptual concepts, (2) Perceptual constancies, (3) perceptual selection processes, (4) perceptual organizational processes, and (5) depth and distance clues. In addition, a set of research principles were also incorporated into the art environment designs, based on information collected from site interviews. The research principles cover topics involving: kinaesthetic activity, interaction which includes both active and reflective spaces, areas for sharing ideas and relating experiences and memories with other people, designs which encourage connections and memories of beauty in every day objects and experiences.

In the design of Land Marks, using the vocabulary of point, line and plane, children will be introduced to the perception of movement using a succession of stationary design elements. They will experience how changing the brightness of a surface or object changes their perception of the size and distance of these elements. They will also learn how perceptual constancies in the shape, color, size and location of an incomplete image may be used to perceive the qualities of known objects as complete objects, regardless of the angle, distance, or context of the observed object.

In the design of Art Openings, childrens' exploration of art forms will be extended using circles, squares, and triangles. In these art environments, the emphasis is on learning to compare and contrast both two and three dimensional images and objects. Within the formal representations of circular, square and triangular art environments, children will playfully explore the characteristics of each geometry. They will learn what is inside, what is outside, what is up and what is down, what is an outline, a shape and a form. These explorations will help children to set up rules for grouping certain patterns together. From this, they will begin to understand sensory patterns. Examples of perceptual techniques used in these art environments involve developing a child's familiarity with geometric forms through repetition alone, by contrasting and comparing the size or intensity of geometric forms and spaces.

The design of the Art Amplitude art environment combines playful experience and actual practice in the spatial and exhibit arrangements. In this environment, children will begin to understand how depth and distance clues are used to create spatial images. The concepts of linear perspective, aerial perspective and gradient of texture are incorporated into the design of this art environment to help children experience and learn about creating images with depth and distance.

Finally, the design of one section of the Art Amplitude art environment will organize space to be reminiscent of an attic in a house. The "artifacts" found in the attic will be actual examples of children's art. The attic is intended to be a reflective area where children can see the value of self expression and connect with others of their own age who may live in other parts of the country or other parts of the world.



**E V E R Y   D A Y   A R T**

**Demonstrating a New Approach to Visual Arts for Children**

**Design Concept by: Abigail Andrea Jones**

**Thesis Advisors: Mark Hewitt  
Peter Papademetriou  
Susan Stuebing**

Copyright C 1992 by Abigail Jones

ALL RIGHTS RESERVED



APPROVAL PAGE

EVERY DAY ART

Environments exploring a new approach to the visual arts for children

Thesis presented in partial fulfillment of  
requirements for the degree of  
Master of Architecture

by Gail Jones

---

Mark A. Hewitt, Thesis Advisor  
Associate Professor of Architecture  
School of Architecture, NJIT

---

Peter C. Papademetriou  
Professor of Architecture and Director, Graduate Program  
School of Architecture, NJIT

---

Susan Steubing  
Research Assistant Professor of Architecture

## BIOGRAPHICAL SKETCH

**Author:** Abigail Andrea Jones

**Degree:** Master of Architecture

### **Undergraduate and Graduate Education:**

Master of Public Health, Boston University, Boston, MA, 1978.

Bachelor of Science in Education, Central Michigan University,  
Mt. Pleasant, MI, 1970.

**Major:** Health Education

The work presented here is dedicated to the students and teachers of Ulm, Germany who provided the inspiration for my ideas in 1972 and to my husband, Dennis, who provided the support and endless encouragement I needed to complete my graduate architecture thesis in 1992.

## A C K N O W L E D G M E N T S

The thesis research and the finished drawings for the thesis were completed under the direction of the New Jersey Institute of Technology Graduate School of Architecture. I am especially grateful to Mark Hewitt, my thesis advisor for his encouragement and support throughout the process. The project would not have been possible without the contributions of Peter Papademetriou, Graduate Advisor and Susan Stuebing, Education Advisor, both of whom shaped the project and helped guide the thesis in its formative stages.

The thesis could not have been completed without the advice of the individuals and organizations that participated in interviews during the research phase of the project. I am indebted for their patience, understanding and support of the goals of the thesis. In particular, I wish to thank Janette Jackson of the Philadelphia Zoo, John Coe of Coe Lee Robinson Roesch - Philadelphia, Leon Kaplan of the Palo Alto Cultural Center, Dee White of the Anderson Collection, Kay Alexander, author of Learning to Look, Richard Spirensen San Mateo County Arts Administrator, Al Nishiura of Gould Associates, Sally Osberg and Michael Oppenheimer of the San Jose Childrens Discovery Museum.

Ginidir Marshall, provided insightful comments throughout the process of the design of the final presentation materials. Joan Scott and Joe McCarthy of the Kaiser Family Foundation provided invaluable assistance in completing the final written summary documents.

Finally, I am grateful to the staffs of the Science and Art Museums who responded to the interview administered as part of the thesis. Particularly, the Philadelphia Zoo, the Philadelphia Childrens Science Museum, the Boston Children's Museum, Snug Harbor - Staten Island, The Coyote Point Museum - Burlingame, California, The Exploratorium - San Francisco, The Palo Alto Cultural Center, The Palo Alto Department of Parks and Recreation and The San Jose Childrens Discovery Museum.

T A B L E   O F   C O N T E N T S

Biographical Sketch	iv
Dedication	v
Acknowledgments	vi
Table of Contents	vii
Introduction	1 - 9
Land Marks Program Description	10 - 15
Art Marks Program Description	16 - 21
Color Connections Program Description	22 - 25
Art Openings Program Description	26 - 33
Art Movements Program Description	34 - 36
Art Amplitude Program Description	37 - 41
Methodological Appendix A	42 - 43
Selected Drawings Appendix B	44
Bibliography	45

# E V E R Y   D A Y   A R T

## Demonstrating A New Approach To Visual Arts For Children

Design Concept by: Abigail Andrea Jones

### I N T R O D U C T I O N

For my design thesis, I will conceptualize and design a Visual Arts Center for children -- an environment for the development of aesthetic perception in children. Aesthetic perception is a way of looking at art, a basis for making judgments about works of art and objects in the environment. Developing skills in perception is a way of helping children think critically about what they see. It involves complex thinking processes such as organizing and selecting, comparing and contrasting, combining and transforming; and finally, evaluating both intellectual intent and emotional quality. The result of developing these skills is a greater understanding and enjoyment of art and the visual world in general.

My design thesis will concentrate on utilizing architectural design elements to develop art environments to help children "see" better and to bring the experience of the visual arts into their every day lives. The design elements will emphasize development of environments where children are encouraged to observe, learn, interact, create, and reflect.

**Every Day Art****Introduction**

My project involves the design of an addition to the San Jose Children's Discovery Museum (CDM) in San Jose, California. This site was chosen primarily because the interactive learning approach taken by CDM is consistent with my goal of developing aesthetic perception in children. The CDM seeks to connect children's interaction with objects and activities that they see every day, but may not understand. They may not understand these objects or activities because, for example, they cannot see what goes on underneath a manhole when men are working under the streets. At CDM they actually go into the manhole and interact with life-sized sewer pipes and valves. Similarly, fire engines are generally untouchable and intriguing objects that children see and hear every day. At CDM, they are given an opportunity to interact with a fire engine, fire equipment and the clothing that fire personnel wear. Through the art environments created at EVERY DAY ART children will be able to make similar interactive connections and experience what it means to see art in every day objects. The titles of the art environments begin making these connections. For instance, Art Marks is a title meant to reference an environment and interactive activity where the goal is to make an impression on a child's memory -- to facilitate the child's remembering the marks they made and learning how to repeat the ideas and create.



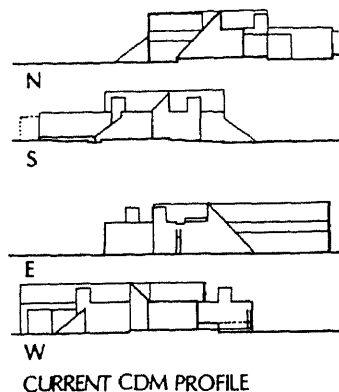
## Every Day Art

The Museum is now nearly two years old and is in need of additional space to meet the increased demand for new exhibition spaces. The title and unifying concept for my project is EVERY DAY ART. EVERY DAY ART is also the unifying theme<sup>3</sup> of the project. The overarching goal is to help children see art in their every day lives and to understand the elements of art well enough to see and experience these properties in everyday objects. The idea seen throughout all designed spaces is that by improving perception, children will see, understand and appreciate the art they see every day in their surroundings.

Two approaches toward a system of architectural design are taken in Every Day Art. In some cases, the architecture is the exhibit -- the experience and the spatial design itself is the vehicle for learning; in other cases the architecture creates a conducive envelope in which children experience and learn the visual arts through the workshops, displays and interactive exhibits contained within it. Both approaches are present in EVERY DAY ART.

The approach to education is both playful and direct. The attitude in all environments will be that nothing is hidden or mystical. The atmosphere is not that of a classroom; the spaces and displays will be

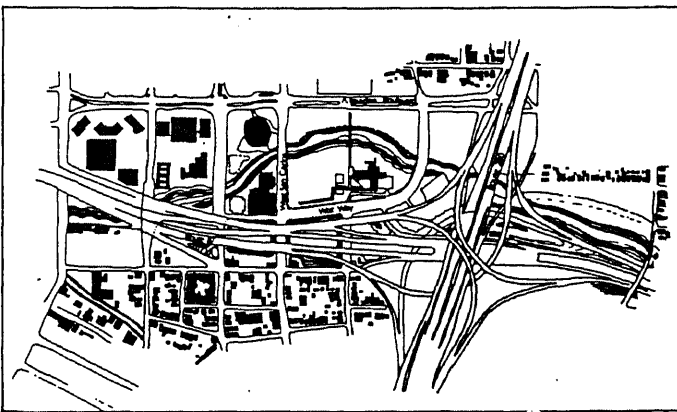
## Introduction



## Every Day Art

## Introduction

self-teaching and low-tech. The heuristic technique is to assume a blank slate and present the basic elements of art and perceptual concepts. From these fundamental experiences, the spaces accumulate experience and learning through a progression of visualization, experience, reflection and presentation. In the environments created in EVERY DAY ART, interaction and reaction or interaction and reflection will alternate, and so the spaces will be designed to support alternatively activity and retreat and reflection. New perceptual concepts and techniques are added as children move through the spaces.



SAN JOSE CHILDRENS DISCOVERY MUSEUM SITE

## SITE

Addition to the San Jose  
Children's Discovery Museum  
San Jose, California

## DESIGN ELEMENTS

Two approaches toward a system of architectural design are taken in Every Day Art.

The first approach is to utilize Architecture as the Exhibit -- The use and contrast of forms, color, light, sound and temperature together with changes in the floor-to-ceiling heights and spatial arrangements are all integrated to achieve specific visual arts learning objectives.

The second approach is to approach the architectural design employing Architecture as an Envelope conducive to visual arts learning -- Under this approach, the design elements are used as the spatial backdrop where children experience and learn about visual arts through the workshops, displays, and interactive exhibits contained within the architectural envelope.

SAN JOSE CHILDREN'S  
DISCOVERY MUSEUM AREA  
SITE PLAN

### THE ART ENVIRONMENTS

EVERY DAY ART will contain five art environments. A complete description of each environment is given in the body of the program document. A summary of each environment and its focal point follows.

- **Land Marks** is the first art environment and is a landscape design which focuses on development of a common vocabulary of art. Perceptual concepts, research principles and design elements will be used to support this general goal and its relationship to seeing everyday art.
- **Art Marks** is the second art environment which forms a transitional space between CDM and EVERY DAY ART. This area provides an environment for remembering and recapitulating the experiences and images of Land Marks. This environment capitalizes on memory using kinaesthetics and making connections to materials and movements that are used every day in art.
- **Color Connections** is the third art environment. Together with Art Marks, Color Connections will form the spine of EVERY DAY ART. The focus in Color Connections is light and color, capitalizing on the San Jose light through adobe walls. Again, the emphasis is on seeing beauty and art every day. It's not necessary to have paint to see art, look at the sky.

- **Art Openings** is intended to use architecture as the exhibit in providing environments where children interact with basic forms and shapes. Art Openings are intended to project the beauty found in the simplicity of basic forms. By understanding the elegance of simplicity, children may be able to capture delight in their every day routines that involve these forms.
  - **Pockets** are parts of Art Openings and are areas designed as environments for reflection by children. Each pocket will be created as a unique micro-environment -- each with its own personality and approach to relaxation.
  - **Nooks and Crannies** are also parts of Art Openings and are intended as practice places. Designed to be larger than pockets, but smaller than art openings, they are sized and arranged for small groups of children to investigate ways of making art.
- **Art Movements** is the fifth art environment designed as the epitome of movement. The architecture and activity emphasize movement and perceptual concepts used in expressing movement. Interpretation of art through dance motions should be made possible in this environment.
- **Art Amplitude** is the sixth art environment. I view the design as a set of interwoven plateaus. The focus here is higher levels of artistic and perceptual understanding and practice.

## Every Day Art

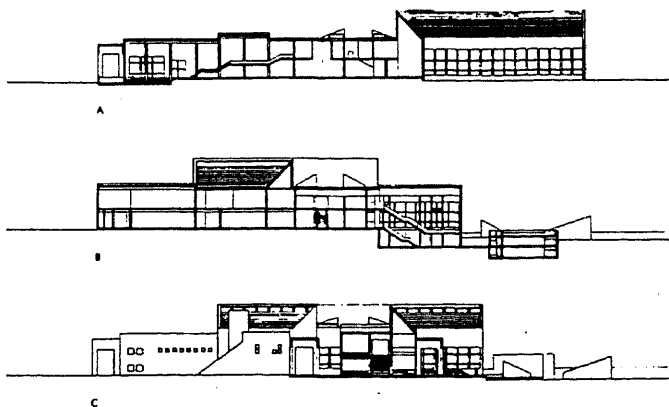
## Introduction

-- The first plateau, **Art Alley**, is intended as an experience in practical applications of art techniques, such as stage set design.

-- The second plateau, **Art Loft**, is designed to provide a variety of approaches to experiencing and creating depth, distance, and perspective; and also to involve children in concepts such as rereading art, transformation, and abstraction.

-- **Art Balconies** represent the third plateau intended to serve as environments designed for "just looking" -- watching other visitors experience EVERY DAY ART or looking at examples of art.

-- **Art Attic**, the fourth plateau, is an environment created to help recognize their own specific experiences from examples of the past. Examples of art done by famous individuals when they were children would be one of the themes. Art done by children from around the world could also be used to illustrate the world of differences and individual differences in interpretation.



THESIS  
Every Day Art  
Demonstrating a New Approach to  
Visual Arts for Children

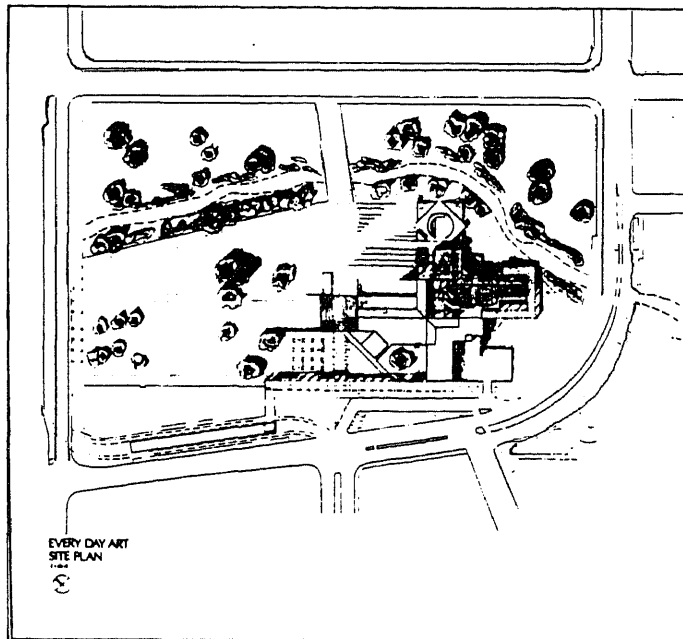
NEW ADDITION SECTION A  
NEW ADDITION SECTION B  
NEW ADDITION SECTION C

### PERCEPTUAL CONCEPTS AND RESEARCH PRINCIPLES

The perceptual concepts that are the basis for this demonstration follow ideas and information I collected during the research phase of the thesis which I completed last semester. There are five categories of perceptual concepts that will be covered in the art environments that are designed as exhibit spaces for EVERY DAY ART. The categories are: general perceptual concepts, perceptual constancies, perceptual selection processes, perceptual organizational processes and depth and distance clues. The Thesis Abstract and Appendix A provide a description of the five categories of perceptual concepts together with a listing of the art environment locations where the concepts were incorporated in the design. Four research principles are also used as the basis for this demonstration. These principles were derived from my observations and ideas about what is important to make EVERY DAY ART places meaningful environments for children. These principles are:

- Kinaesthetic activity is an integral part of a child's experience and memory of ideas and places.
- Spatial experiences must include some spaces that are intended for interaction coupled with other spaces reserved for reflection and retreat from activity.

- There should be deliberate opportunities for children to share their ideas, relate their perceptions of what they see to their own life experiences, hear and respond to others' experiences. Emphasis should be on listening and credentialling all ideas as legitimate to raise their spirits and aspirations. Architecturally, throughout EVERY DAY ART, pockets, niches and open wall space should be used for public illustration of ideas shared by artists and children.
- The materials, objects, and spatial forms should facilitate the child's connection between art and their appreciation of every day objects and experiences with EVERY DAY ART. Small routines in life should be understood as joyful and meaningful rituals.



# EVERY DAY ART

## Demonstrating a New Approach to Visual Arts for Children

### PROGRAM DESCRIPTION

#### Art Environment: Land Marks

The purpose of Land Marks is to establish a common vocabulary of the elements of art. Land Marks is a landscape design that will use a variety of elements to familiarize visitors with movement over points, lines, planes and textures. The design will engage visitors in a number of different ways, from walking over smooth stones in a stream to marking sand with sticks or rakes.

#### Perceptual Concepts

As part of the design process for the Land Marks art environment, specific perceptual concepts will be chosen from among those listed below. A selection of these concepts guided the design of the Land Marks art environment.

#### Perceptual constancies

shape constancy, color constancy, location constancy and size constancy

#### Perceptual selection processes

Movement Alone, Contrast Alone, Movement and Contrast Combined,

Familiarity through repetition

#### Perceptual organizational processes

Common Movement Patterns, Depth and Distance Clues, Gradient of Texture



**Art Environment: Land Marks****Research Principles**

As part of the design process, specific research principles were chosen from among those listed below. A selection of these principles guided the design of the Land Marks art environment.

Kinaesthetic Environments

Variety of Interactive

Reflective Spaces

Familiarity with natural materials

**Art Environment: Land Marks****Goal Statement**

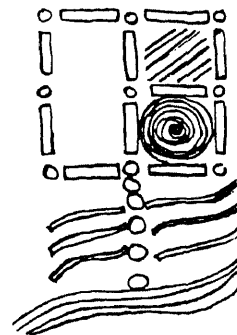
Land Marks is intended to be a landscape design that provides a variety of movement experiences using the incorporation of the perceptual concepts given above as the design concepts. Visitors will cross a nearby creek, move up the creek bed, through a series of terraced and ramped spaces leading to the entrance of EVERY DAY ART. The goals of the Land Marks environment are:

- To incorporate the elements of a common vocabulary of art (point, line, plane and texture) using the perceptual concepts given above;
- To use the perceptual concepts given above as the design devices;
- To provide environments for interaction and exploration of different land formations for children;
- To provide restful environments for supervising adults/parents;
- To incorporate ideas about the differences between public and private art into the design elements combined with the natural elements of the Land Marks area.

## Art Environment: Land Marks

## Program Description

In lieu of a square footage description for this landscape design, the following description is provided as a possible approach to the design. Land Marks begins with a walk across Japanese tea garden stones located in the creek. The stones will be constructed of partially moss covered concrete pier-like forms. Their surface will be like smooth shiny "Go" stones. Signage for the stones will be as water marks, each stone representing one mark in the Guadalupe River.



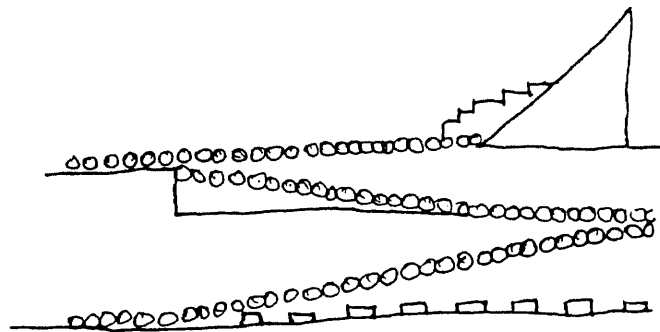
Proceeding onto the creekbed nearest CDM, visitors will move toward stone points made of redwood rounds and identified as wood marks. The grouping of the wood marks grows increasingly close together until the edges meet and the wood marks form lines. The lines are made of alternating rows of wooden logs lying horizontally, sand areas and garden rows. The lines are identified as land marks. Benches and stick rakes will be located in the sand areas. In these areas children may experiment with stick rakes to carve out point and line patterns in the sand. The garden spaces will be that used by CDM for its cafeteria.

## Art Environment: Land Marks

## Program Description

Just beyond the line logs and sand paths, lines made of concrete will be organized on a diagonal pointing toward a path that moves visitors onto a ramp up to the entrance of EVERY DAY ART. The ramp facade toward the creek and Land Marks park will be made of alternating wooden and concrete logs, changing the texture of the path to form a corduroy road.

On different levels on the way to the entrance to EVERY DAY ART will be two sculptures: one of a globe of the world, to symbolize the world of differences that exists in our country and between individuals. This sculpture will be made of steel with the countries of the world including the major topographic elements.

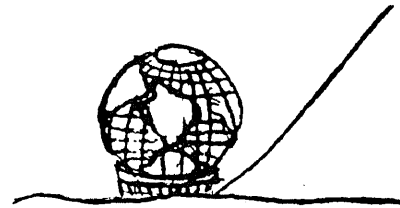


Corduroy Ramp

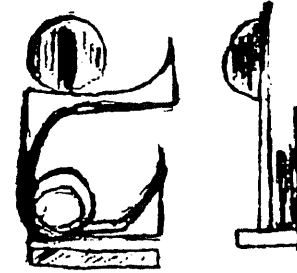
## Art Environment: Land Marks

The fretwork of the globe inside and out will be fabricated so children can climb up, through and over this sculpture. The second sculpture will also be of steel, but will be an abstraction of point, line and plane combinations. This sculptural piece will not be intended for climbing. The "side" entrance to EVERY DAY ART will be a slice made between the CDM pool and the flying buttress wall on the west side of the building.

## Program Description



Public Art



Private Art

**Art Environment: Art Marks****Program Description**

Art Marks is a part of the building addition. It represents the transition from CDM to the new addition and the transition from outside to inside. Art Marks is an example of the combination of approaches between architecture as the exhibit versus exhibits within the envelope of the architecture.



It is intended as the introduction to the indoor program of EVERY DAY ART. Art Marks will recap the concepts and ideas presented in Land Marks and will be an environment used to loosen up visitors with big movements and areas where connections to their experiences with Land Marks are reinforced.

**Art Environment: Art Marks****Perceptual Concepts**

As part of the design process for the Art Marks art environment, specific perceptual concepts were chosen from those listed below. These concepts guided the design of Art Marks.

**Perceptual Constancies:**

Shape, color, location and size constancies

**Perceptual Selection Processes:**

Movement Alone Movement, Contrast Alone, Contrast Combined, Familiarity through repetition

**Perceptual Organizational Processes:**

Patterns, Common Movement,

Depth and Distance Clues

Gradient of Texture

**Research Principles**

As part of the design process for the Art Marks art environment, specific research principles were chosen from those listed below. These concepts guided the design of the Art Marks art environment.

Kinaesthetic environments

Variety of introductory interactive spaces

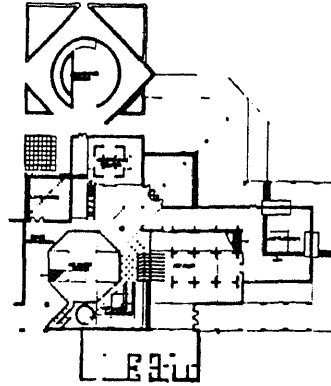
Familiarity with natural materials

Large motions used as expressive devices

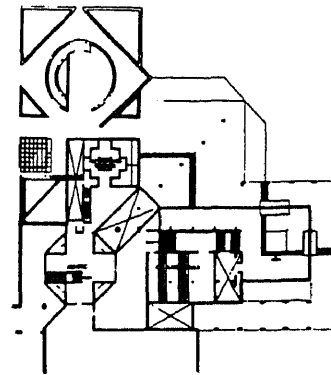
**Art Environment: Art Marks****Goal Statement**

The goals of Art Marks art environments are:

- To incorporate the perceptual concepts and research principles that are used as the vehicles for developing a common vocabulary of art for children, point, line, plane, texture;
- To ensure that the environmental design will involve remembering changes in surface, texture, form and color as experienced in Land Marks;
- To organize this area as the juncture between CDM and EVERY DAY ART and to capture a sense of transition between Land Marks and Art Marks;
- To capture a smooth transition between the outside Land Marks and a side entrance into Art Every Day;



ADDITION/EXHIBIT SPACES  
FIRST FLOOR PLAN



ADDITION/EXHIBIT SPACES  
SECOND FLOOR PLAN



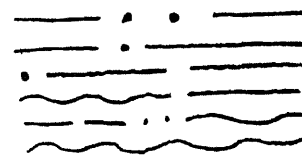
## Art Environment: Art Marks

- To provide an interactive environment where children may recap their experiences and draw out their initial ideas about Land Marks;
- To provide spaces for using different natural materials to recall, retrace and redraw the elements of art they experienced previously in the Land Marks areas;
- To design materials and spaces where kinaesthetic experiences and a typical floor, ceiling and wall forms and surfaces are employed for remembering the movements made in Land Marks (e.g. tracing dots and a variety of textured surfaces with hands and feet, beginning to draw lines on the blank slate walls and floor surfaces with hands and feet,

## Goal Statement



Blank Slate



Art Mark Rhythms

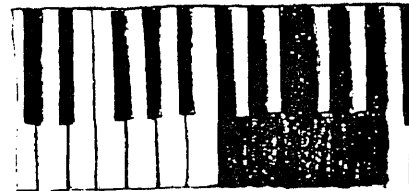


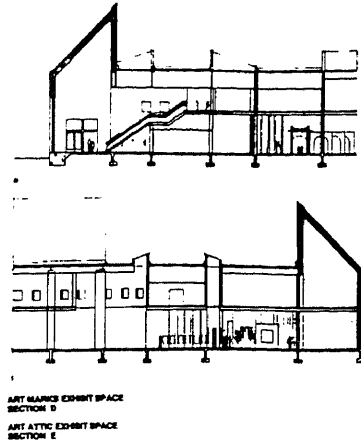
Figure Ground Sound

## Art Environment: Art Marks

## Goal Statement

seeing how different materials and surfaces accept the same image differently, coordinating sight of different sized and lengthed dots and dashes and then playing the rhythms of different length and textured items on wooden percussion instruments);

- To clearly indicate a change in the atmosphere by changes in lighting, texture and the type of activity that exists in the exhibit areas that precede and follow Art Marks.
- To serve primarily as an interactive beginning point -- an introduction to the art realms beyond in Art Openings, while areas for observation by adults and parents are provided.



**Art Environment: Art Marks****Requirements**

Square Footage Requirements: 1500 s.f. per program area

Other Requirements: Natural light should be the primary source of illumination in this environment. Soft seating areas should be designed for adults overseeing children. The area should be designed to reduce sound as much as possible. As the juncture between the main building and Land Marks, materials used in this environment should support a sense of translucency between the outside and the inside; and to telegraph the space as an introductory experience.

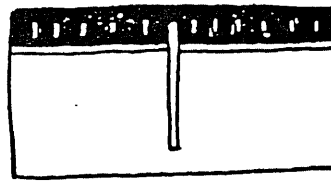
Comments: This environment needs to be sufficiently large to be both a transition from the main CDM building as well as separation between the interactive etchings of Art Marks, Art Openings entrances, and the passageway(s) that lead directly to either Art Movements or Art Amplitude environments. This environment, in conjunction with Color Connections, will be the spinal cord of Art Every Day.

**Art Environment: Color Connections****Program Description**

COLOR CONNECTIONS is the connecting passage between the main entry from the Childrens Discovery Museum (CDM) and all other Every Day Art exhibit areas. Together with ART MARKS, it will serve as the spine for Every Day Art.

**Perceptual Concepts and Research Principles**

As part of the design process for the Color Connections art environment, specific perceptual concepts will be chosen from among those listed below. These concepts guided the design of the Color Connections art environment.

**General Perceptual Phenomenon****Gamma Phenomenon****Perceptual Constancies****Color Constancy, Brightness Constancy****Selection Processes****Familiarity through intensity, Contrast Alone****Organizational Processes****Patterns****Depth and Distance Clues****Gradient of Texture****Repetition & Light**

**Research Principles**

As part of the design process for the Color Connections art environment, specific research principles were selected from among those listed below. These research principles guided the design of the Color Connections art environment.

Primarily Reflective Activities

Use of Natural/Familiar Materials

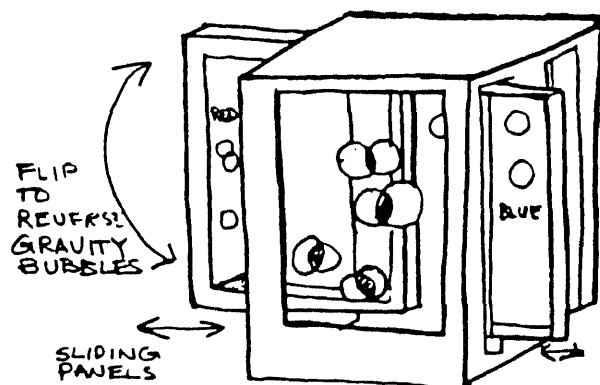


## Art Environment: Color Connections

## Goal Statement

The goals of the Color Connections art environment are:

- To introduce the concepts of light and color as a part of seeing art;
- To introduce the effect of mixing colors;
- To see and understand how light bends;
- To link art environments together;
- To provide a passageway between art environments;
- To optimize the character of the light that exists in San Jose;
- and
- To provide a reflective spatial counterpoint to the more interactive Art Marks environmen.



Color Mixing

**Art Environment: Color Connections****Requirements**

Square Footage Requirements: 1,000 s.f. per exhibit area

Other Requirements: Natural materials and natural light should be the emphasis in this area. Seeing light through small windows compared with light through a marble pane of glass.

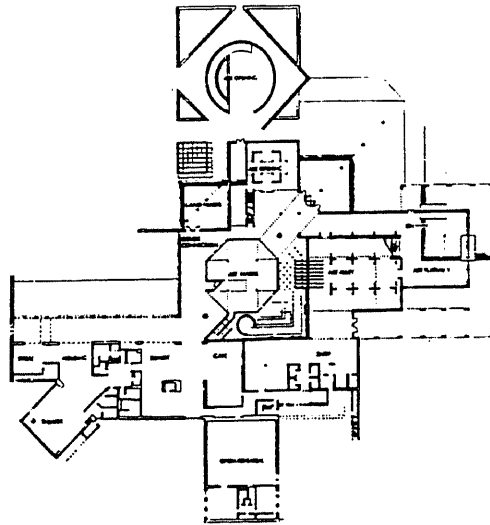
Capitalizing on the water in the area from the Guadalupe River and the CDM pool would be ideal for experiencing how light reflects, bends and colors. The nature of this area should be as a gathering place to experience color and light and to be able to sit and watch other visitors to Every Day Art. One section of color connections should include an area where colors are first visualized (e.g. prisms reflecting rainbow shades on a wall) next to an area where colors can be mixed (e.g. color leaves that enabled children to slide different colors past one another with light shining through to see color changes could be the design for mixing colors.

## Art Environment: Art Openings

## Program Description

Art Openings is intended to use architecture as the exhibit in providing environments where children interact with basic forms and shapes. There will be three interactive areas which will be designed to describe the nature of a square, the nature of a triangle, and the nature of a circle.

The entrance, the activities, and the relaxation environments within each Art Opening environment will reinforce the nature of the form. For example, in the Triangular Art Opening, the entrance will be through a pyramidal doorway onto a platform. Visitors' choices to move farther into the triangular room will be to move down stairs that start wide and end narrow or to slide down a ramp.



FIRST FLOOR - CMH  
ADDITION  
©

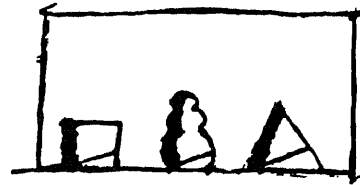


### Art Environment: Art Opening

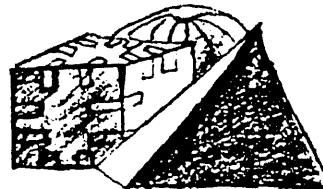
Once in an Art Opening environment, experiences will follow a variety of patterns of understanding the nature of the form: its top, bottom, sides, inside, outside, edges and depth for forms or outlines for shapes.

Each Art Opening will include interactive areas and the possibility for reflection in miniature environments hidden away in pockets of space. In addition, encased in niches formed throughout the interactive art environments, there will be areas for practicing art with examples of fine art using the shapes and forms seen in the main art opening environment. Passage through the Art Opening, with or without experiencing either the pocket environments or practice niches, should offer a rich enough environment for children to understand the nature of each form.

### Program Description



Art Openings



Interactive Objects



Shapes and Outlines  
Are Not  
Forms with Depth

**Art Environment: Art Openings****Program Description****Perceptual Concepts and Research Principles**

As part of the design process for the Art Openings art environment, specific research principles were selected from among those listed below. These research principles guided the design of the Art Openings art environment.

**General perceptual phenomenon**

Autokinetic Illusion, Gamma phenomenon

**Perceptual Constancies**

Shape constancy, Brightness constancy, Location constancy, Size constancy

**Perceptual Selection Processes**

Contrast alone, Familiarity through repetition, Familiarity through intensity,

Familiarity through size

**Perceptual Organizing Processes**

Figure/ground, Closure, Proximity

**Depth and Distance Clues:**

Perceived size

Interposition

Aerial Perspective

**Research Principles**

As part of the design process for the Art Openings art environment, specific research principles were selected from among those listed below. These research principles guided the design of the Art Openings art environment.

Variety of Interactive and Reflective Activities

Use of Natural/Familiar Materials

**Art Environment: Art Openings****Goal Statement**

The goals of the Art Openings art environments are:

- To create environments using design elements to support children's experience and understanding of the nature of three basic shapes: square, triangle and circle;
- To develop the details of the environment to facilitate learning about and experimenting with edges of forms...top, bottom, side, front, back, inside, outside, volume, depth; o to incorporate areas in the environment that can be used to differentiate between forms and shapes;
- To include design elements that aid in learning about and experimenting with outlines of shapes, figure ground, contrast, and repetition;
- To organize pockets of reflective space that provide a comfortable environment for children to be alone or together with a friend or family where "alone time" is valued, books and music may be chosen and the space feels soft and comfortable to spend time in;
- To introduce fine art samples using the same ideas presented in each art opening;
- To practice the ideas presented in each art opening in a practice niche.

**Art Environment: Art Openings****Goal Statement**

- To design the "pockets" as small sized nooks and crannies of the main more interactive environment where "alone time" is valued, books and music may or may not be chosen and the space feels soft and comfortable -- a place to spend time;
- To design areas within both interactive environments and reflective pockets where examples of art which recapitulate the ideas presented by the shapes and forms created in each Art Opening environment; and
- To design intermediate nooks and crannies that are large enough for small groups to provide opportunities for practicing the ideas experienced in each Art Opening environment.



**Art Environment: Art Openings****Requirements**

## Square Footage Requirements:

Art Openings 3 @ 1200 s.f. each	3,600
---------------------------------	-------

Pockets	450
---------	-----

(3 per opening @ 50 s.f.)

Intermediate Nooks and Crannies	1,800
---------------------------------	-------

(3 per opening @ 200 s.f.)

## Other Requirements:

Separate moveable furniture will not be used in any of these environments. Lighting will vary according to atmosphere being created in each environment.

Art Environment: Art Openings/Pockets

Program Description

### Perceptual Concepts

As part of the design process for Art Openings/Pockets art environments, specific perceptual concepts were chosen from among those listed below.

A selection of these concepts guided the design of the Art Openings/Pockets art environments.

### Selection Processes

Contrast Alone, Familiarity through Repetition, Familiarity through Intensity, Familiarity through Size

### Organizational Processes

Continuity, Patterns

### Depth and Distance Clues

Interposition, Aerial Perspective, Gradient of Texture

### Research Principles

As part of the design process for the Art Openings art environment, specific research principles were chosen from among those listed below.

A selection of these principles guided the design of the Art Openings art environment.

Reflective environments alternate with interaction

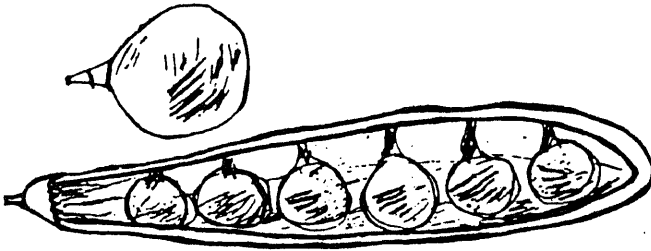
Art Environment: Art Openings/Pockets

Goal Statement

The Goals of the Art Pockets art environments are:

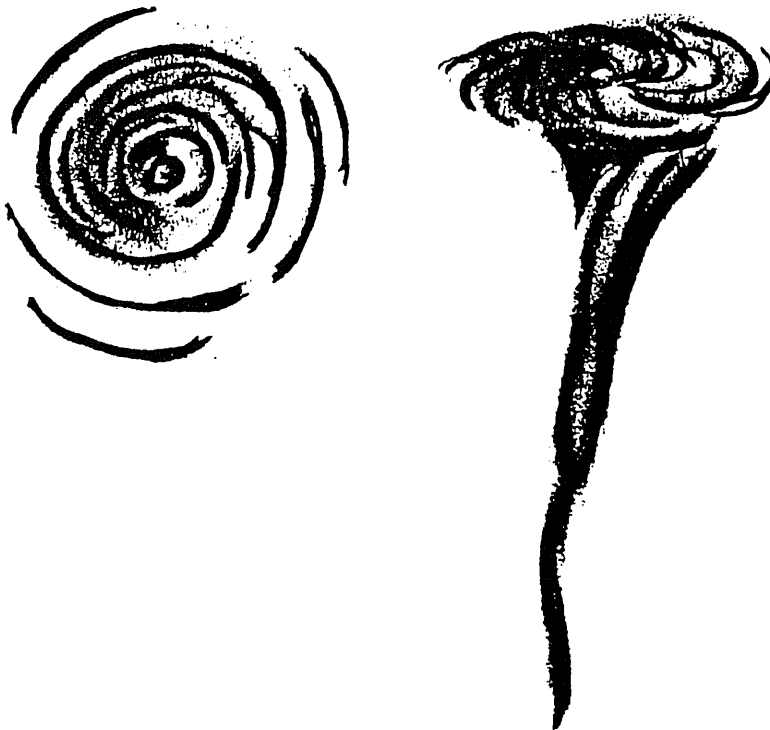
- To create areas of reflection and calm for children, and
- To incorporate the perceptual concepts above as vehicles for the architectural design of these environments.

What would it feel like to be  
a pea in a pod?



A Pocket in a Circular Art Opening

Art Movements will be a spiraling surround of presentation space with balconies on different levels looking out from workshops, pockets, nooks and crannies and possibly art openings. Seeing and understanding movement in art is the focus of this environment. This environment is another example of architecture as the exhibit. Spiraling ramps will be used both for movement between levels and experiencing display areas. This environment looks like an interior cylinder open to the sky with slivers of light marking points in the spiral motion.





**Art Environment: Art Movements****Perceptual Concepts****Perceptual Concepts**

As part of the design process for the Art Movements art environment, specific perceptual concepts were chosen from among those listed below. A selection of these concepts guided the design of the Art Movement art environment.

**General Perceptual Phenomenon**

Perceived Movement Gamma phenomenon(brightness), Perceived Movement Phi phenomenon (stationary lights)

**Perceptual Constancies**

Shape, Location, Size Constancies

**Selection Processes**

Movement Alone, Movement and Contrast Combined, Familiarity through repetition

**Organizational Processes**

Continuity, Patterns, Common Movement

**Depth and Distance Clues**

Linear perspective

**Research Principles**

As part of the design process for the Art Movements art environment, specific research principles were chosen from among those listed below. A selection of these principles guided the design of the Art Movements art environment.

Interaction/Reflection Kinaesthetic experiences, Every day objects connections to memory.

**Art Environment: Art Movements****Goal Statement**

The goals of the Art Movement art environment are:

- To create a presentation environment that emphasizes movement in art and architecture;
- To design an environment that facilitates an understanding of movement in art, how it is created and the feelings elicited by movement;
- To create an environment that encourages gatherings similar to a plaza behaving like a stage for the neighborhood of artists;
- To organize a space that is comfortable for formal and informal presentation of ideas for visitors;
- To develop in the design details areas for exhibited art completed by visitors and to exhibit examples of art which illustrate movement;
- To design an environment that is conducive to sharing between older and younger visitors to collaborate on ideas.

**Art Environment: Art Movements****Requirements**

Square Footage Requirements:

approx. 2000 s.f.

**Art Environment: Art Amplitude****Program Description**

**Art Amplitude** is divided into four interconnecting environments. First, **Art Alley** is intended as an environment where local children and visitors may be involved in practical applications of making art, such as creating stage sets for Art Movements or parts of exhibit design used at CDM, together with local theater groups and the CDM staff.

Second, **Art Plateaus** will involve children in techniques of creating depth and distance. The emphasis in this environment is seeing and understanding a variety of approaches to creating depth, distance, and perspective. The Art Plateaus environment will be similar to that of an artist's loft and one of the plateaus could be used to involve children in concepts such as, rereading art, transformation, and abstraction. It is an area where "children as artists" will meet other artists and collaboration is emphasized.

**Art Balconies** will be areas designed for watching others. These environments will allow oversight onto other art environment areas through the use of either interior balconies and/or exterior balconies.

**Art Attic** is an environment created to provide experiences where children may recognize their own specific experiences from examples of the past. Examples of art done by famous individuals when they were children would be one of the themes, and art done by children from around the world could be used to illustrate the world of differences and individual differences in interpretation.

**Art Environment: Art Amplitude**

**Perceptual Concepts**

### **Perceptual Concepts**

As part of the design process for the Art Amplitude art environment, specific perceptual concepts were chosen from among those listed below. A selection of these concepts guided the design of the Art Amplitude art environment.

#### **Perceptual Constancies**

Shape, brightness, color, location and size constancies

#### **Selection Processes**

Familiarity through intensity

#### **Organizational Processes**

Figure Ground, Closure, Continuity, Proximity

#### **Depth and Distance Clues**

Linear Perspective, Aerial Perspective, Gradient of Texture

### **Research Principles**

As part of the design process for the Art Amplitude art environment, specific research principles were selected from those listed below. These principles guided the design of the Art Amplitude art environment.

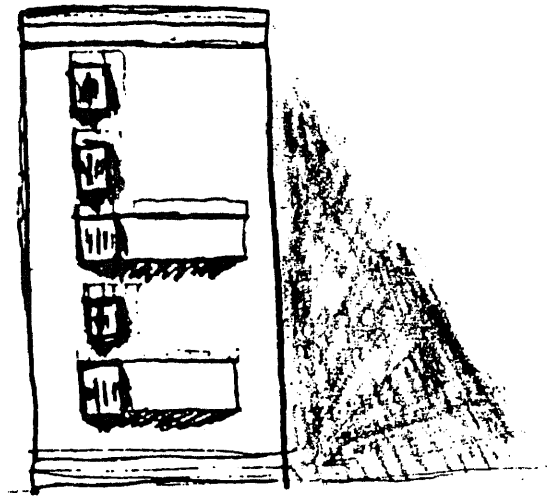
Progression in learning skills, Every day objects and experiences, kinaesthetic experience and memory, action/reflection/presentation

## Art Environment: Art Amplitude

## Goal Statement

The goals of the Art Amplitude environment are:

- To encourage higher levels of understanding of perceptual concepts and visual arts techniques;
- To organize the designed space as a set of levels separated, but adjoining in some way -- possibly using stairs leading to several plateaus;
- To organize the levels of art amplitude to enable visitors to be involved in practical applications of art experiences;
- To use the perceptual concepts emphasizing abstraction, depth, distance, perspective in the design of the environment.
- To design environments where children will see and experience how new examples of art are created from old messages, i.e. borrowing and reinterpreting insights;



A balcony is an  
an exposed  
pocket of space.

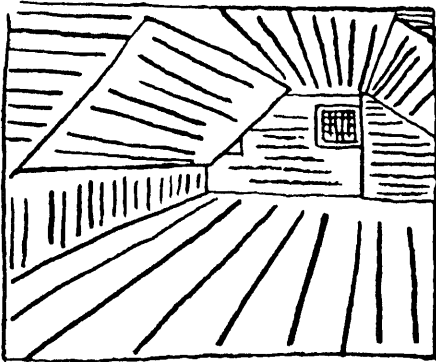
## Art Environment: Art Amplitude

## Goal Statement

- To organize environments where children will respond to art created by other children through the use of historical and contemporary examples of children's art;
- To remind children of the important areas of life that seem to be getting past us, ideas about discoveries made from old familiar subject matter, family life, student life, daily life.



Limiting a child's exposure to this type of image leads to bankrupt memories...



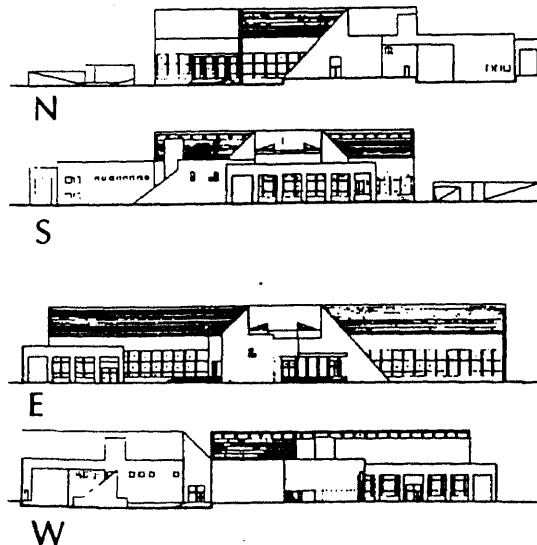
leaving them  
essentially with  
an empty attic.

## Art Environment: Art Amplitude

## Requirements

Square Footage Requirements:	3,725 s.f.
Art Plateaus	1,000 s.f.
Art Balconies	225 s.f.
Art Attic	1,000 s.f.
Art Alley	1,500 s.f.

Other requirements: One environment should be designed so as to recreate artists loft atmosphere with a sense that the area is a set of interwoven plateaus. Another area should be a reflective environment where children see children's art from the past and from around the world. Practical experiences and involvement with practicing artists is key to organizing one of the environments. A sense of interconnection -- an art community/neighborhood should be felt.



NEW CDM PROFILE

E V E R Y   D A Y   A R T

Demonstrating a New Approach To Visual Arts for Children

A P P E N D I X   A

Perceptual Concepts

Exhibit Location

(1) General perceptual phenomenon

including:

Phi phenomenon - perceived movement through a rapid succession of succession of stationary images

Autokinetic illusion is the perceived movement of a stationary pinpoint in a dark room

Gamma phenomenon are the perceived changes in size and distance through changes in brightness.

(2) Perceptual constancies occur when the qualities of known objects are understood regardless of the angle, distance or context. These constancies include: shape constancy, brightness constancy, color constancy, location constancy, size constancy

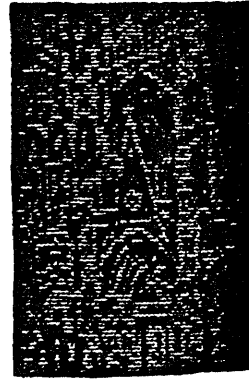




(3) Perceptual concepts involve selection processes which are described as techniques for grouping certain patterns together and setting up rules to distinguish from other stimulus complexes, from this viewers are able to form sensory patterns. A change in the pattern of stimulation is useful in understanding how perceptual selection occurs. Selection processes include: Movement alone, Contrast Alone, Movement and Contrast combined, Familiarity through repetition, Familiarity through size.

Perceptual concepts involve organizational processes including: Figure Ground, Closure, Continuity, Overlap, Proximity, Patterns, Overlap

Distance and Depth clues as perceptual concepts include: Perceived Size, Interposition, Overlaps, Linear Perspective, Aerial Perspective, Gradient of Texture



Cathedrals  
Roy Lichtenstein

E V E R Y   D A Y   A R T

Demonstrating a New Approach To Visual Arts for Children

A P P E N D I X   B   -   S E L E C T E D   D R A W I N G S

**SEVENTH SEMESTER  
THESIS PROJECT**

**THESIS**

Every Day Art  
Demonstrating a New Approach  
to Visual Arts for Children

**SITE**

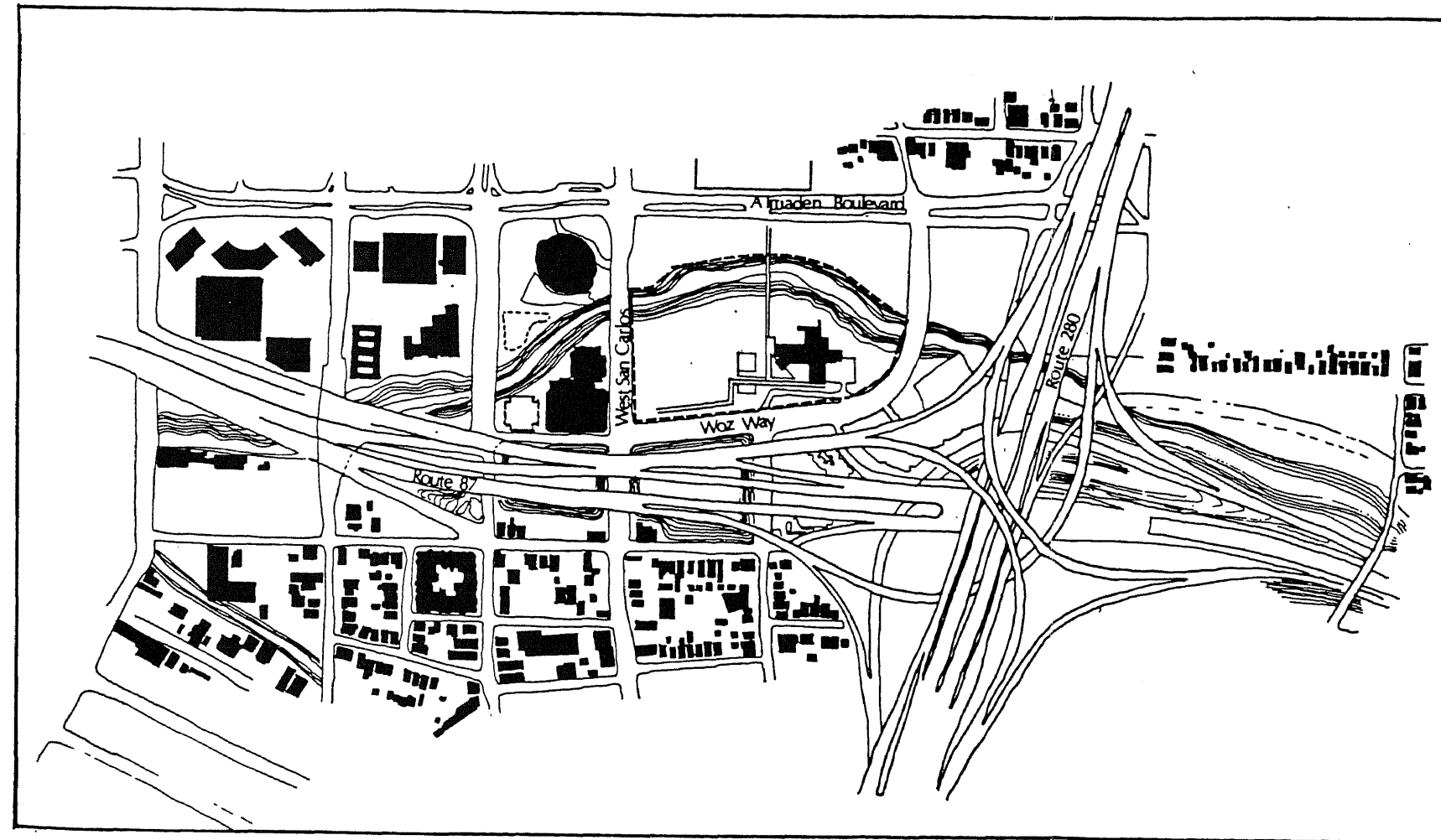
Addition to the San Jose  
Children's Discovery Museum  
San Jose, California

**DESIGN ELEMENTS**

Two approaches toward a system of  
architectural design are taken in  
Every Day Art.

The first approach is to utilize  
Architecture as the Exhibit -- The  
use and contrast of forms, color,  
light, sound and temperature together  
with changes in the floor-to-ceiling  
heights and spatial arrangements are  
all integrated to achieve specific  
visual arts learning objectives.

The second approach is to approach  
the architectural design employing  
Architecture as an Envelope  
conducive to visual arts learning --  
Under this approach, the design  
elements are used as the spatial  
backdrop where children experience  
and learn about visual arts through  
the workshops, displays and  
interactive exhibits contained within  
the architectural envelope.



**SAN JOSE CHILDRENS DISCOVERY MUSEUM SITE**

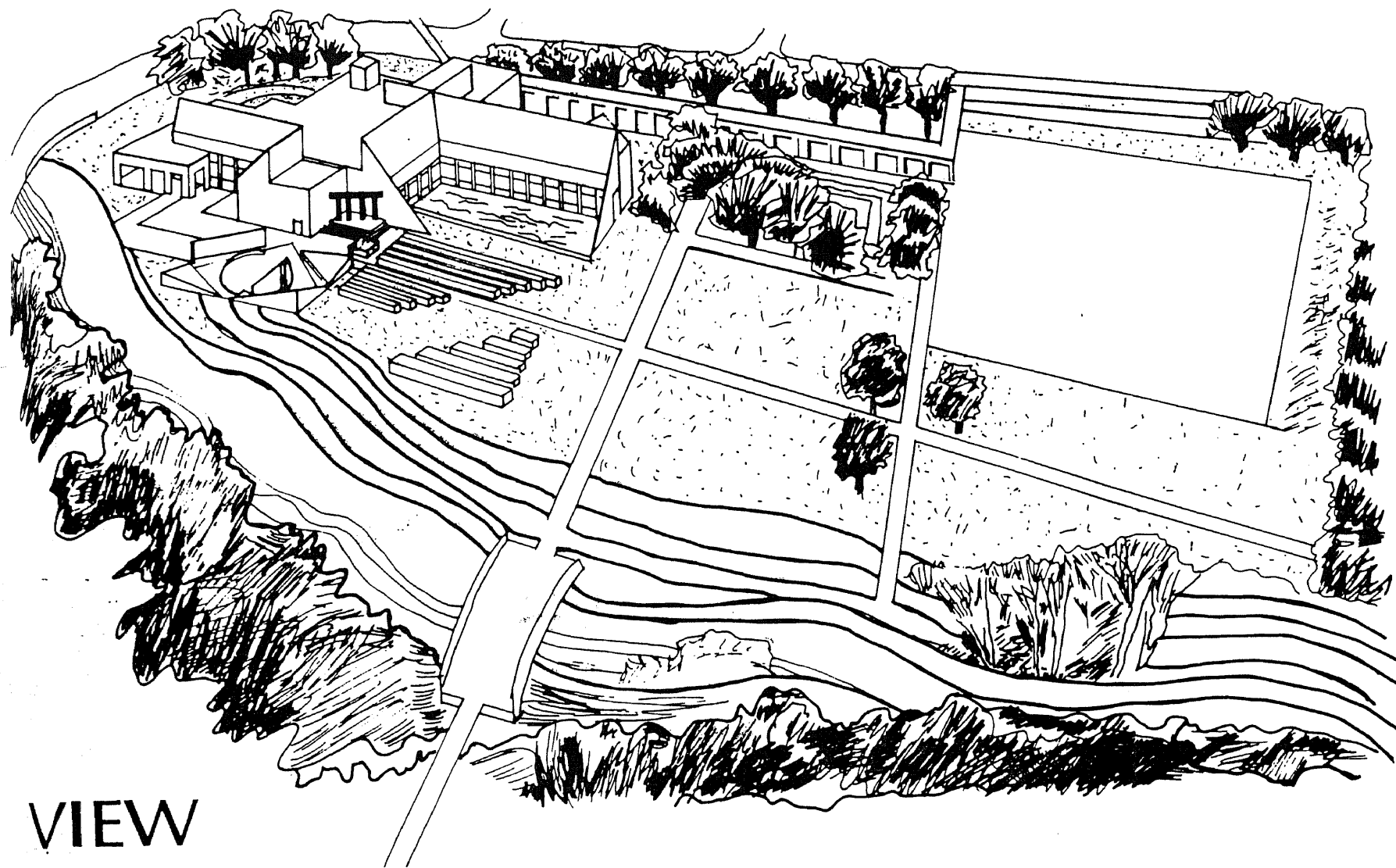
**SAN JOSE CHILDREN'S  
DISCOVERY MUSEUM AREA  
SITE PLAN**

SEVENTH SEMESTER  
THESIS PROJECT

THESIS

Every Day Art  
Demonstrating a New Approach to  
Visual Arts for Children

EAST VIEW PERSPECTIVE



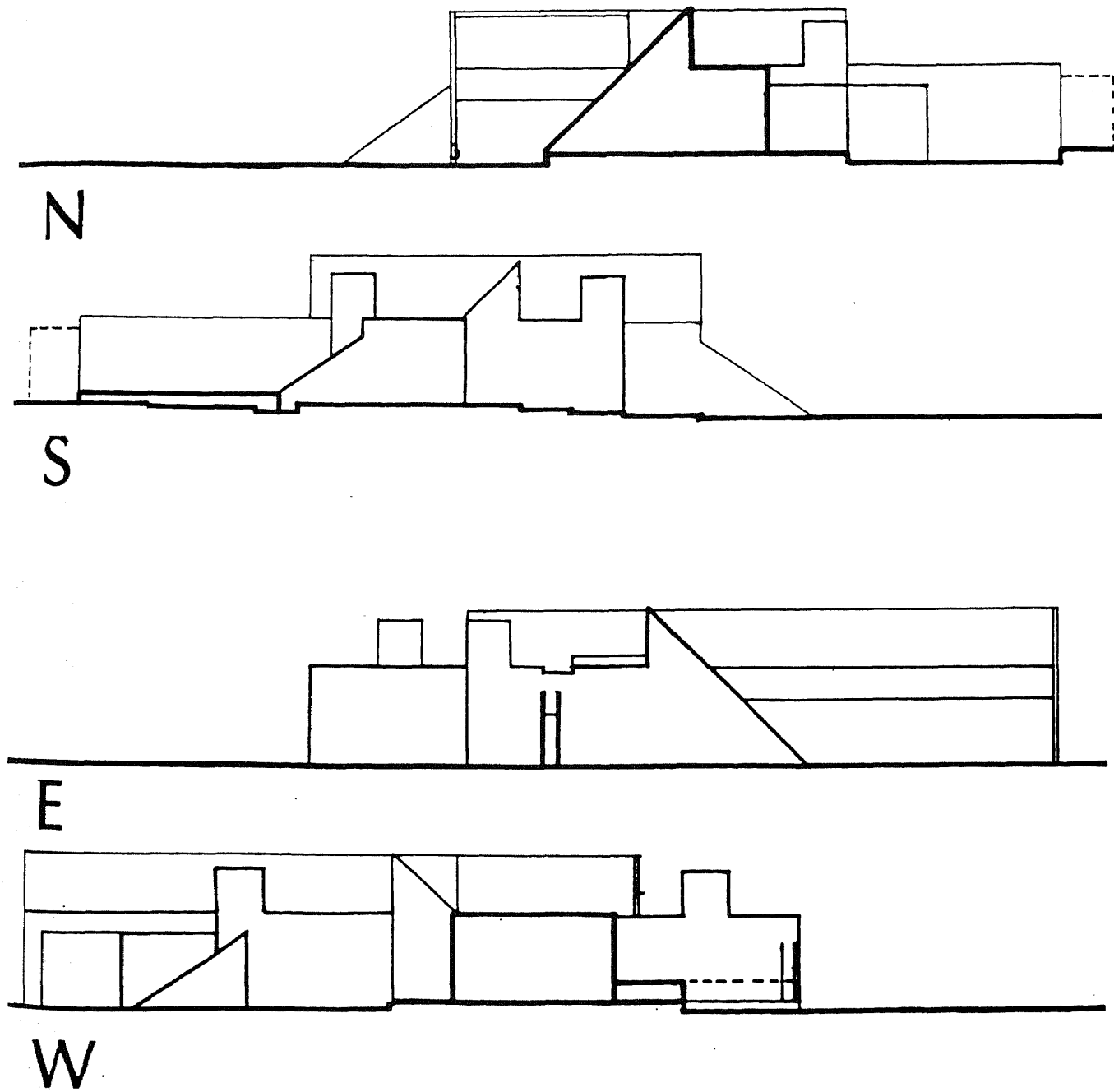
VIEW

SEVENTH SEMESTER  
THESIS PROJECT

THESIS

Every Day Art  
Demonstrating a New Approach to  
Visual Arts for Children

EXISTING PROFILE OF THE  
CHILDREN'S DISCOVERY  
MUSEUM



CURRENT CDM PROFILE

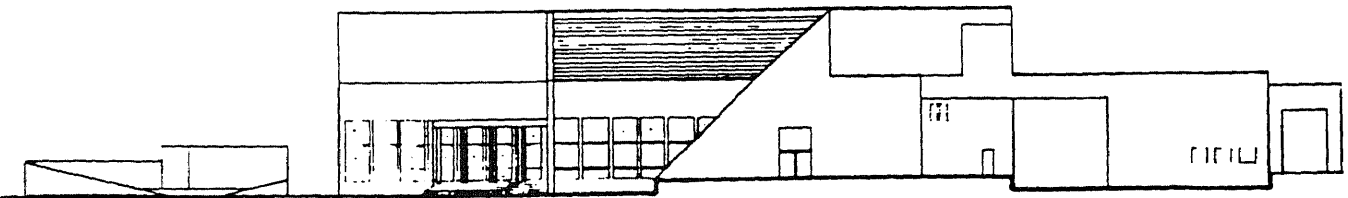
1/40" = 1'-0"

SEVENTH SEMESTER  
THESIS PROJECT

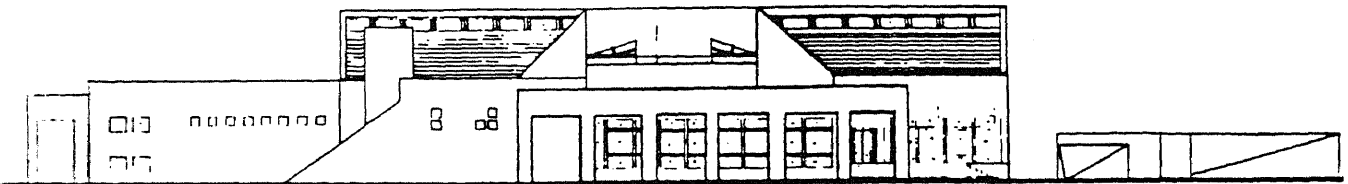
THESIS

Every Day Art  
Demonstrating a New Approach to  
Visual Arts for Children

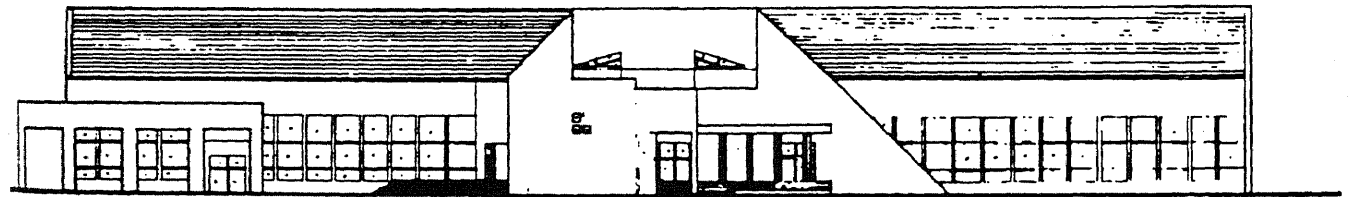
CHILDREN'S DISCOVERY  
MUSEUM PROFILE SHOWING NEW  
ADDITION



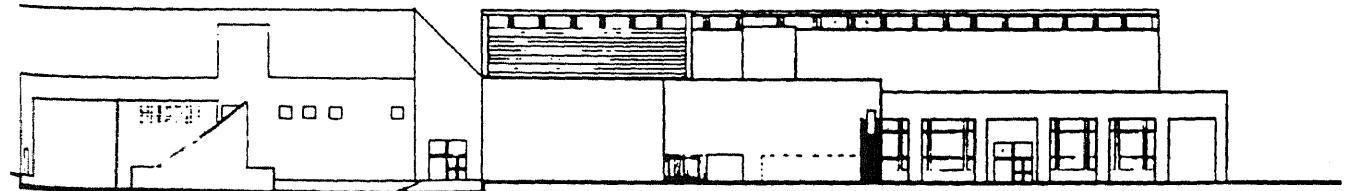
N



S



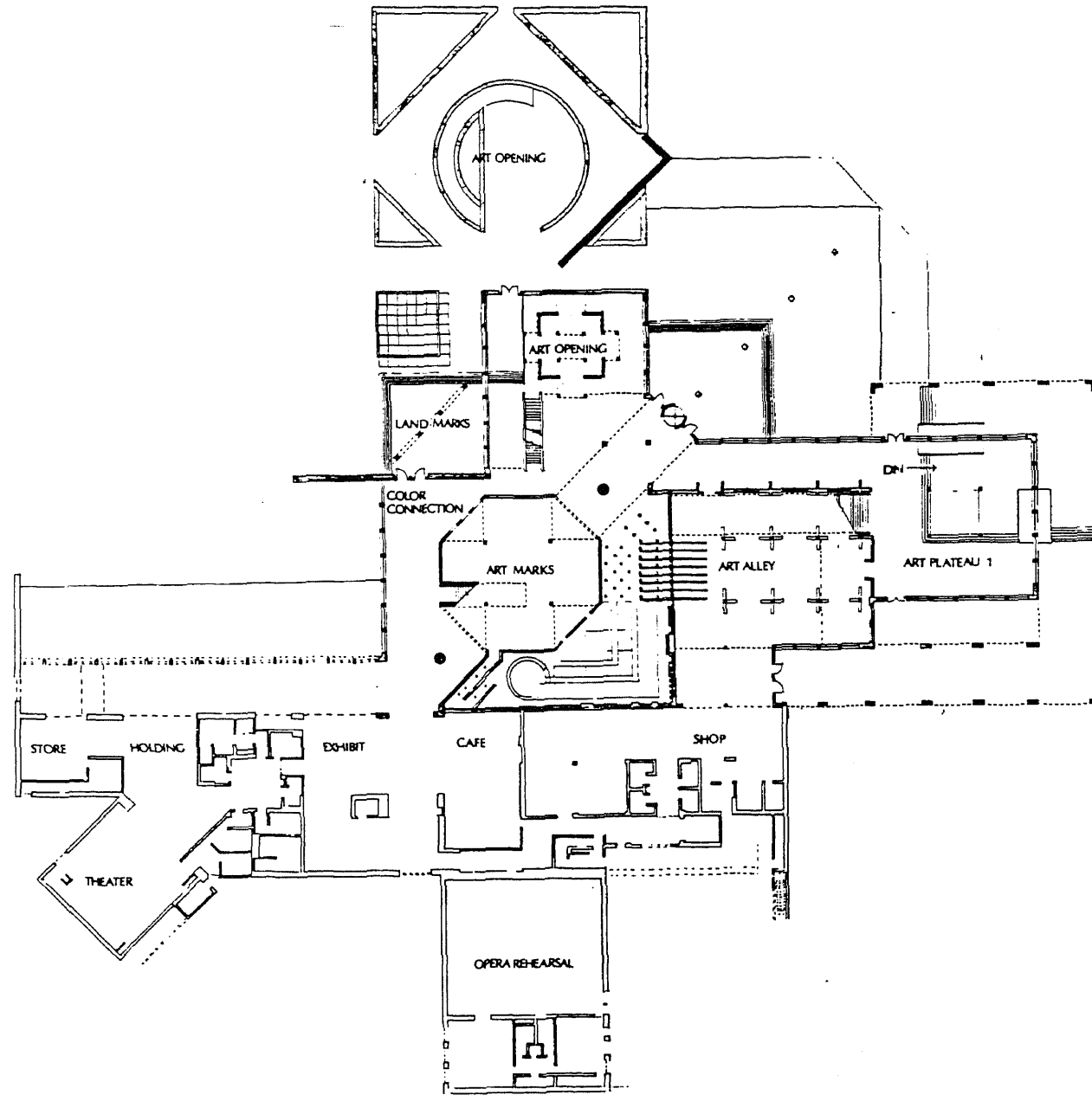
E



W

NEW CDM PROFILE

1/40" = 1'-0"



**SEVENTH SEMESTER  
THESIS PROJECT**

**THESIS**

Every Day Art  
 Demonstrating a New Approach to  
 Visual Arts for Children

**FIRST FLOOR PLAN FOR  
 ADDITION AND RENOVATION  
 SHOWING EXISTING BUILDING**

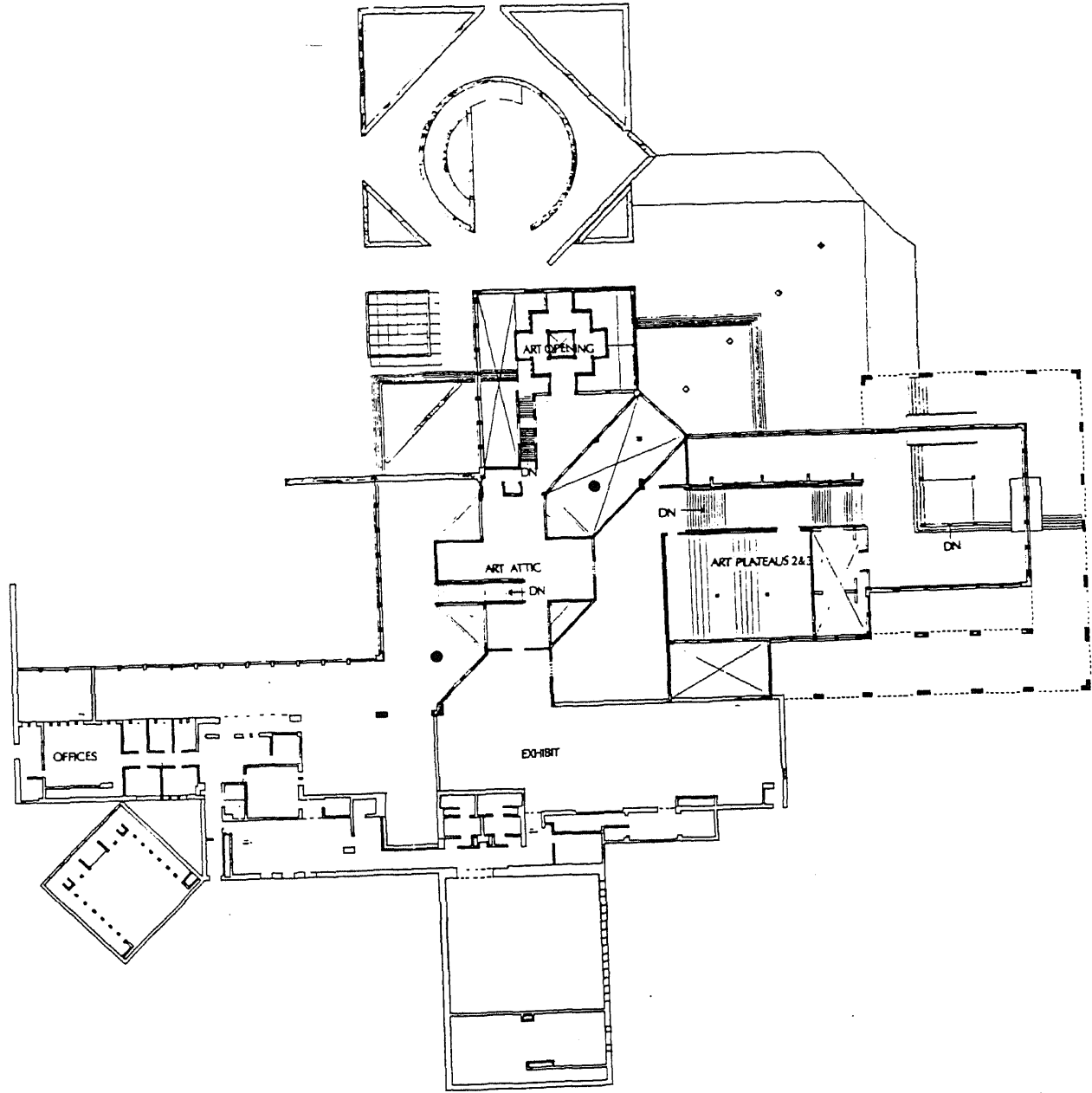
FIRST FLOOR - CDM  
 ADDITION  
 1/8" = 1'-0"  
 ⊗

**SEVENTH SEMESTER  
THESIS PROJECT**

**THESIS**

Every Day Art  
Demonstrating a Nedw Approach to  
Visual Arts for Children

**SECOND FLOOR PLAN FOR  
ADDITION AND RENOVATION  
SHOWING EXISTING BUILDING**



SECOND FLOOR - CDM  
ADDITION  
1/8" = 1'-0"  
⊗



**SEVENTH SEMESTER  
THESIS PROJECT**

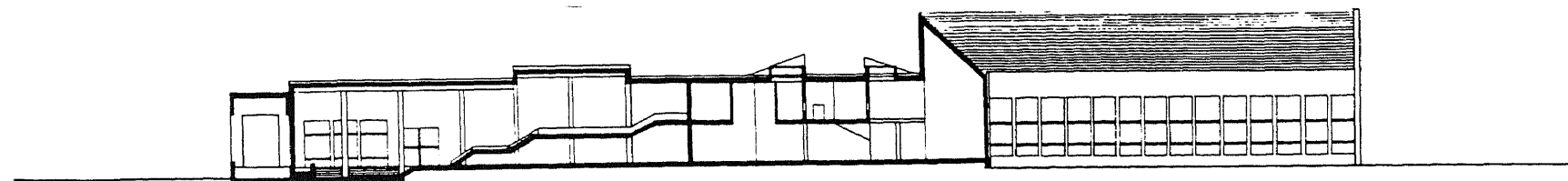
**THESIS**

Every Day Art  
Demonstrating a New Approach to  
Visual Arts for Children

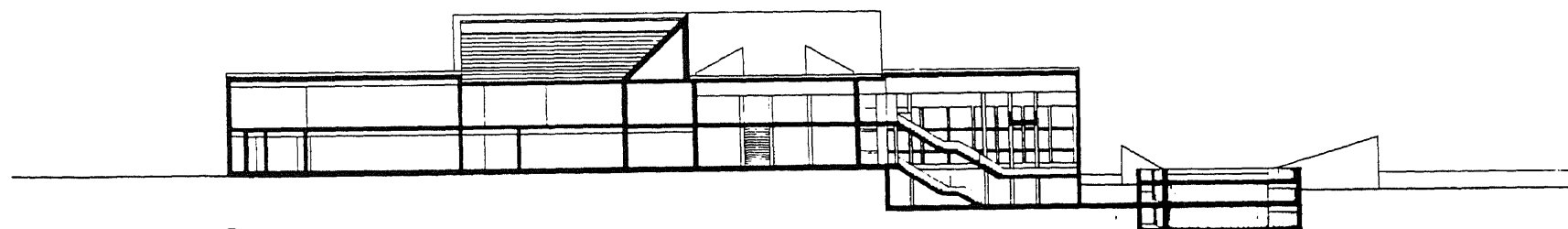
**NEW ADDITION SECTION A**

**NEW ADDITION SECTION B**

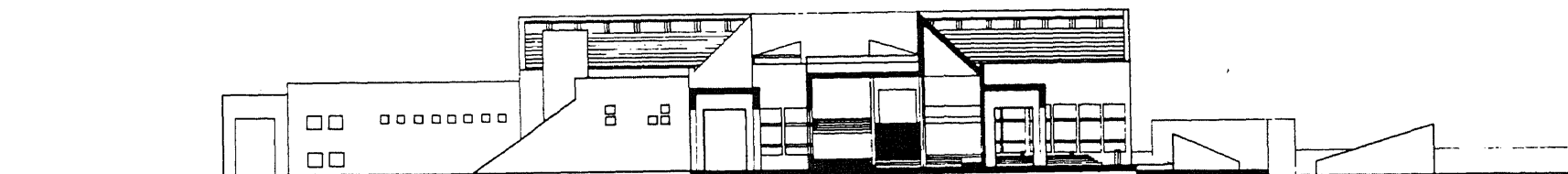
**NEW ADDITION SECTION C**



A

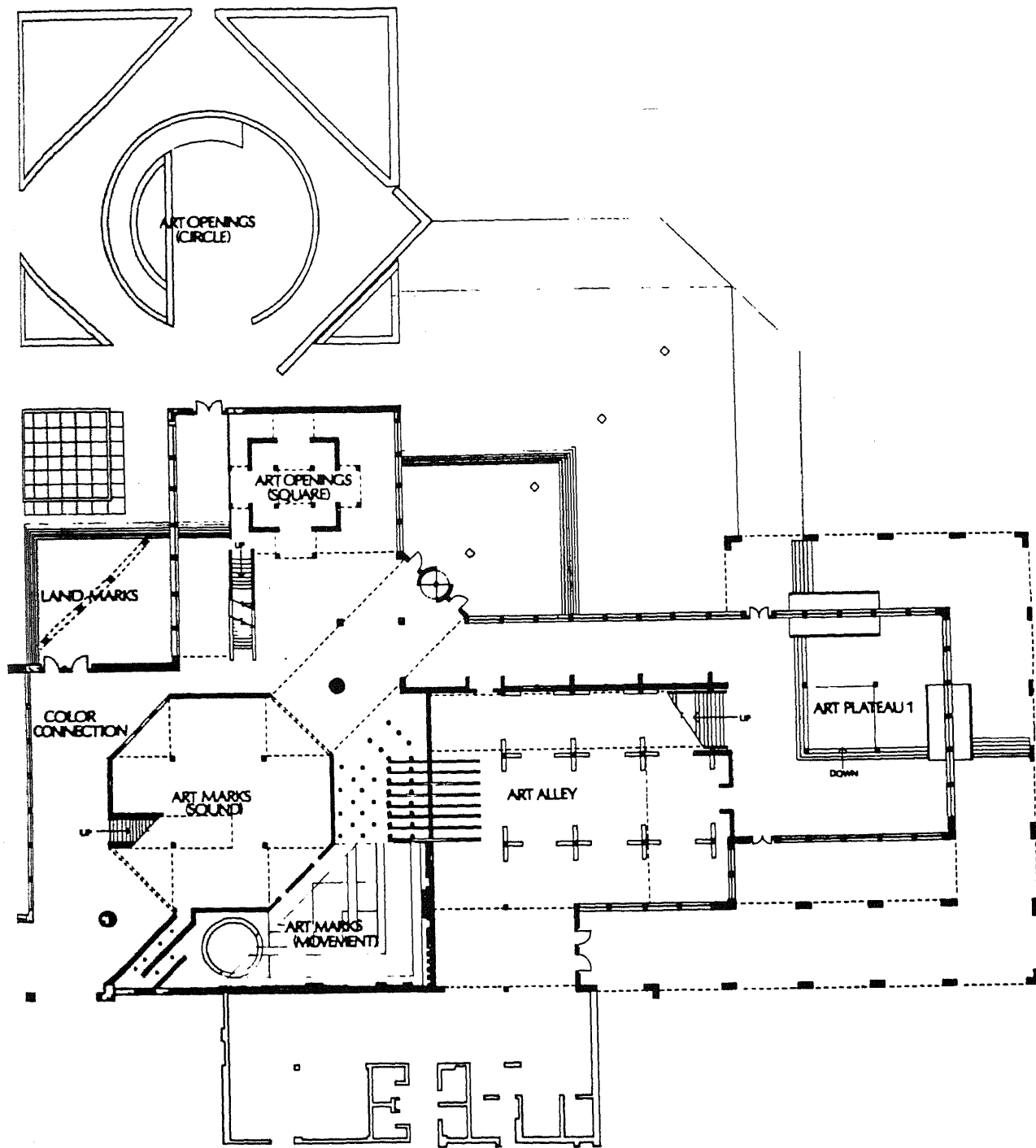


B



C

**EVERY DAY ART  
SECTIONS**  
1/16" = 1'-0" 



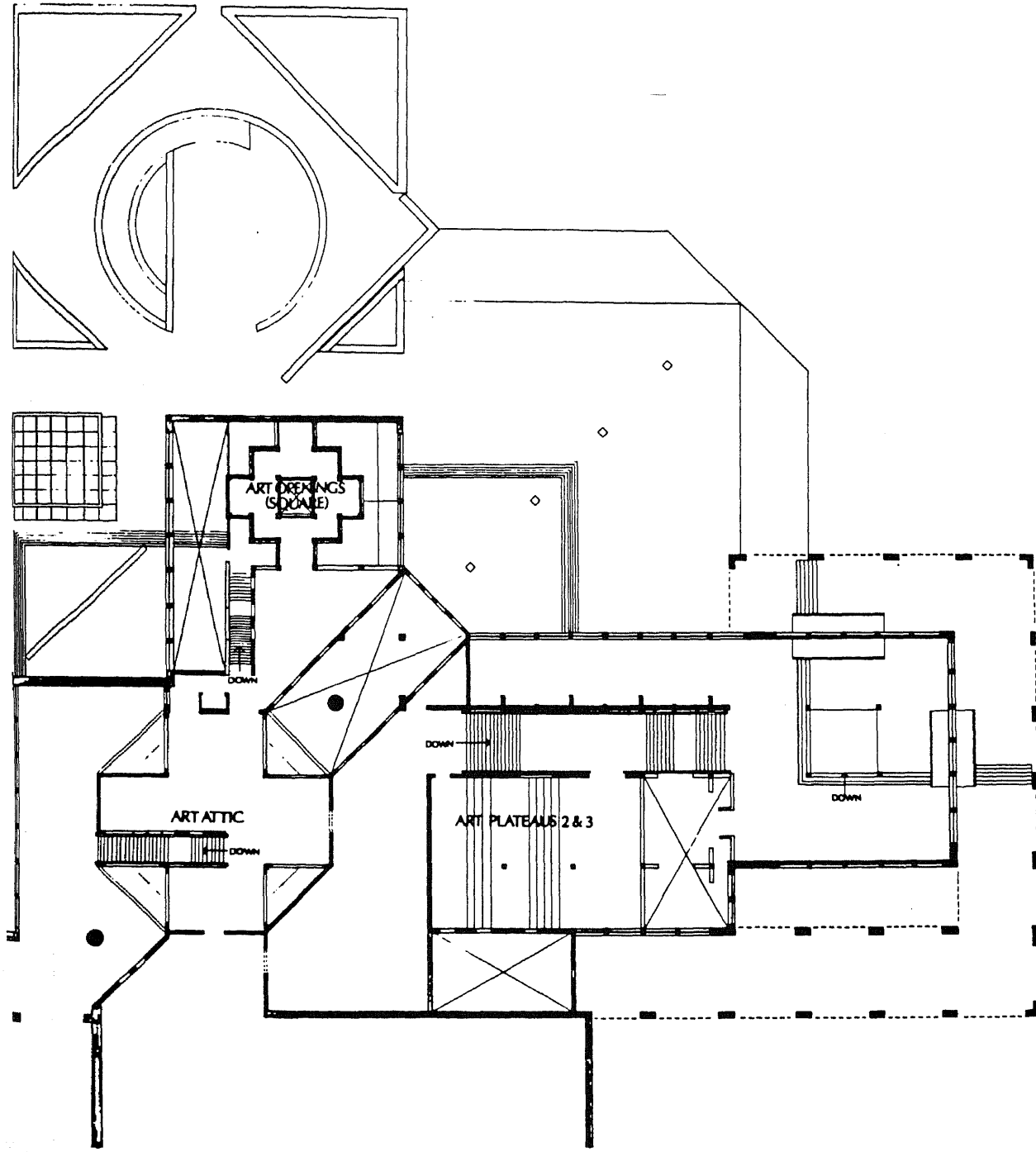
**SEVENTH SEMESTER  
THESIS PROJECT**

**THESIS**

Every Day Art  
 Demonstrating a New Approach to  
 Visual Arts for Children

**ADDITION/EXHIBIT SPACES  
FIRST FLOOR PLAN**

EVERY DAY ART  
 FIRST FLOOR PLAN  
 1/8" = 1'-0"



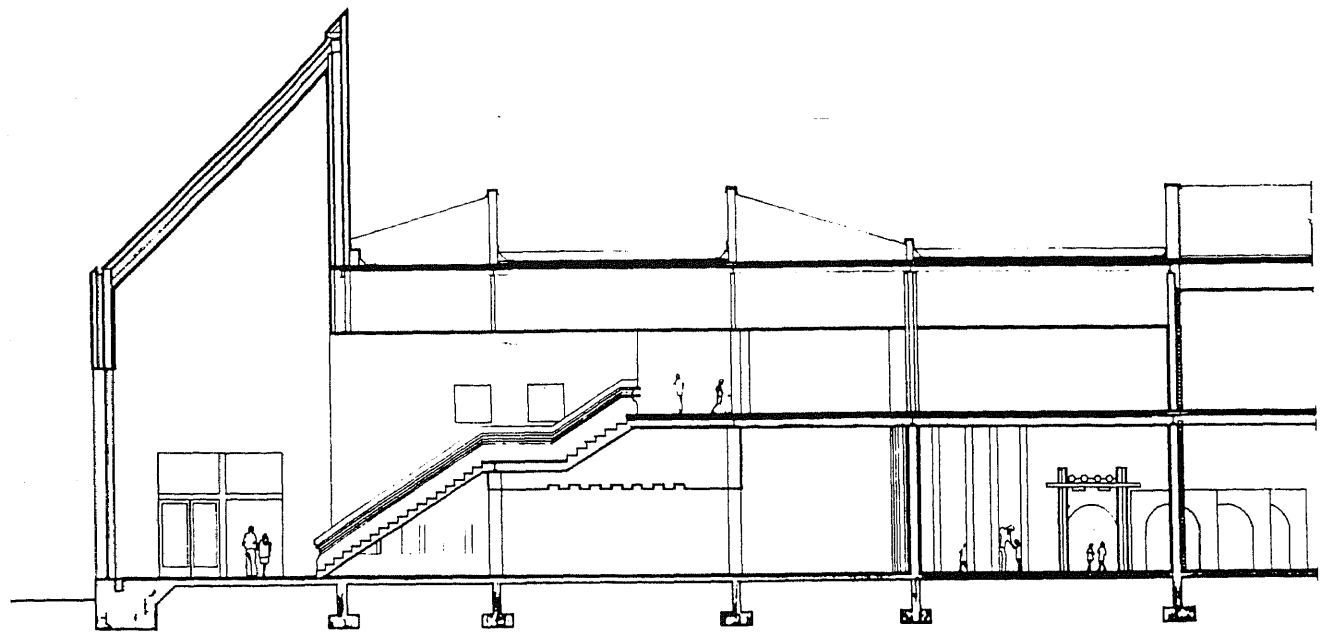
**SEVENTH SEMESTER  
THESIS PROJECT**

**THESIS**

Every Day Art  
 Demonstrating a New Approach to  
 Visual Arts for Children

**ADDITION/EXHIBIT SPACES  
SECOND FLOOR PLAN**

EVERY DAY ART  
 SECOND FLOOR PLAN  
 1/8" = 1'-0"



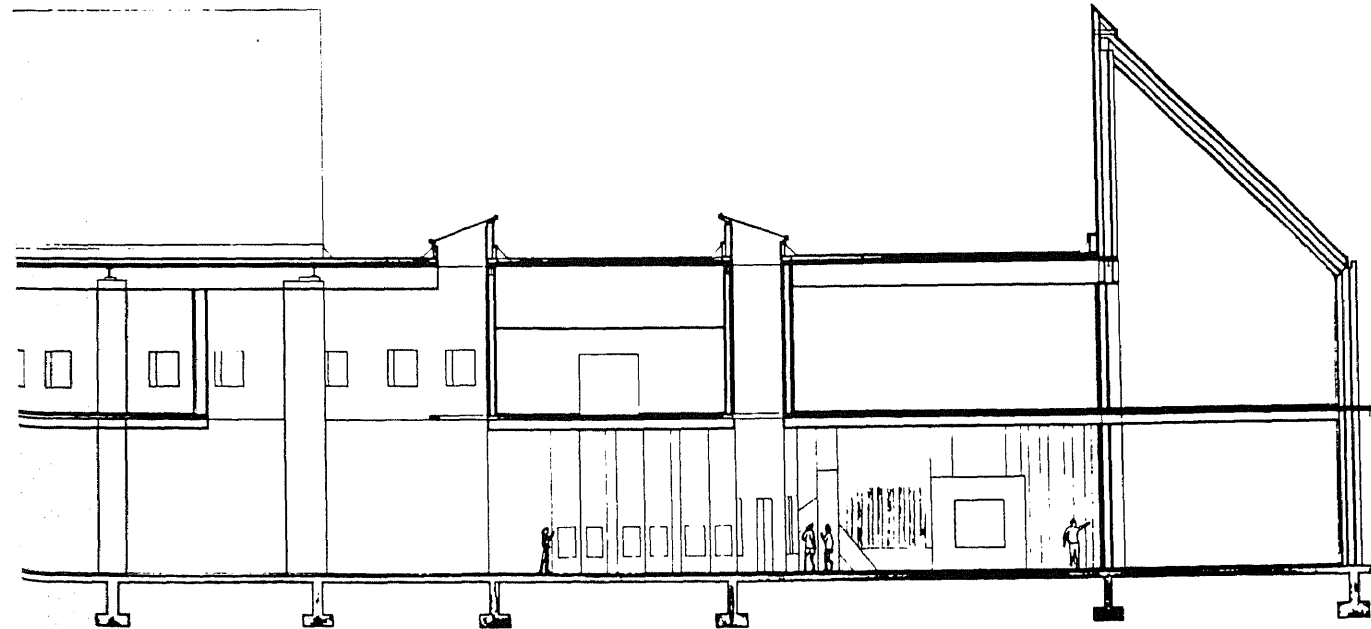
**SEVENTH SEMESTER  
THESIS PROJECT**

**THESIS**

Every Day Art  
Demonstrating a New Approach to  
Visual Arts for Children

**ART MARKS EXHIBIT SPACE  
SECTION D**

**ART ATTIC EXHIBIT SPACE  
SECTION E**



ART MARKS AND ART ATTIC



E V E R Y   D A Y   A R T

Demonstrating a New Approach To Visual Arts for Children

B I B L I O G R A P H Y

Alexander, Kay. Learning to Look, Palo Alto California, 1990.

Bloomer and Moore. Body, Memory and Architecture, New Haven, Connecticut:  
Yale University Press, 1977.

Hubbard, William. Complicity and Conviction: Steps Toward an Architecture of  
Convention, Cambridge, Massachusetts: The MIT Press, 1980.

Lynch, Kevin. Good City Form, Cambridge, Massachusetts: The MIT Press, 1989.

The Princeton Journal: Thematic Studies in Architecture - Volume One,  
Princeton, New Jersey: Princeton Architectural Press, 1983, Julia Bourke,  
Editor.

Langer, Susanne K. Feeling and Form, New York: Charles Scribner's Sons, 1953.

Spirensen, Richard. "San Mateo County Art Education Curriculum", Redwood  
City, California, 1991.