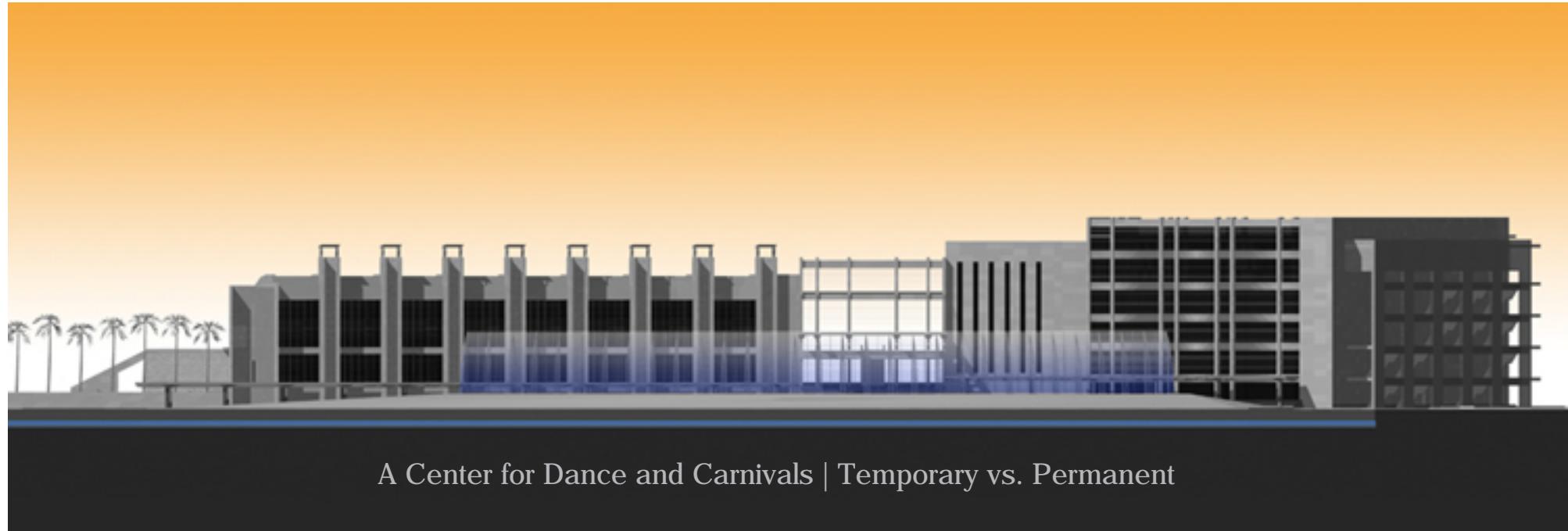


thesis project **Virginia Tech**
WAAC

A Center for Dance and Carnivals | Temporary vs. Permanent
Eliana del Carmen Lamadrid- Eckert



A Center for Dance and Carnivals | Temporary vs. Permanent

A Center for Dance and Carnivals | Temporary vs. Permanent

Eliana del Carmen Lamadrid- Eckert

A Thesis Project submitted to the faculty of the
Virginia Polytechnic Institute and State University

in partial fulfillment of the requirements for the degree of

Master of Architecture

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Defense
May 2, 2001
Alexandria, Virginia

Keywords: carnivals, wind towers, barranquilla, window to the river, parade, sun protection, climate control

How to create a permanent house for a temporary event?

How to provide a comfortable environment in an extreme climate?

Acknowlegments

Thanks to all the people who contributed in the process of getting this project together.
To my friends far away for their encouraging words as well as my friends in Alexandria for their helping hand and good advice.

Thanks to all my architecture professors throughout my studies at Corporacion Unicosta and Virginia Tech.
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Thanks to my mentors at EB always willing to answer my many questions and to help me in one way or another.
Thanks to my family for the continuous support. Dad, thanks for your suggestions and for gathering information. Mom,
this is a small response to all your efforts.
Finally, thanks Mathew. I could not have made it without you.

Reconocimientos

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A mis amigos que de lejos me enviaron aliento como tambin a mis amigos en Alexandria que me brindaron su ayuda
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Gracias a mis consejeros en Ellerbe Becket siempre dispuestos a responder mis mltiples preguntas y a ayudarme
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Mam- , esta es una pequea respuesta a tus muchos esfuerzos.
Finalmente, gracias Mathew. No lo hubiese logrado sin ti.

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Foreword

After one year of graduate studies at WAAC, I realized that the time had come to begin my thesis project. Feeling still homesick and very much a foreigner, I felt it had to be a project for Barranquilla, my hometown in Colombia - perhaps as gift to the city, but more probably as a way to bring closer a land that seemed so far away. I thought a project to host cultural events would be appropriate. I also wanted it to be accessible to the community in general - a place that any citizen (old, young, rich or poor) could enjoy.

Carnival is the main cultural event in Barranquilla. Starting in December, dancers and musicians of all ages gather at parks, social clubs and mostly in the streets, practicing their new choreographies for the approaching carnival that usually takes place by the end of February. Still, the city lacks of a place dedicated to the carnival celebrations. Traditional costumes and dances that originated in the times of the Spanish colony and still show hints of their African, Spaniard and Indian descents are in danger of fading away with time. I thought of a project with a combination of temporary facilities for the once-a-year carnival events as well as permanent ones to keep carnival memories alive year round... a center dedicated to the carnival culture.

Introduction

A Center for Dance and Carnivals studies the possibility of providing a permanent home for a once-a-year event. Due to the nature of the site, the project also explores the use of natural ventilation for indoor comfort.

The program includes a parade plaza, a dance school, a library, a ballroom/auditorium, and outdoor spaces for cultural events. In the manner in which a dancer puts on her icumbiaí skirt only during carnivals, a shell erected only during the carnival season represents the temporary spirit of carnivals. The dance school and library are the permanent nature of the project. The dance school serves as a place to prepare for carnivals and the library as a place to hold its memories.

The excessive heat conditions of the site are a challenge to the project. The building uses wind towers and scoops and other design elements to take advantage of the prevailing winds. It also utilizes the cooling properties of water through its vicinity to the river and the use of water fountains throughout the project.

Understanding that it would take a number of years and specialists to complete a project of this magnitude, the following pages present the humble beginning of an ongoing search...

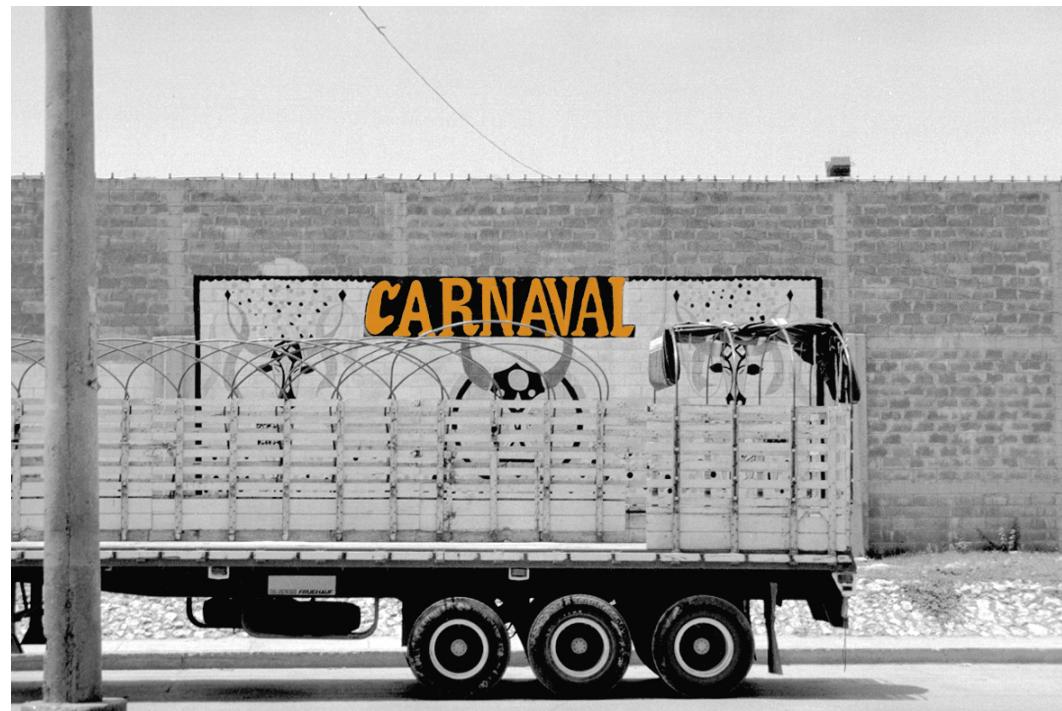
How to create a permanent house for a temporary event?

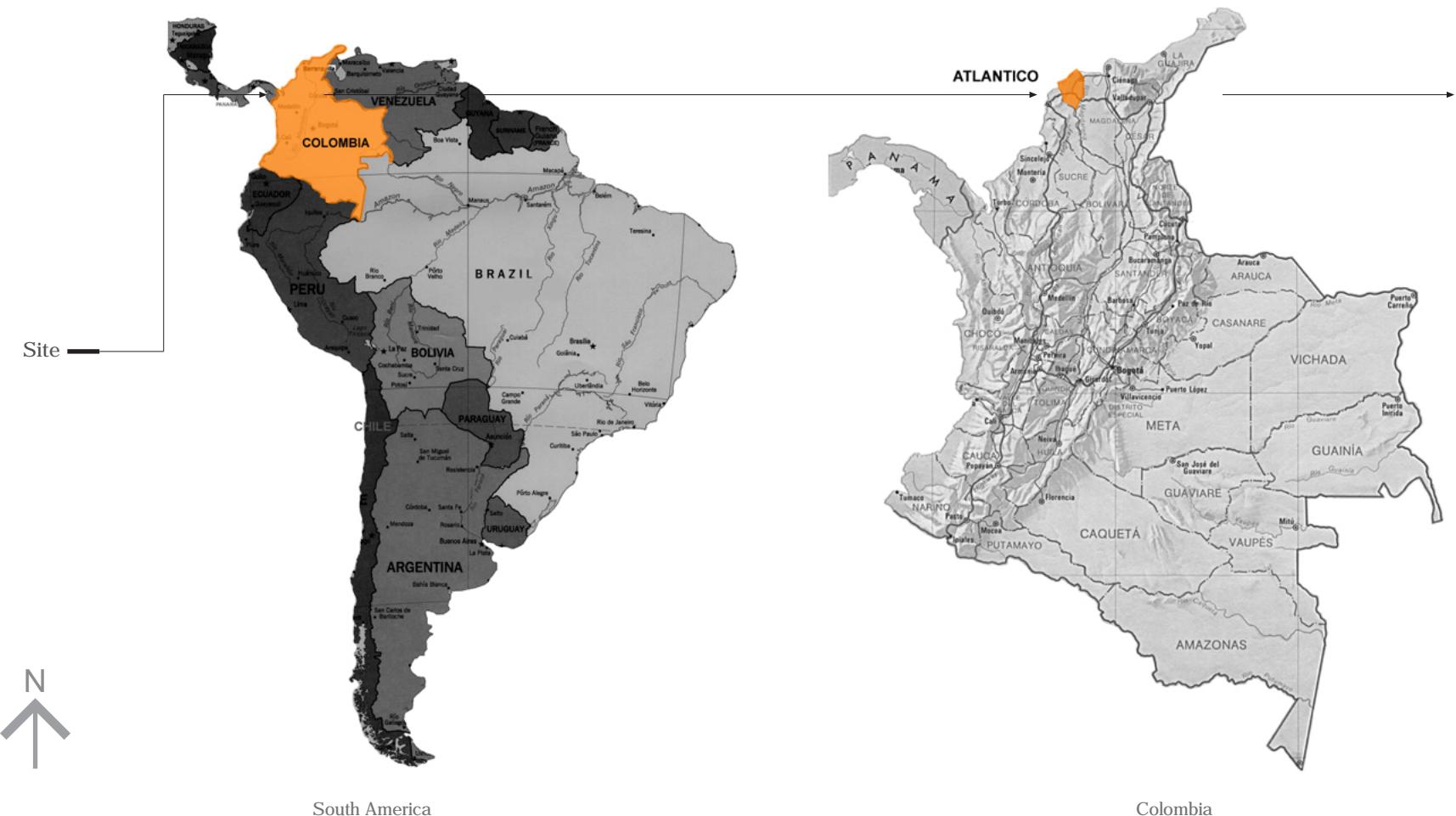
How to provide a comfortable environment in an extreme climate?

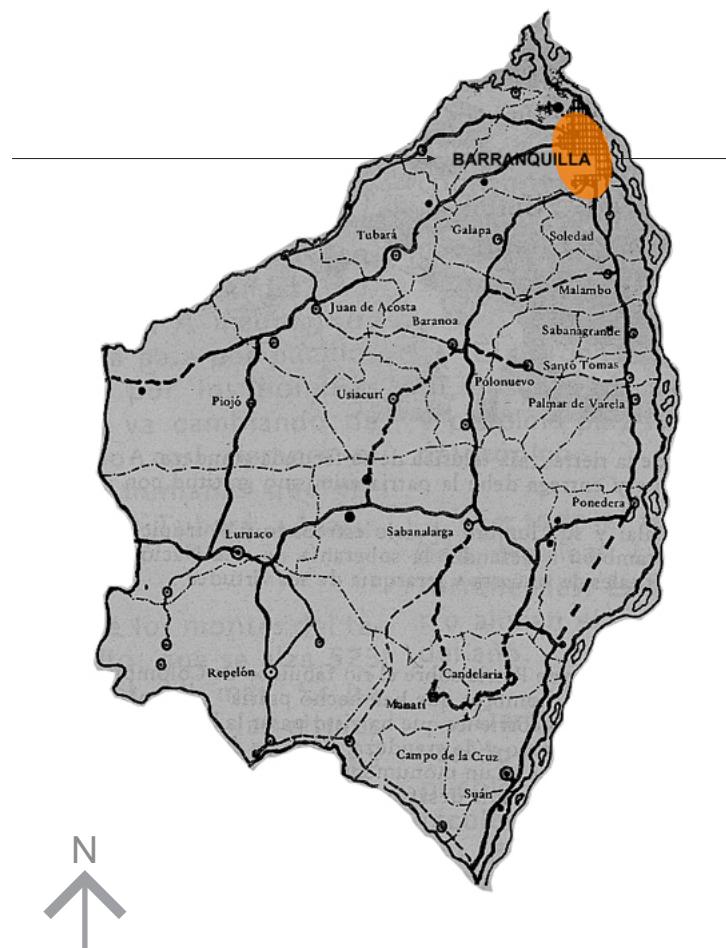
Project Background Barranquilla and its Carnivals

The history of Barranquilla is intertwined with the Magdalena River. Its convenient location on the river established it as a fluvial port and its proximity to the Atlantic Ocean made it ideal for the commerce of products that arrived from nearby maritime ports into the interior of Colombia during the XVIII and XIX centuries. Barranquilla developed rapidly between the 1930s and 1960s time when it also became a maritime port thanks to work on the river mouth that allowed entrance of ships coming from the ocean. Today, Barranquilla is a modern city, the largest in the Colombian Caribbean region. Port-related activities have declined and the city relies more on industry and commerce. Still, the sense of the city as a port and its bond to the river remains strong.

Barranquilla showed its charm and amazing capability for celebration since its beginnings. There are records of carnival celebrations in the city as early as the 1820s where participants exchanged good sense of humor and mischief. Since then, carnival has been celebrated almost every year until becoming part of the city's culture. Initially introduced by the Spaniards, carnival adopted native Indians', and African slaves' dances and traditions and with the continuous contribution of its participants evolved to become what it is known today as Barranquilla's Carnival. New times have introduced changes and even the commercialization of carnival. However, the cheerfulness and the creativity of the participants keep going the authenticity of the celebration. At the end of a carnival season participants are already making plans for the next one. Carnival is embedded in the city's culture and today one cannot think of Barranquilla without thinking of its carnival.



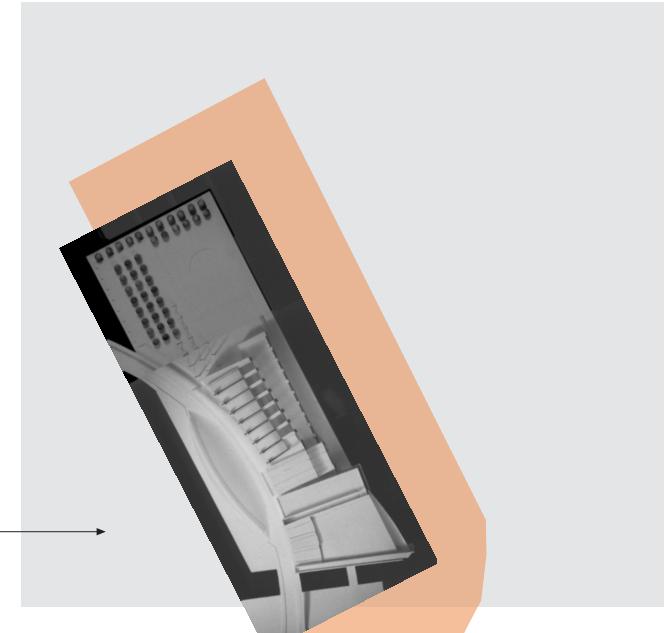




Atlántico



Barranquilla



Site

The site is adjacent to the Magdalena River and along the via 40, a major road that hosts traditional parades during carnival. This area is currently part of an urban plan that intends to develop the river potentials. The city planning office describes on the Master Plan i...the river as a source of recreational, cultural activities...as a source of development...tourism related activities and residential use in the long term. Thus, the site presents the opportunity open a window to a river hidden by the very industries that keep the city alive.

Caño de la Ahuyama, an arm of the Magdalena River runs along the east and south sides of the site. Towards the north there are a number of factories and other buildings with mainly industrial use. To the west is Barrio Abajo, a popular neighborhood with a long carnival history. The city downtown is towards the southwest. The site itself is currently a decaying area lacking adequate security. The city has started to realize its privileged location. Recovery of the area has already started with the restoration on the 1921 Customs Building, located immediately to the west, after years of being forgotten. It houses now a small art museum and several other small offices mostly focused on cultural activities, which adds potential for future cultural focus of the area.

Path of carnival parades



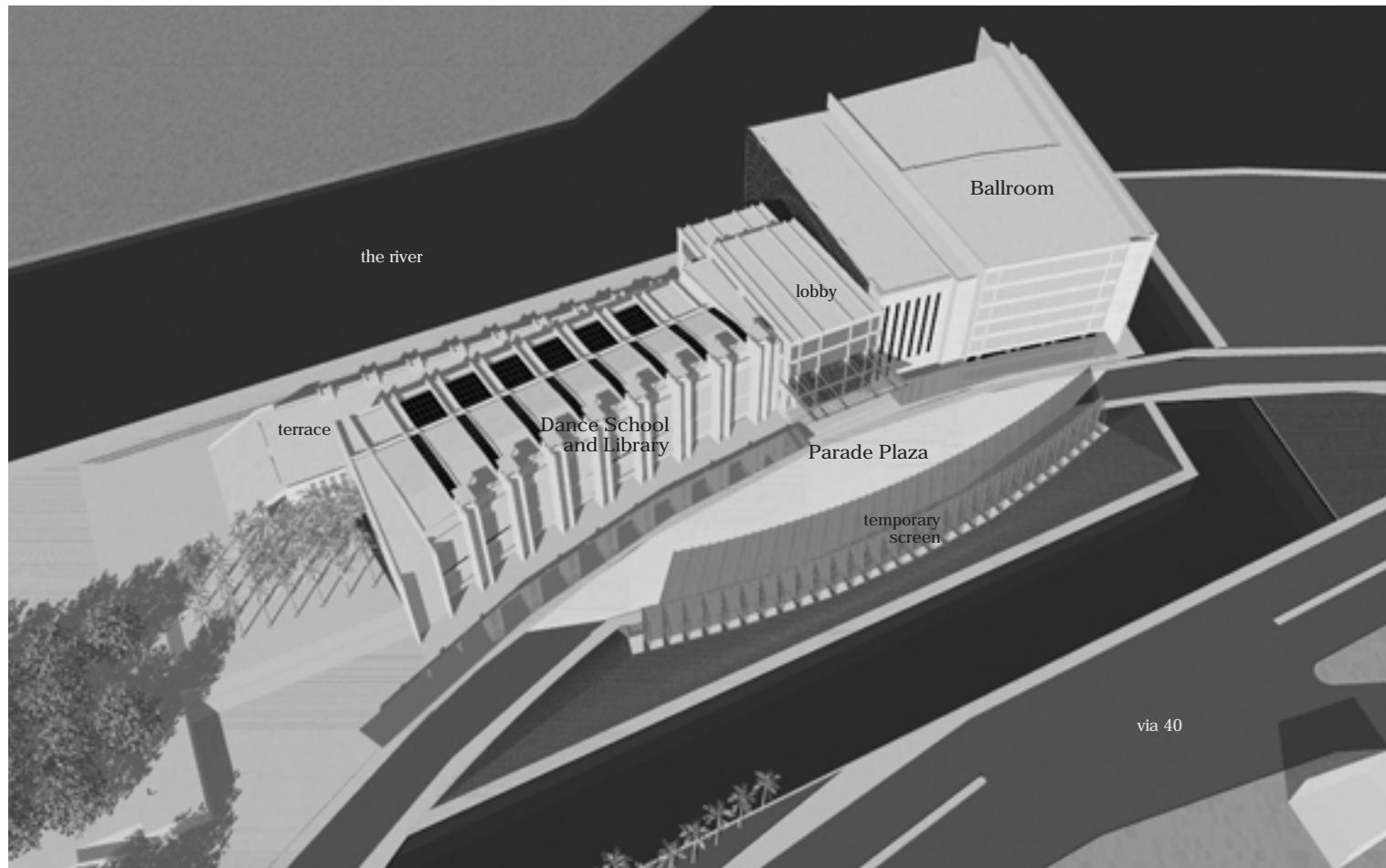
Neighboring views and buildings.



The *Via 40*

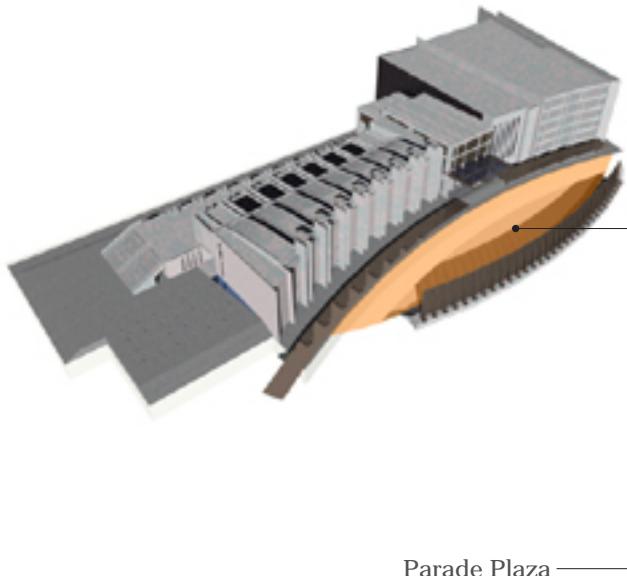
The project is located on the Via 40, a major road along the Magdalena River lined mostly with industrial buildings that from time to time allow brief views of the water. Via 40 serves the city as a transportation artery and also as a path for the carnival parades.





Project Overview

The three main program elements are a Parade Plaza, a Dance School and Library, and a Ballroom. Additionally, there are a number of open air spaces that could host a number of different cultural activities.



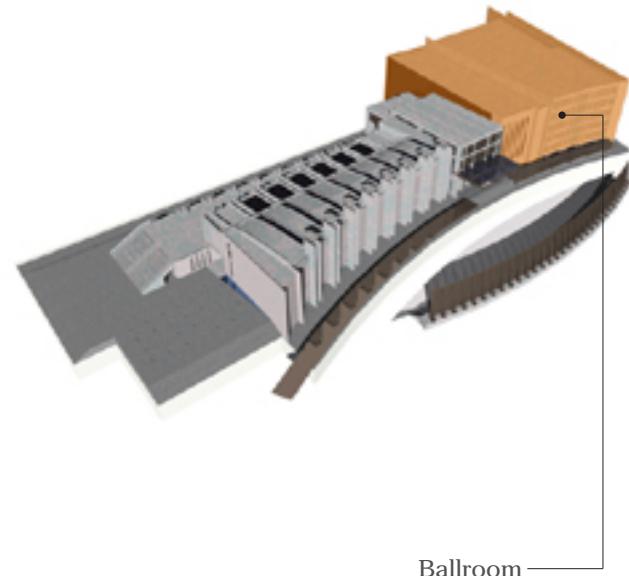
Parade Plaza

The Parade Plaza has a temporary screen erected only during carnivals as well as permanent bleachers and performance space.



Dance School
and Library

The Dance School and the Library would host scholars year round.



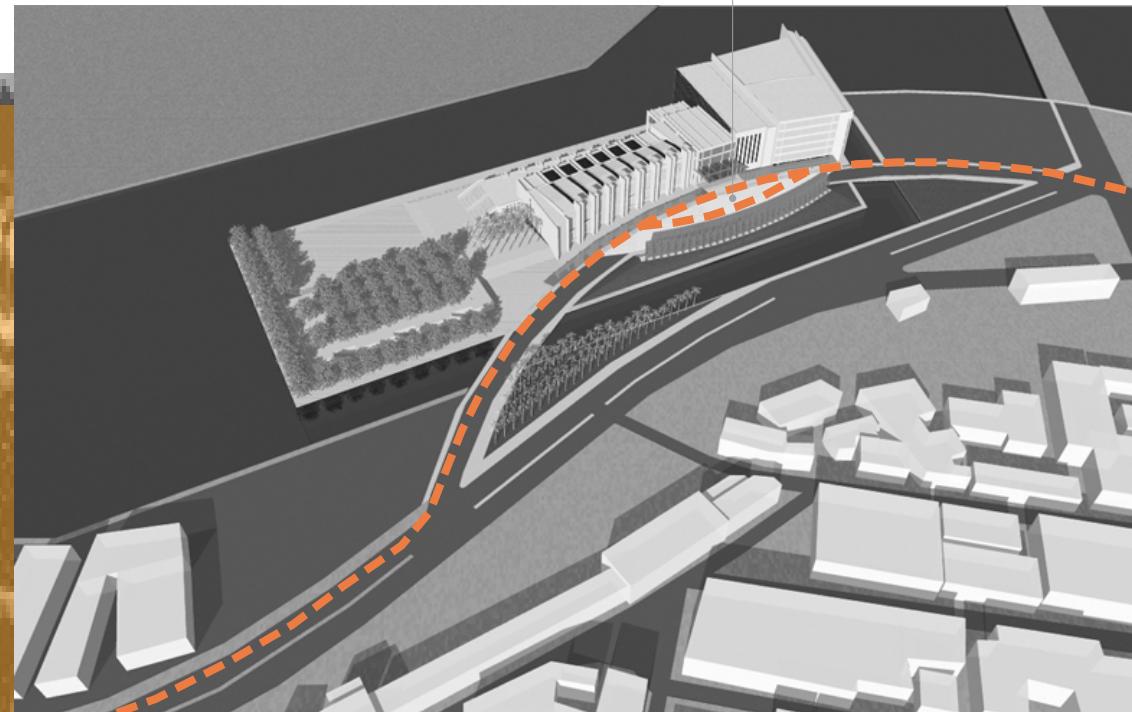
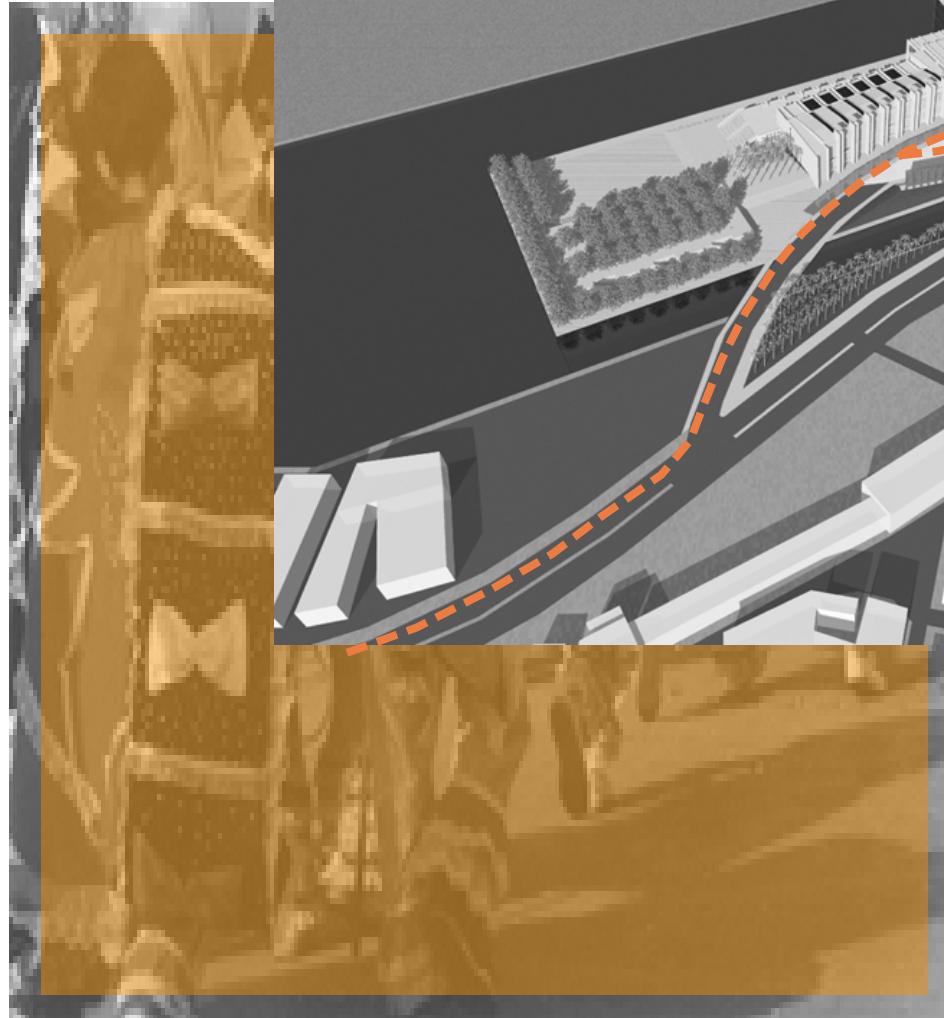
Ballroom

The Ballroom would be used as such during the carnival season and become an auditorium for the balance of the year.



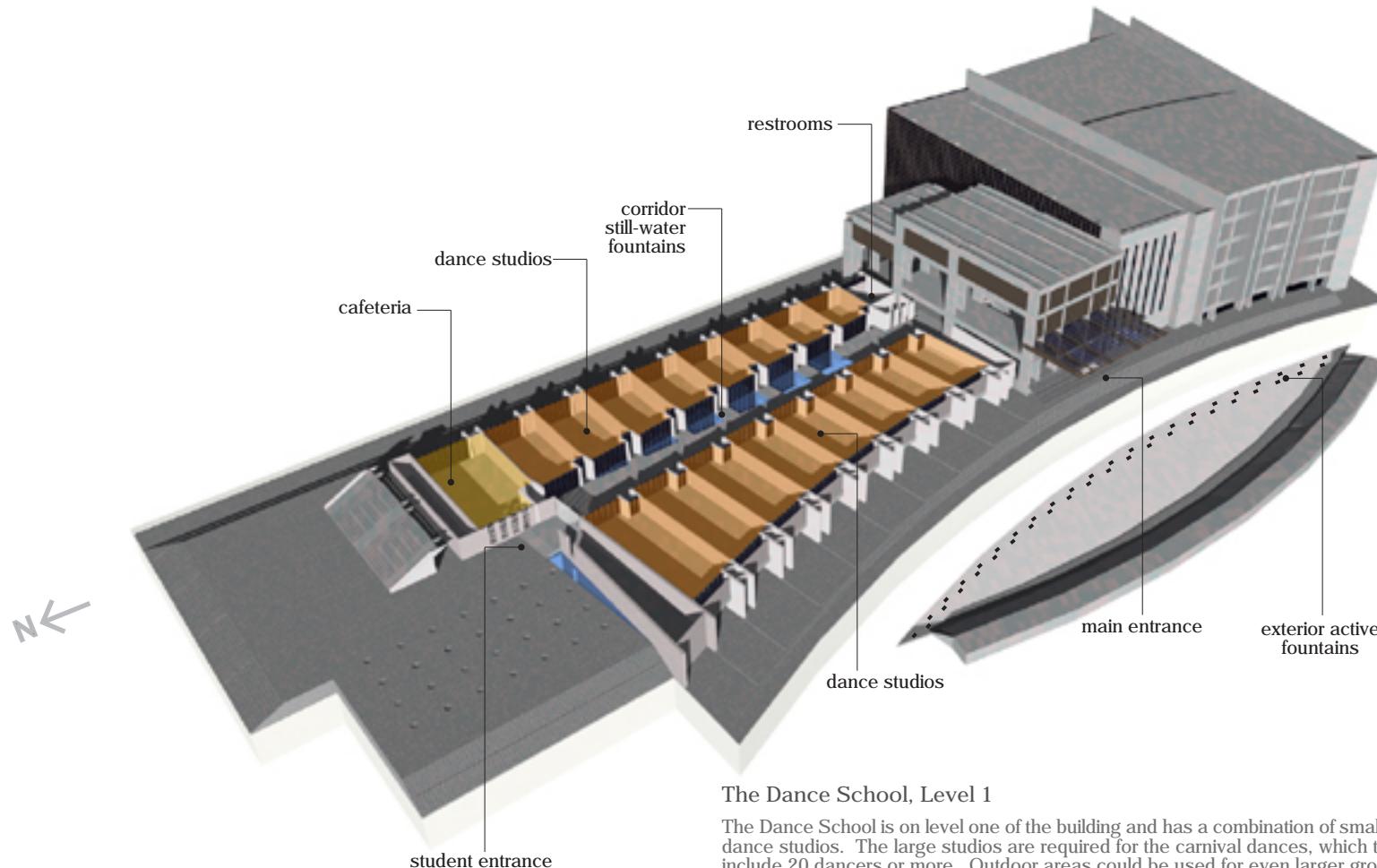
The Parade

Carnival is best embodied during its parades. La Guacherna, la Gran Parada, la Batalla de Flores and a number of other parades allow carnival participants to display choreographies and costumes prepared for the yearly event. A Center for Dance and Carnivals welcomes them with a Parade Plaza.



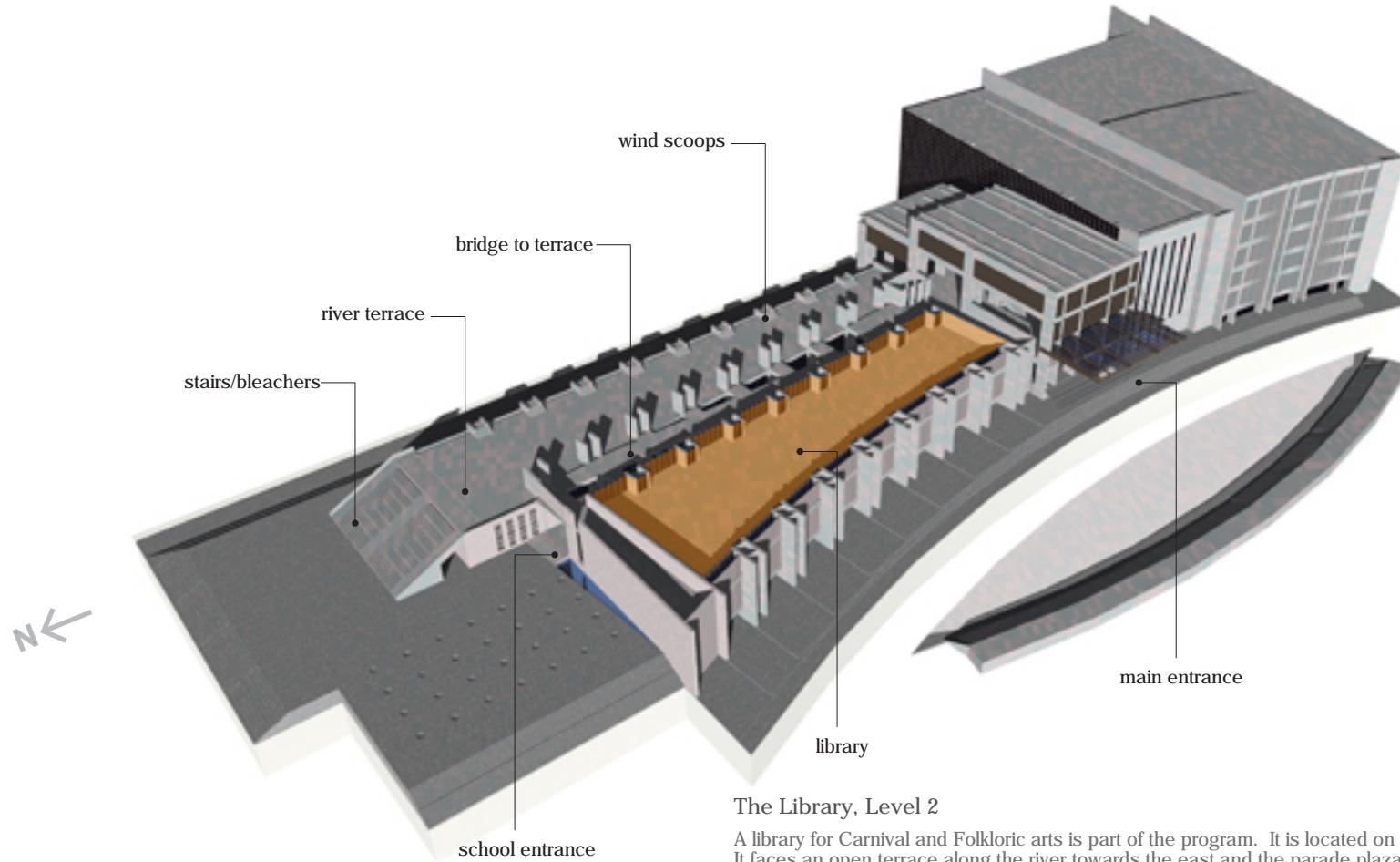
The Parade Plaza

A parade road enters the project and widens to become the Parade Plaza. There, participants display their choreographies and costumes. There are bleachers at this point as well as a temporary screen to protect viewers from the sun. The plaza narrows again into the road that leads the parade to the city downtown.



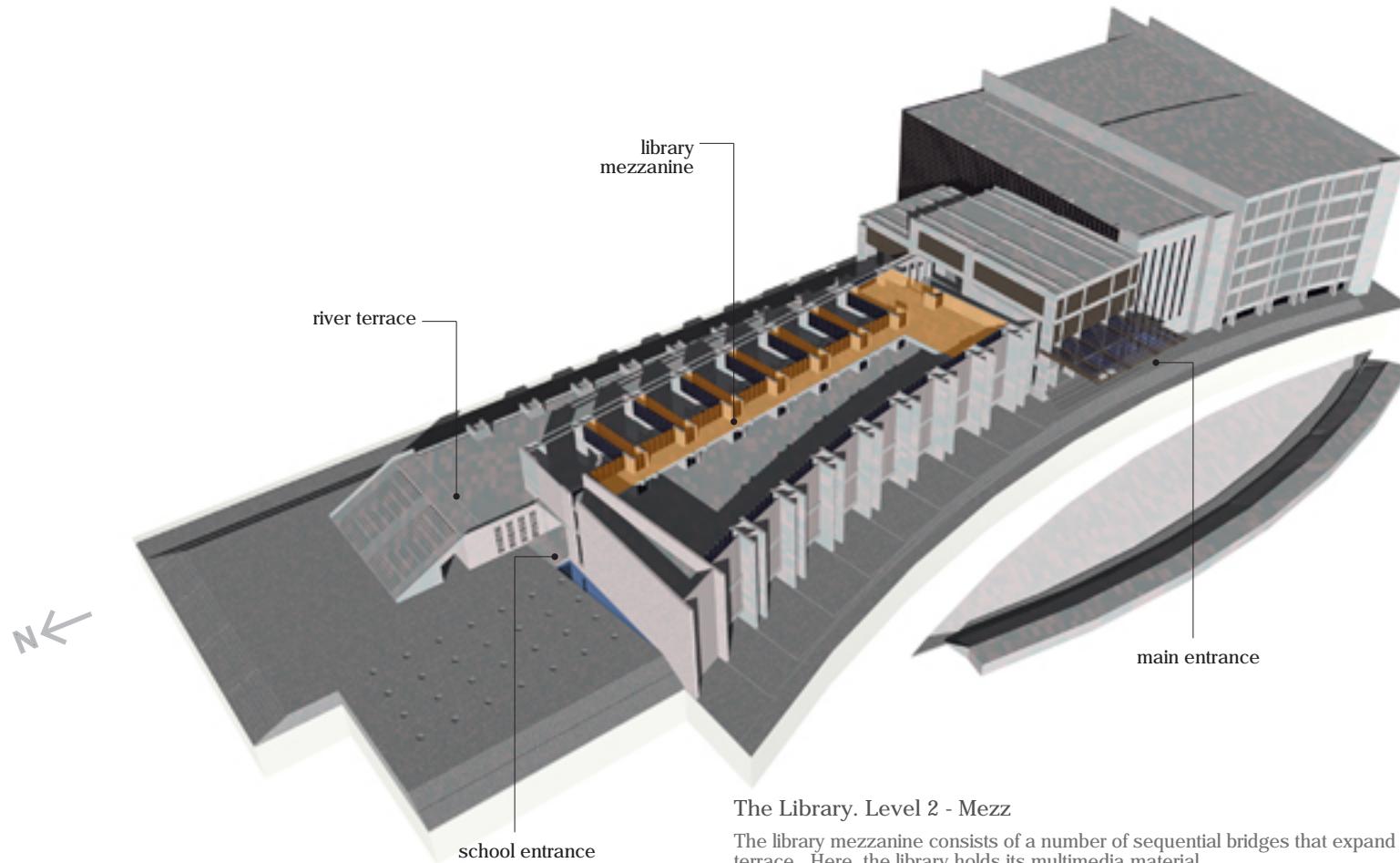
The Dance School, Level 1

The Dance School is on level one of the building and has a combination of small and large dance studios. The large studios are required for the carnival dances, which typically include 20 dancers or more. Outdoor areas could be used for even larger groups. Students may access the school from the building main entrance on the west or from the school entrance on the north. From there, a corridor leads into the dance studios. A basement level has a gym and changing rooms. Studios on the east side of the have views to the river while the ones on the west side have views to the interior water fountains along the common corridor as well as to the exterior fountains in the parade plaza. There are a number of outdoor open spaces that students can use for their practice.



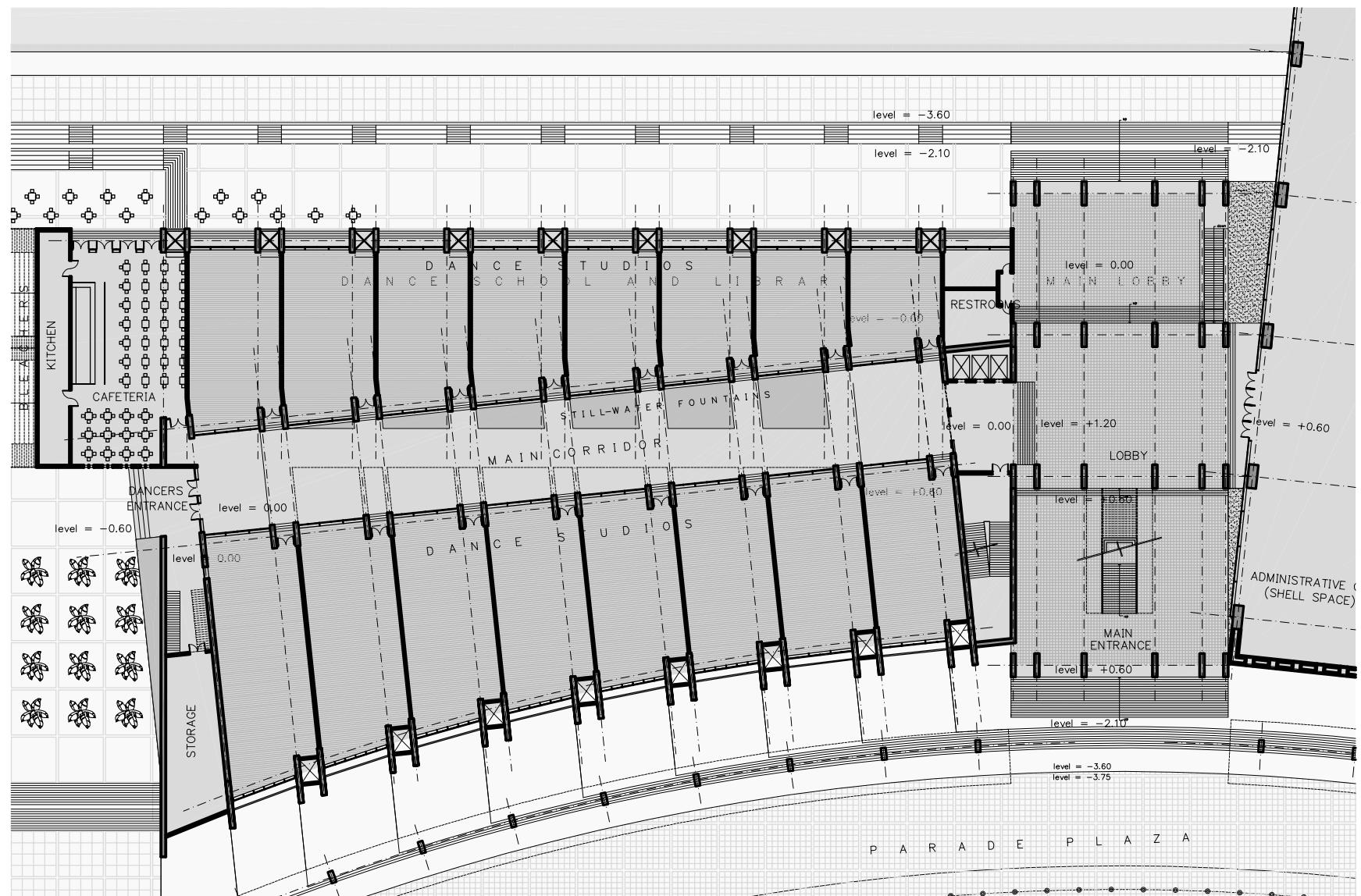
The Library, Level 2

A library for Carnival and Folkloric arts is part of the program. It is located on level one. It faces an open terrace along the river towards the east and the parade plaza towards the west.



The Library. Level 2 - Mezz

The library mezzanine consists of a number of sequential bridges that expand toward the terrace. Here, the library holds its multimedia material.

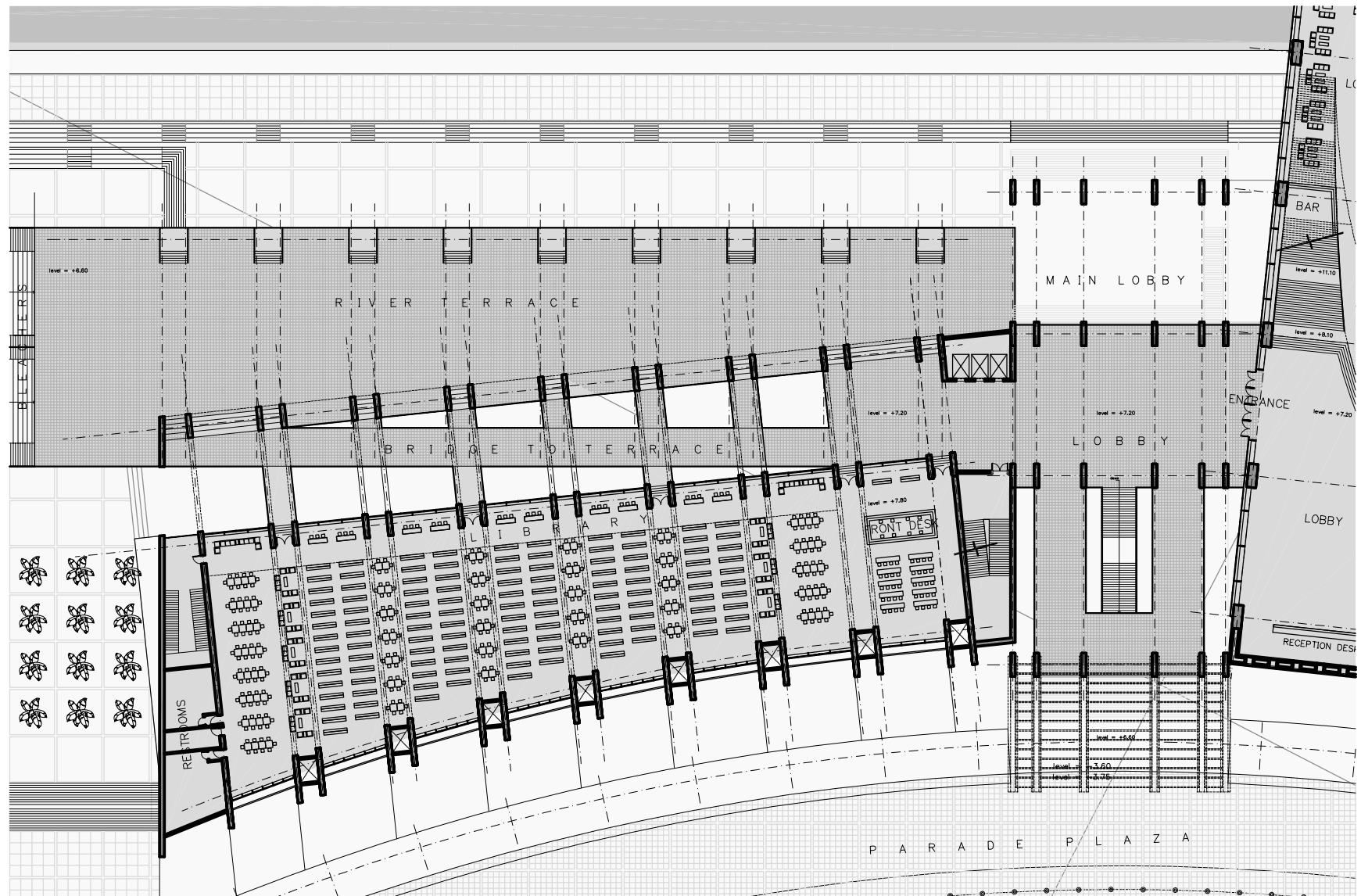


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The Dance School
Level 1



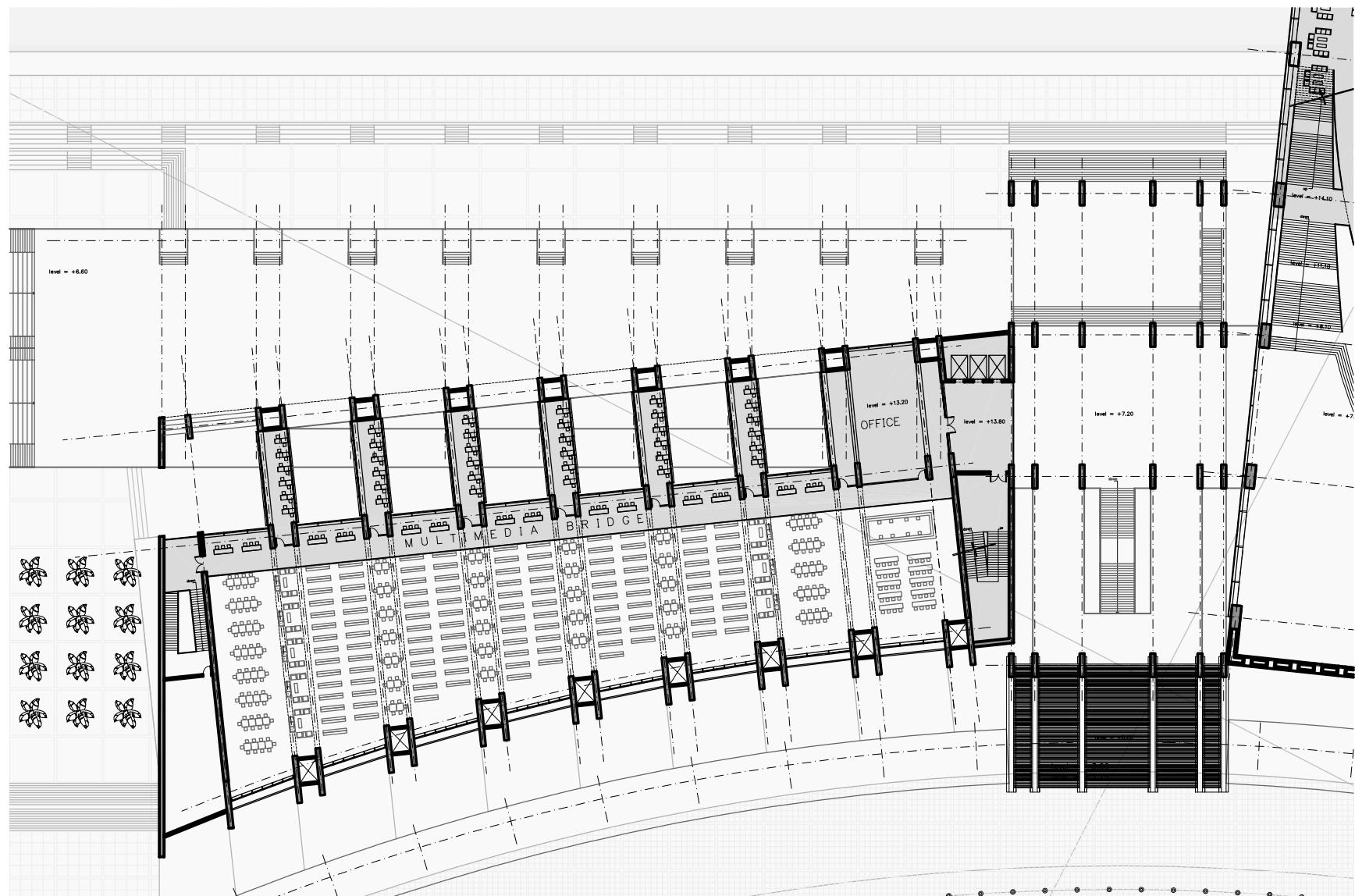


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The Library
Level 2



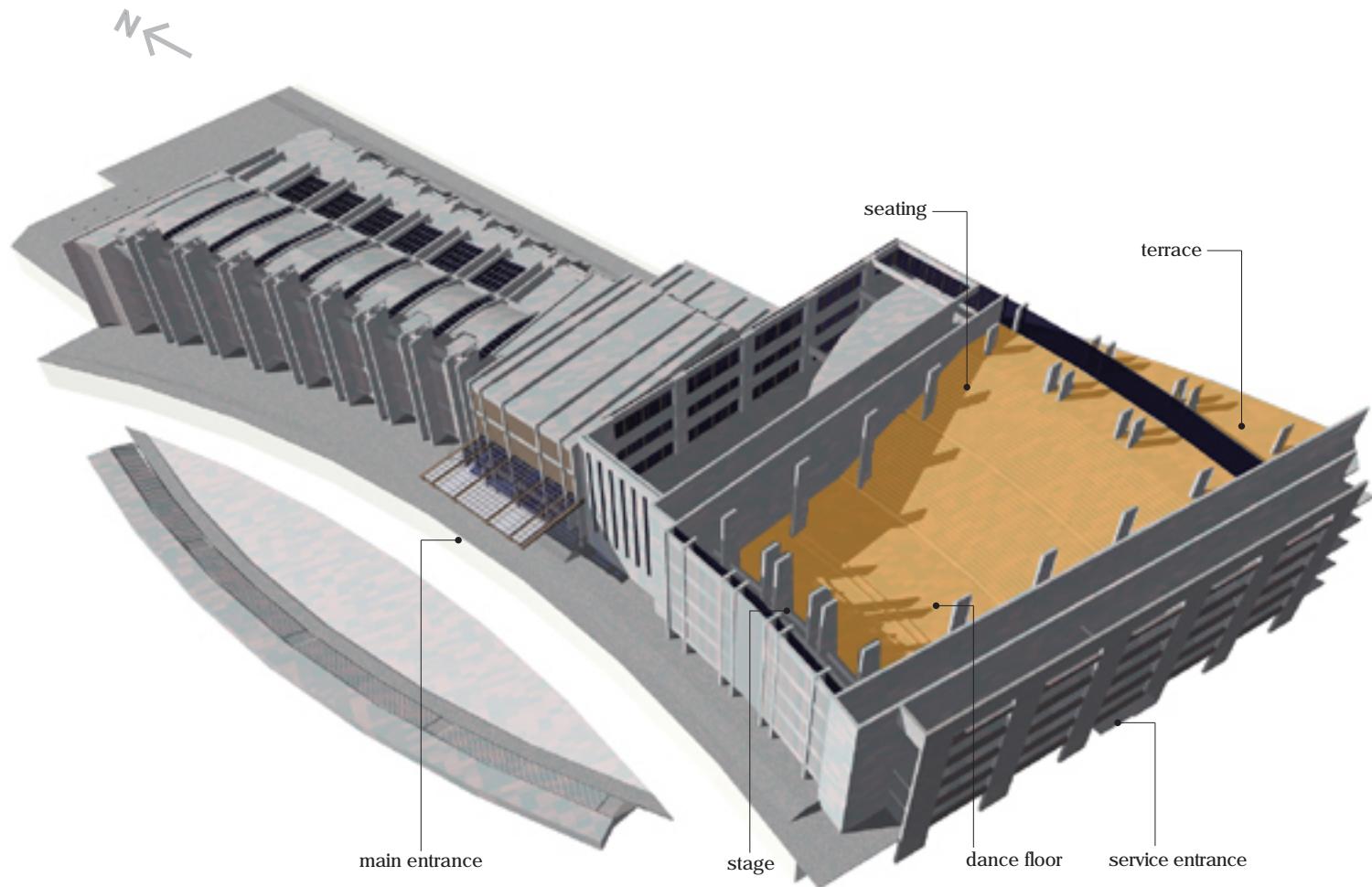


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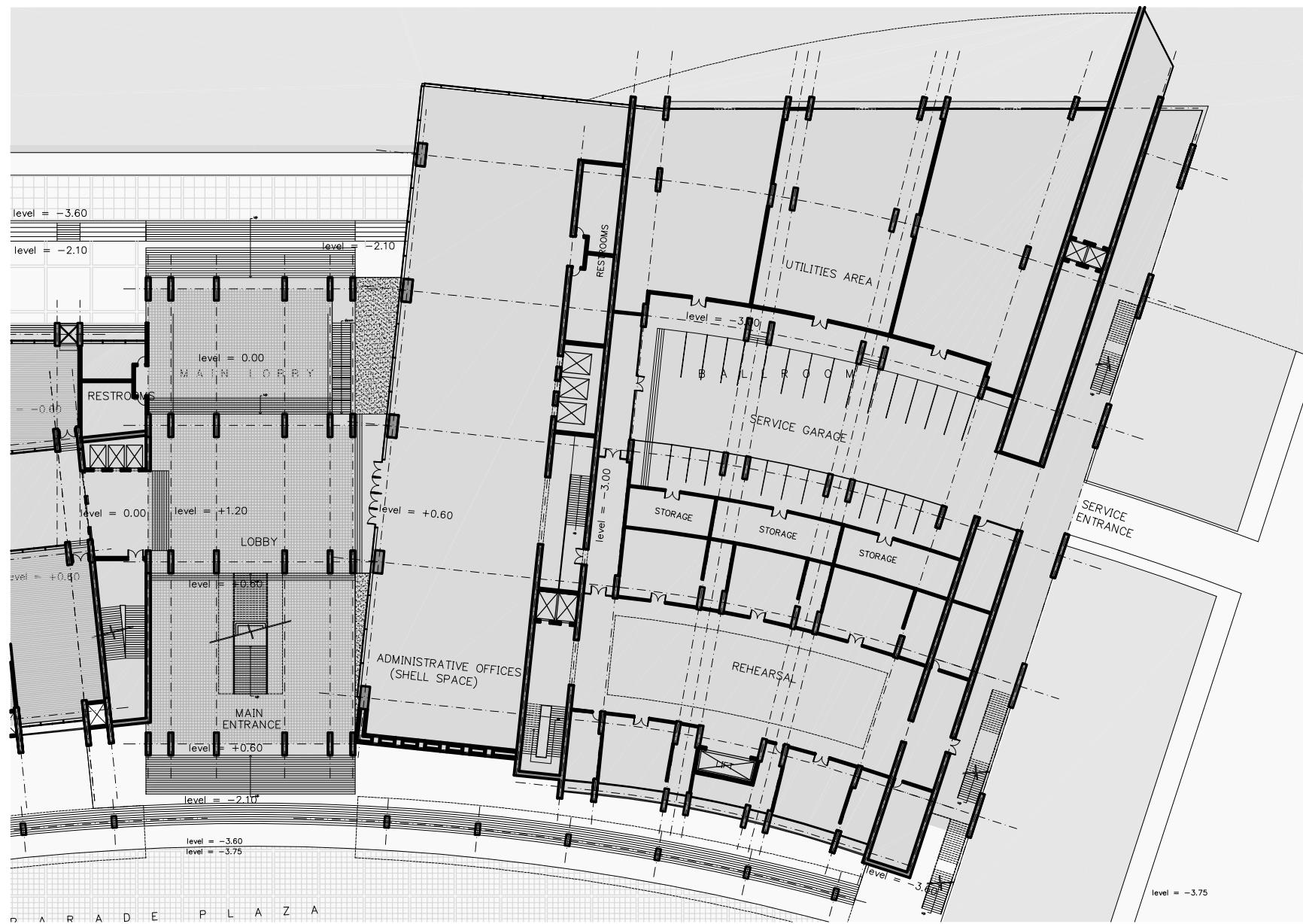
Library-Multimedia Bridge
Level 2 - Mezzanine





The Ballroom

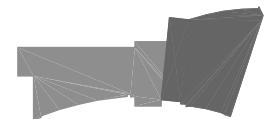
As its name indicates the Ballroom is intended to hold dances during carnivals and throughout the year. The Ballroom can also serve as an auditorium.

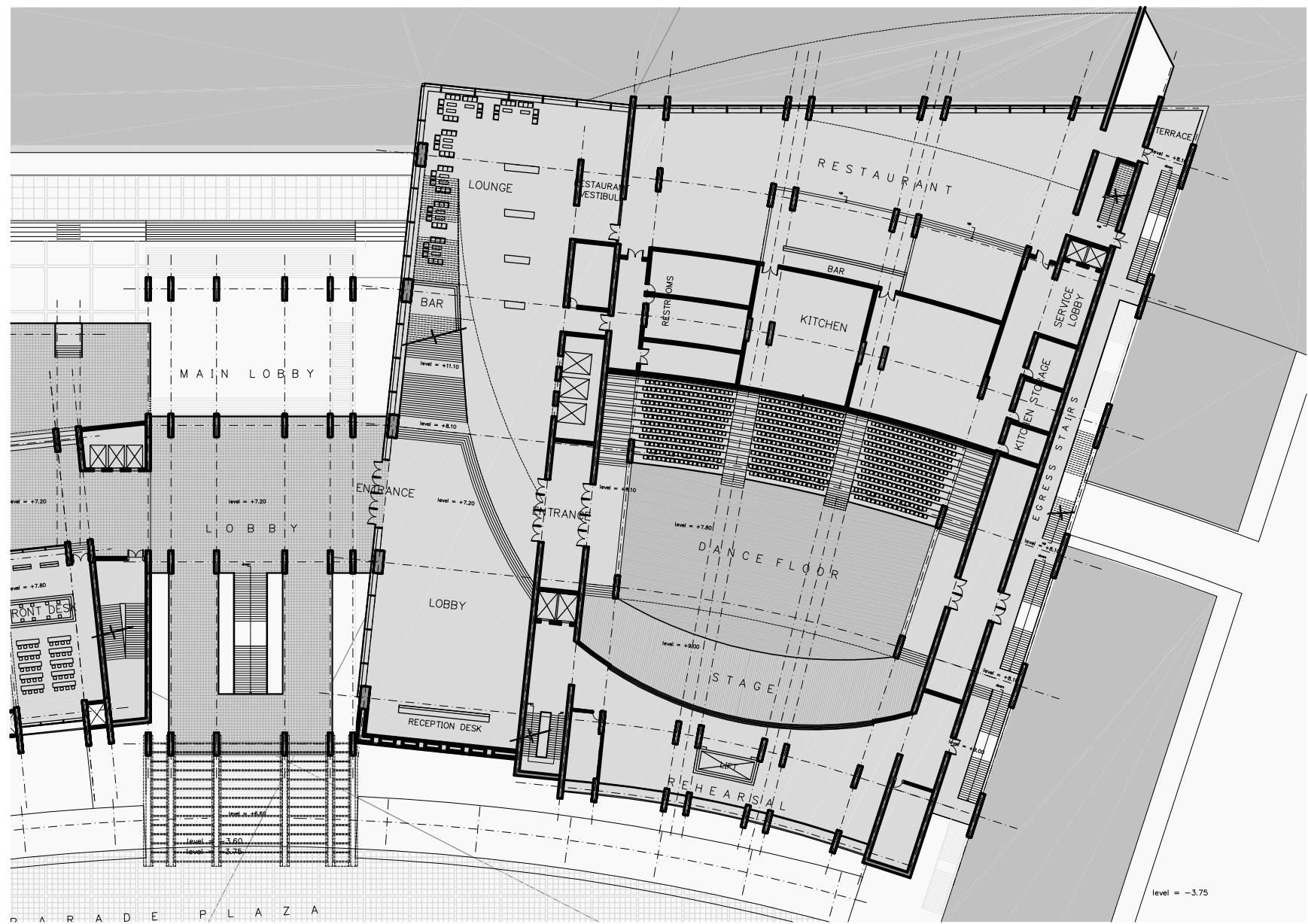


The Ballroom - Service Areas Level 1

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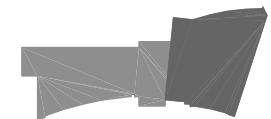


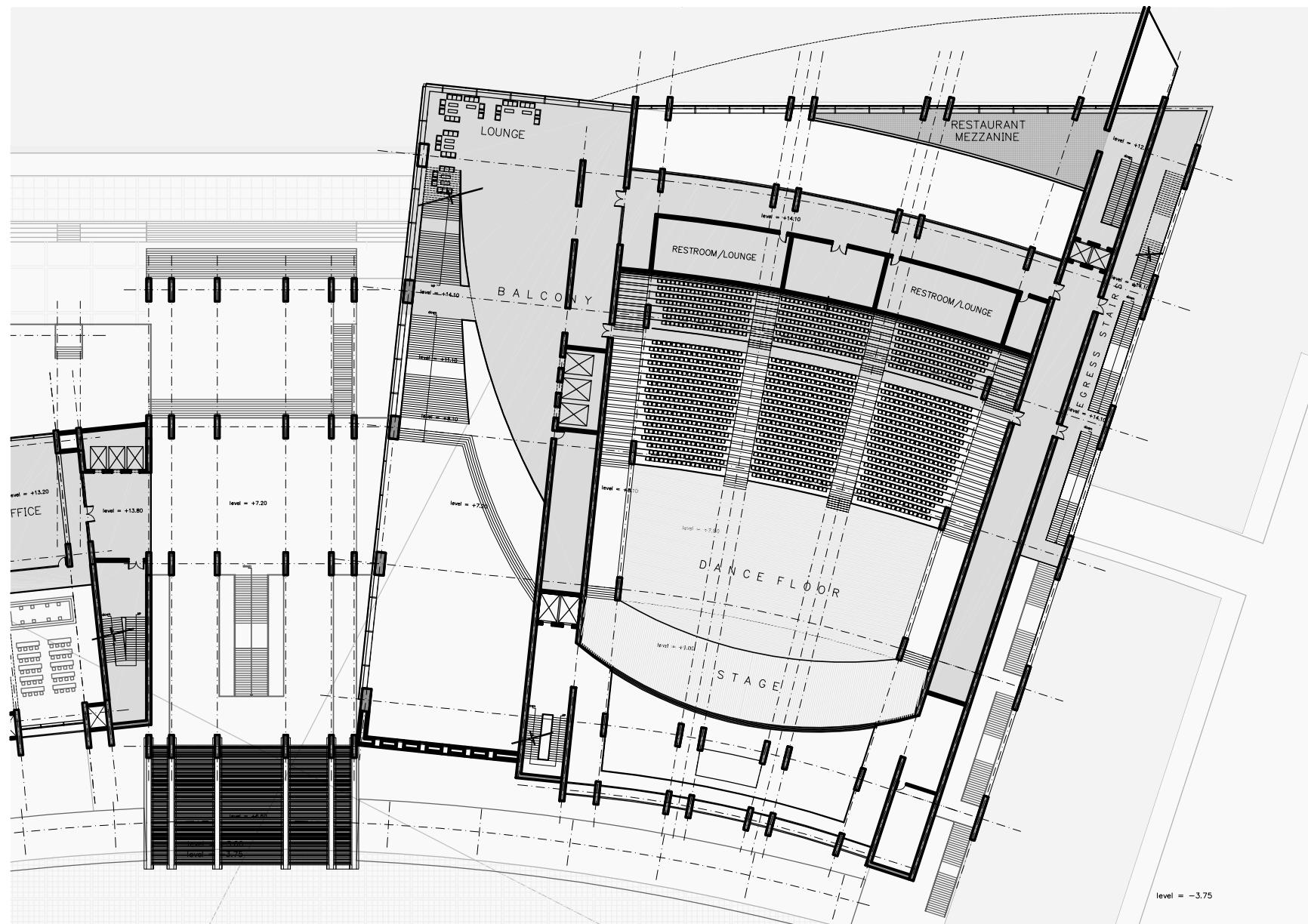


The Ballroom - Lobby, Dance Floor, and Restaurant
Level 2

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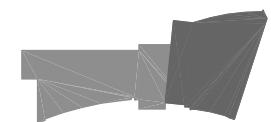


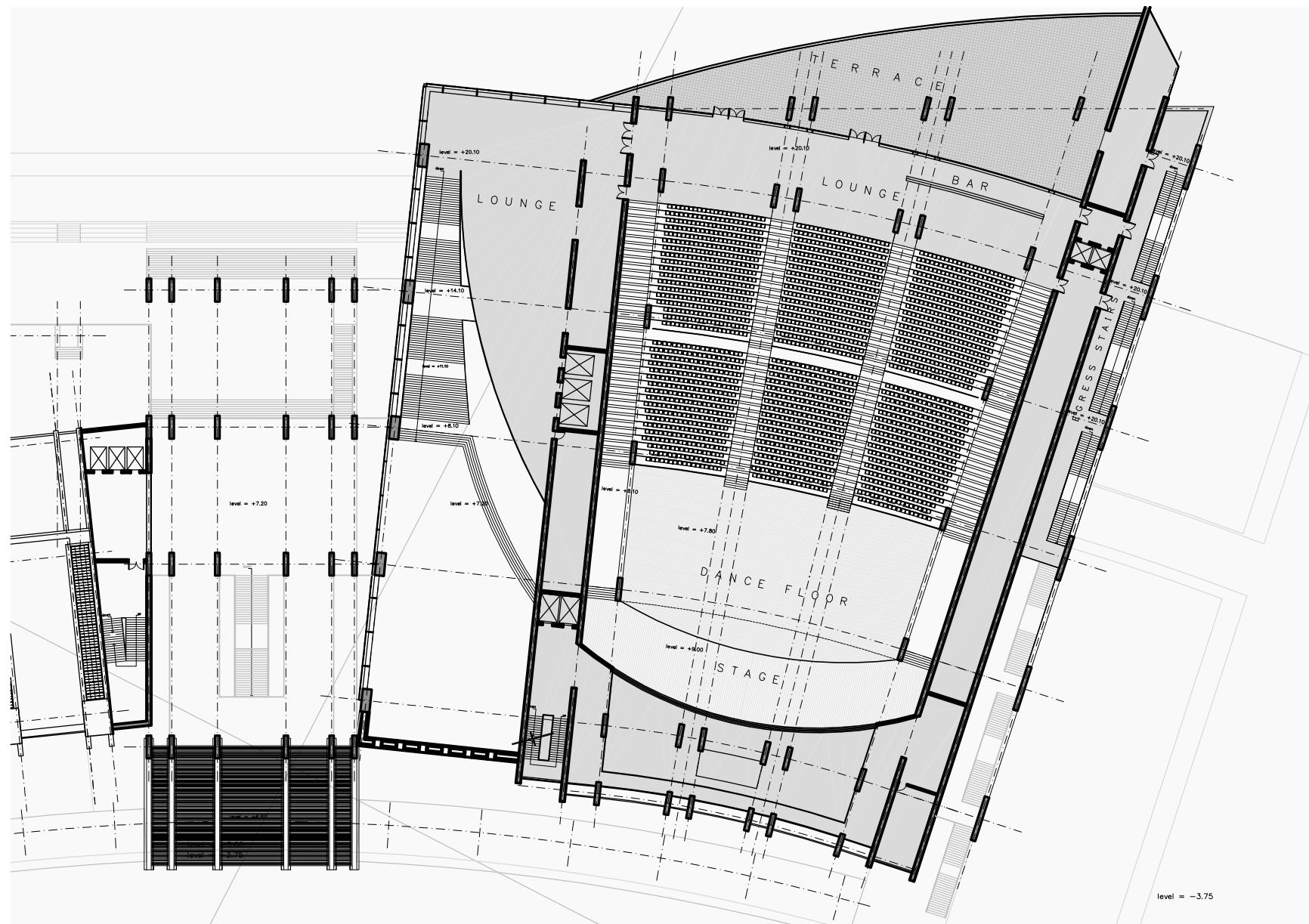


The Ballroom - Restaurant
Level 2 - Mezzanine

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0 5 10 25mts

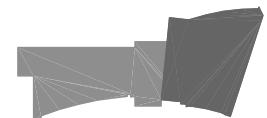


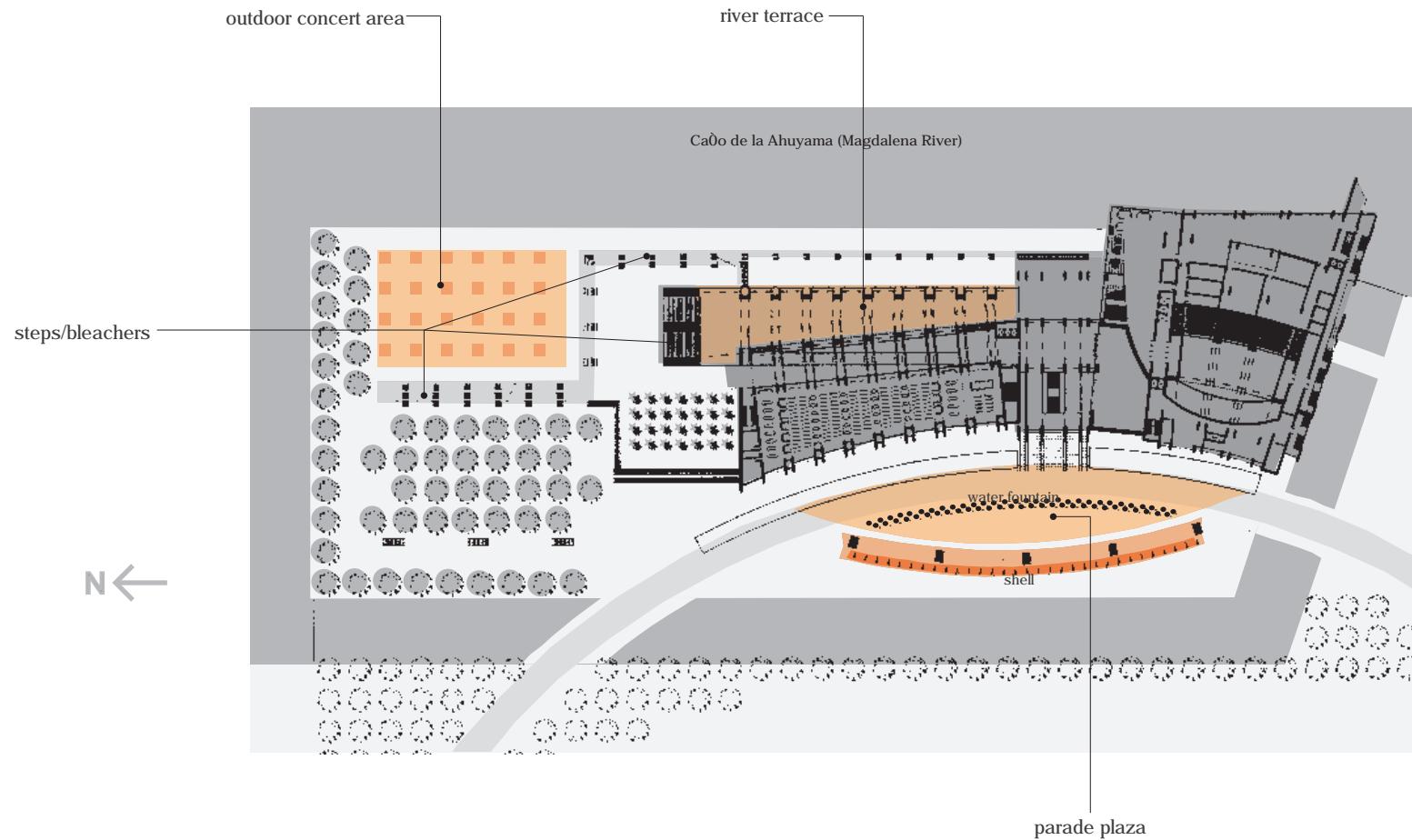


The Ballroom - Terrace
Level 3

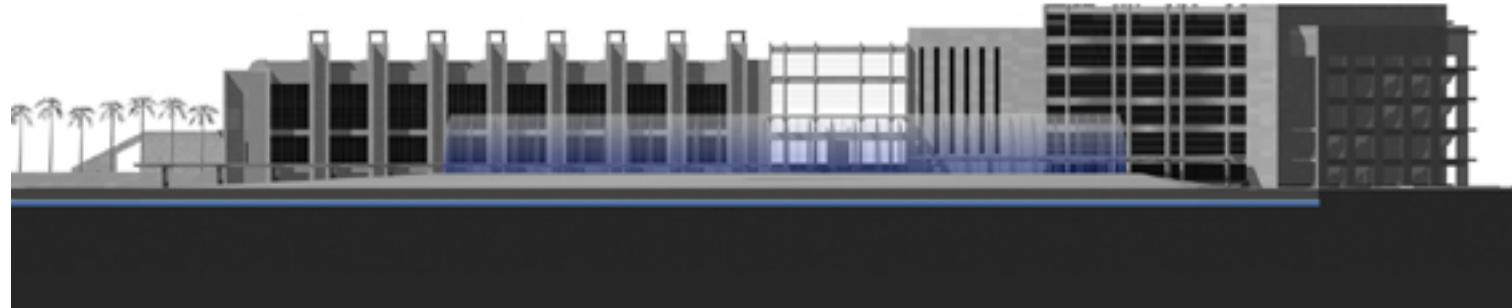
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Open-Air Spaces Dancing on the streets is part of the carnival culture. The project presents a number of open spaces for large groups of dancers practicing their choreographies as well as other open-air activities as concerts and festivals. Steps along open spaces function as temporary bleachers for spectators. Main open spaces are the outdoor concert area at the northeast corner of the site, the floor river terrace on level two, and the parade plaza itself.



West Elevation during Carnival Season

A shell at the parade plaza erected only during the carnival season is a reminder of the temporary character
Temporary vs. Permanent of the project. The building puts on its shell in the manner in which citizens would put on masks and costumes
during carnival. The shell functions as a protective sunscreen for day time parades going through.



West Elevation during off Carnival Season



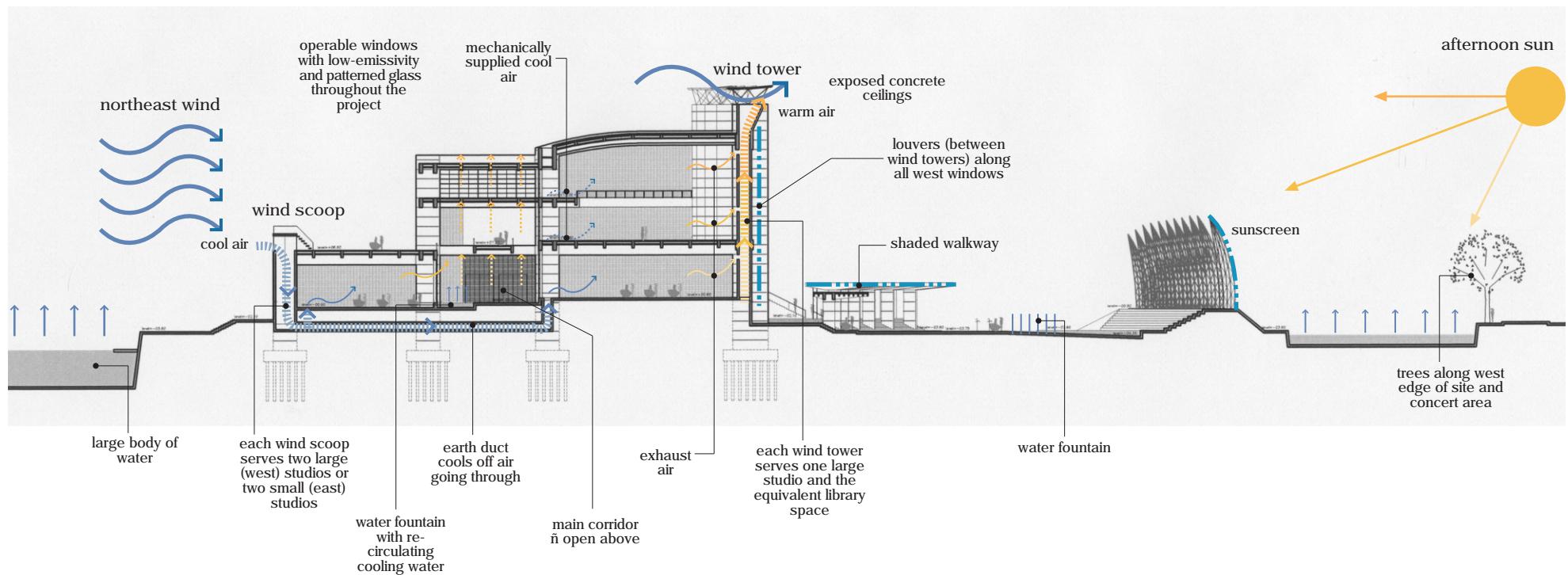
The Sun



The Wind

Climatic Considerations

Two main climatic factors taken into account were the sun and the wind. Located at a latitude of 10° 54' north and only 3 meters above sea level, the site presents high temperatures year-round with an average of 28°C (82°F). The prevailing wind direction is 14 NE. The project studies the use of a variety of design elements to provide thermal comfort while minimizing dependence on mechanical systems. Dance studios would utilize mainly natural ventilation. The library would have a combined system with mechanically supplied air and extract air driven out by wind towers. The Ballroom would rely solely on mechanical systems.



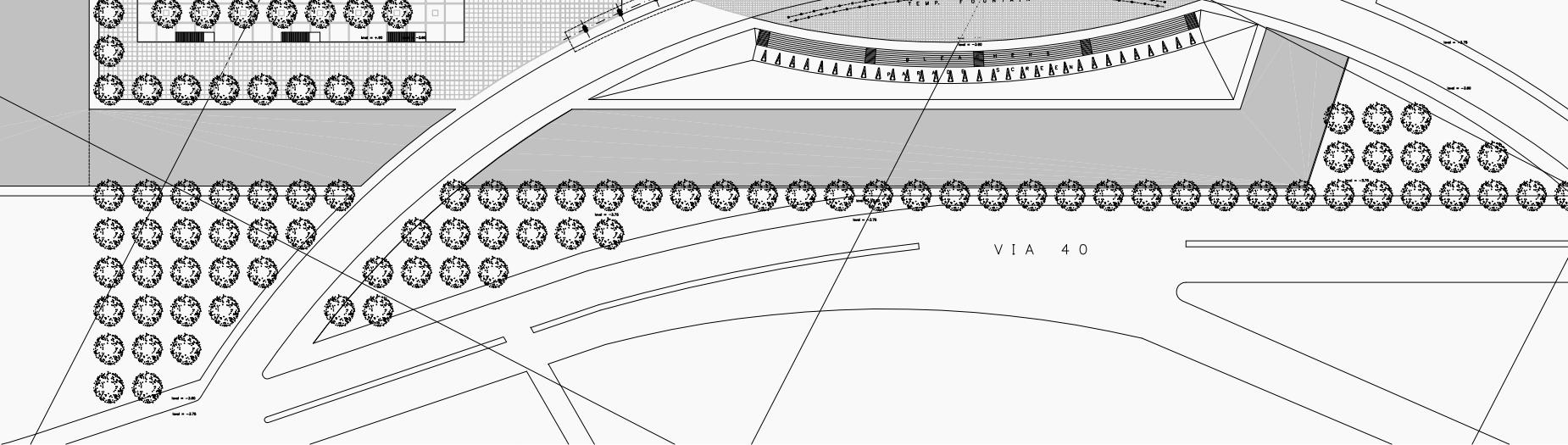
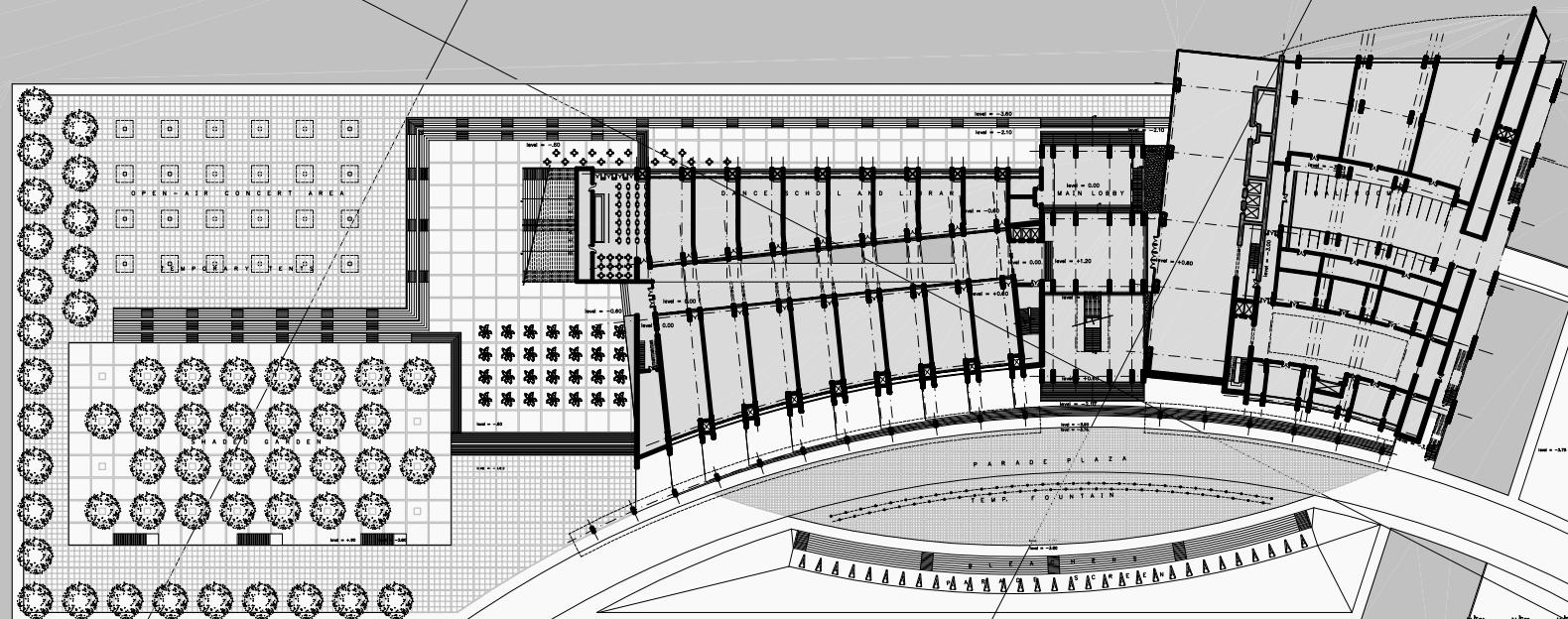
Ventilation and Sun Protection Study - Section viewing south

Plans

Sections

Elevations

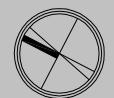
CAÑO DE LA AHUYAMA
(MAGDALENA RIVER)



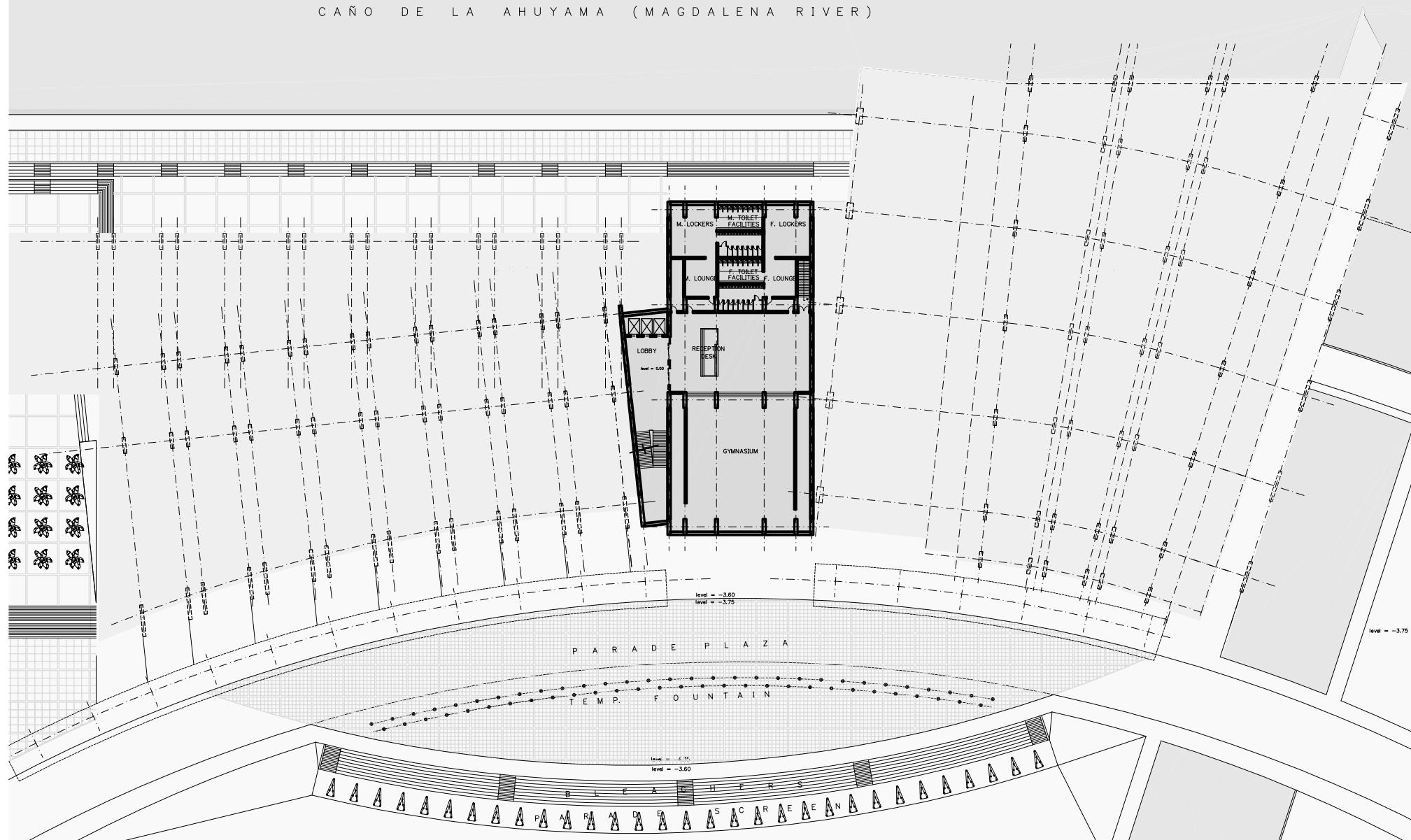
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Site Plan



C A Ñ O D E L A A H U Y A M A (MAGDALENA RIVER)



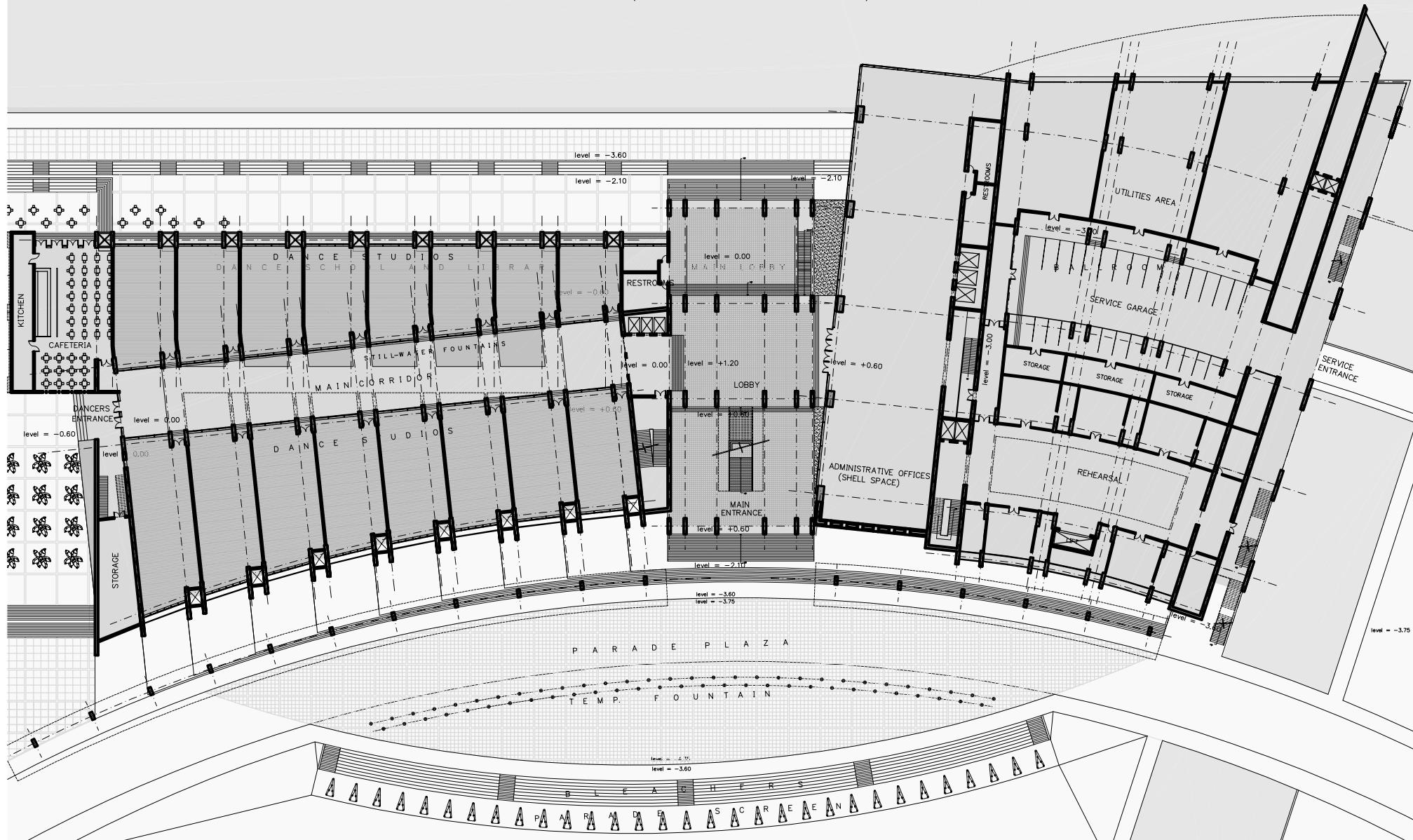
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0 5 10 25mts

Basement Plan



C A Ñ O D E L A A H U Y A M A (M A G D A L E N A R I V E R)



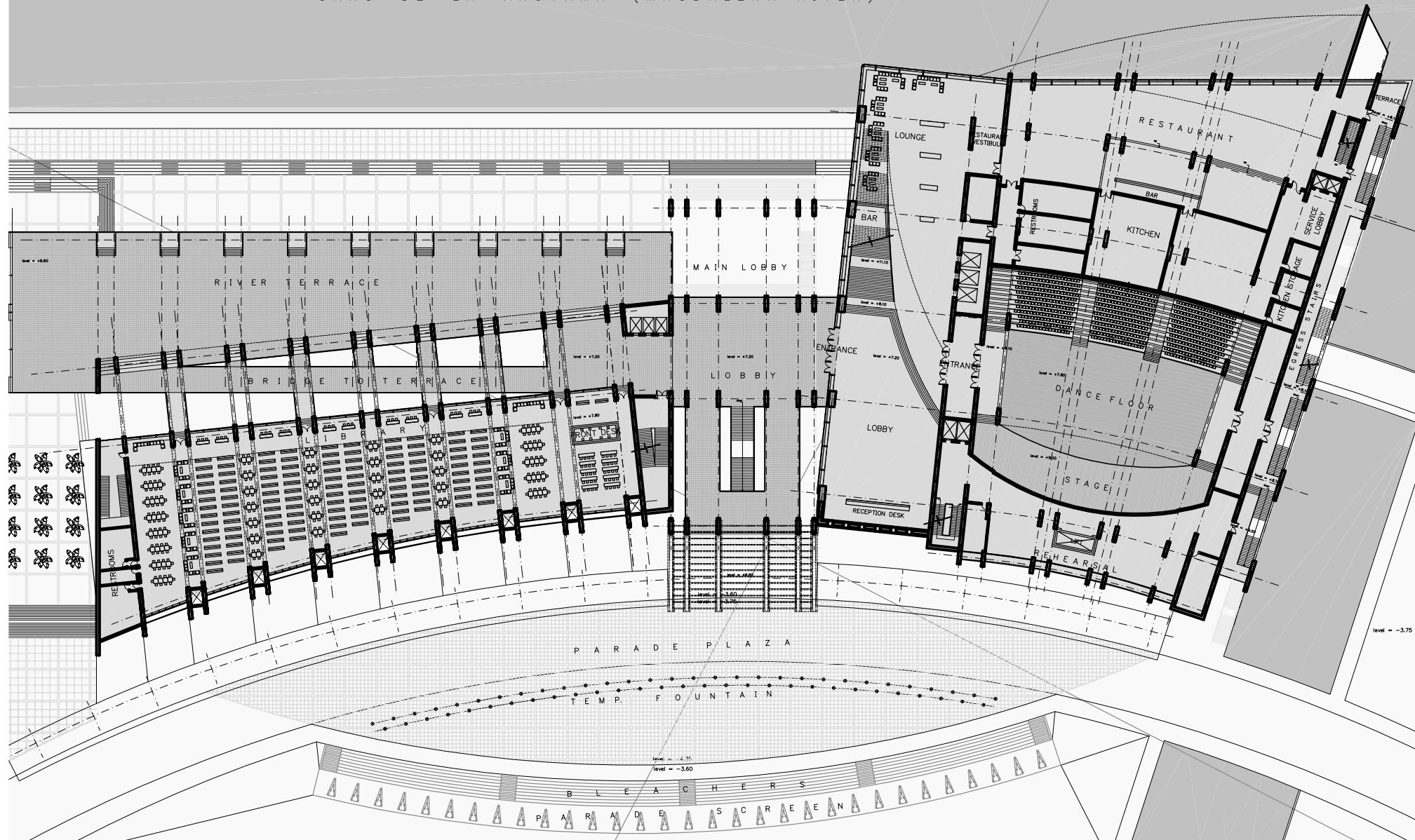
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A horizontal scale with tick marks at 0, 5, 10, and 25mts. A thick black bar spans from the 0 mark to the 5 mark.

1st Floor Plan



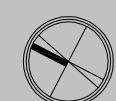
CAÑO DE LA AHUYAMA (MAGDALENA RIVER)



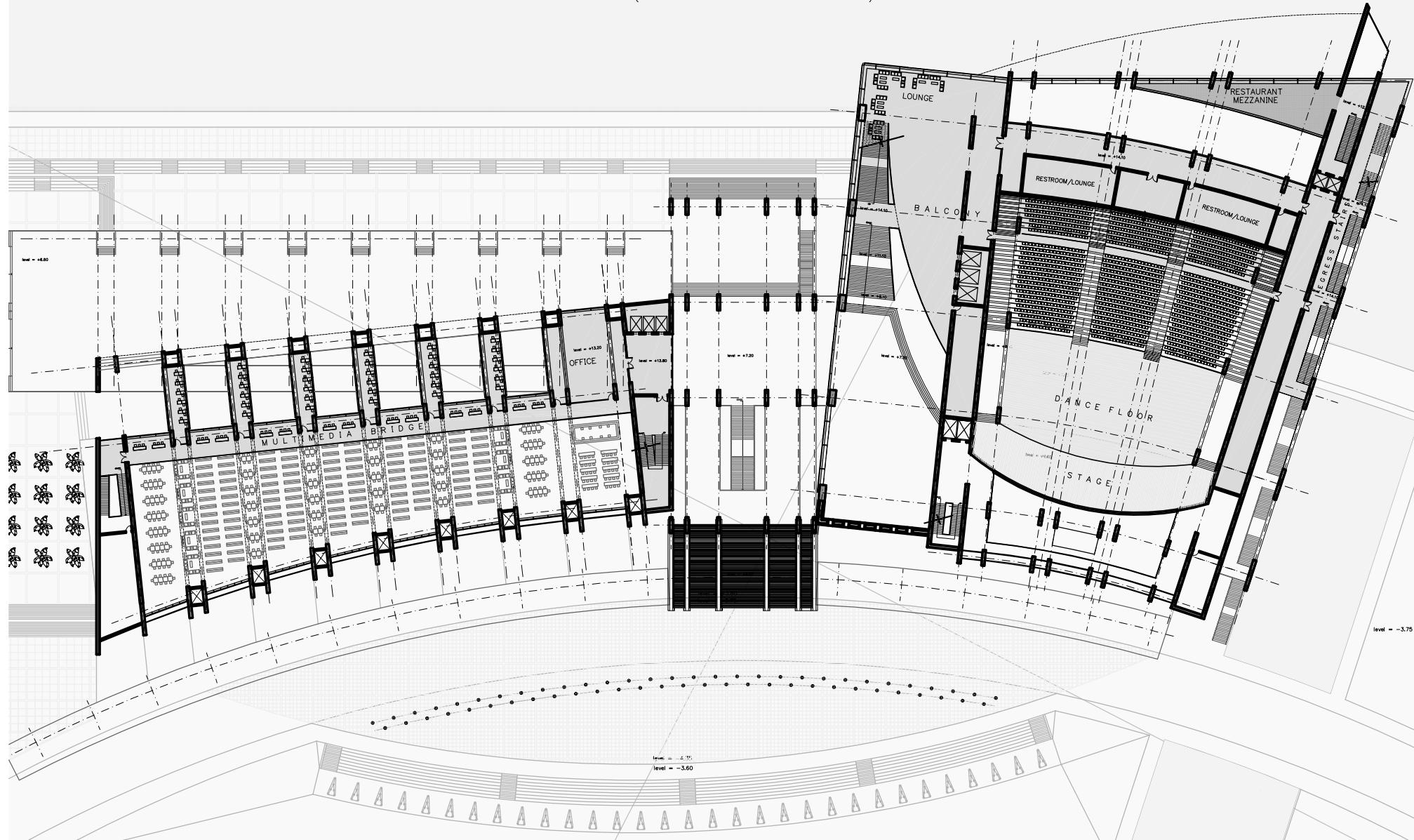
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0 5 10 25mts

2nd Floor Plan



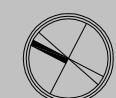
C A Ñ O D E L A A H U Y A M A (M A G D A L E N A R I V E R)



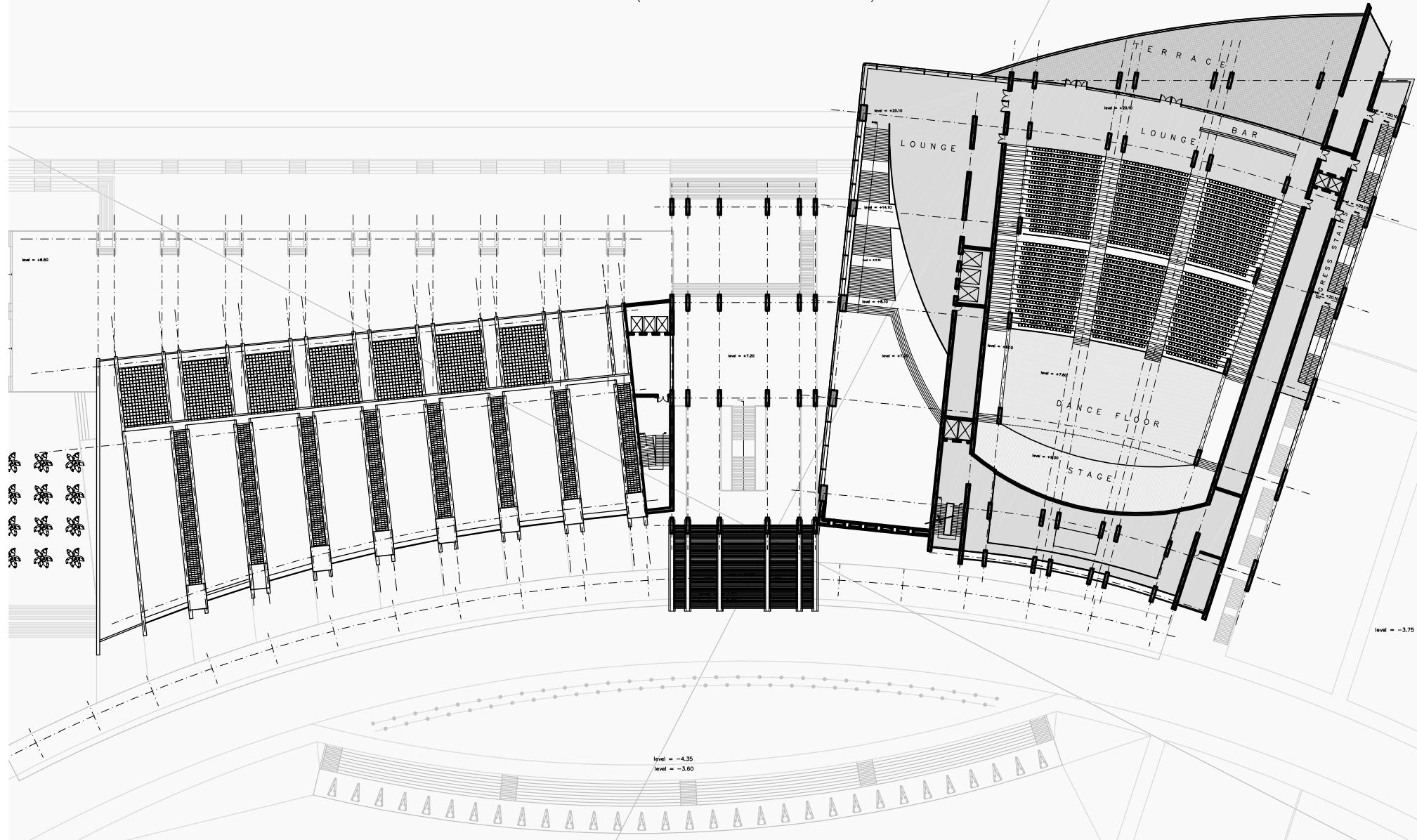
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A horizontal scale with tick marks at 0, 5, 10, and 25mts. A solid black bar spans from the 0 mark to the 10 mark. A dashed black line extends from the 10 mark to the 25mts mark.

2nd Floor Plan - Mezzanine



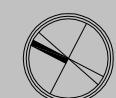
CAÑO DE LA AHUYAMA (MAGDALENA RIVER)

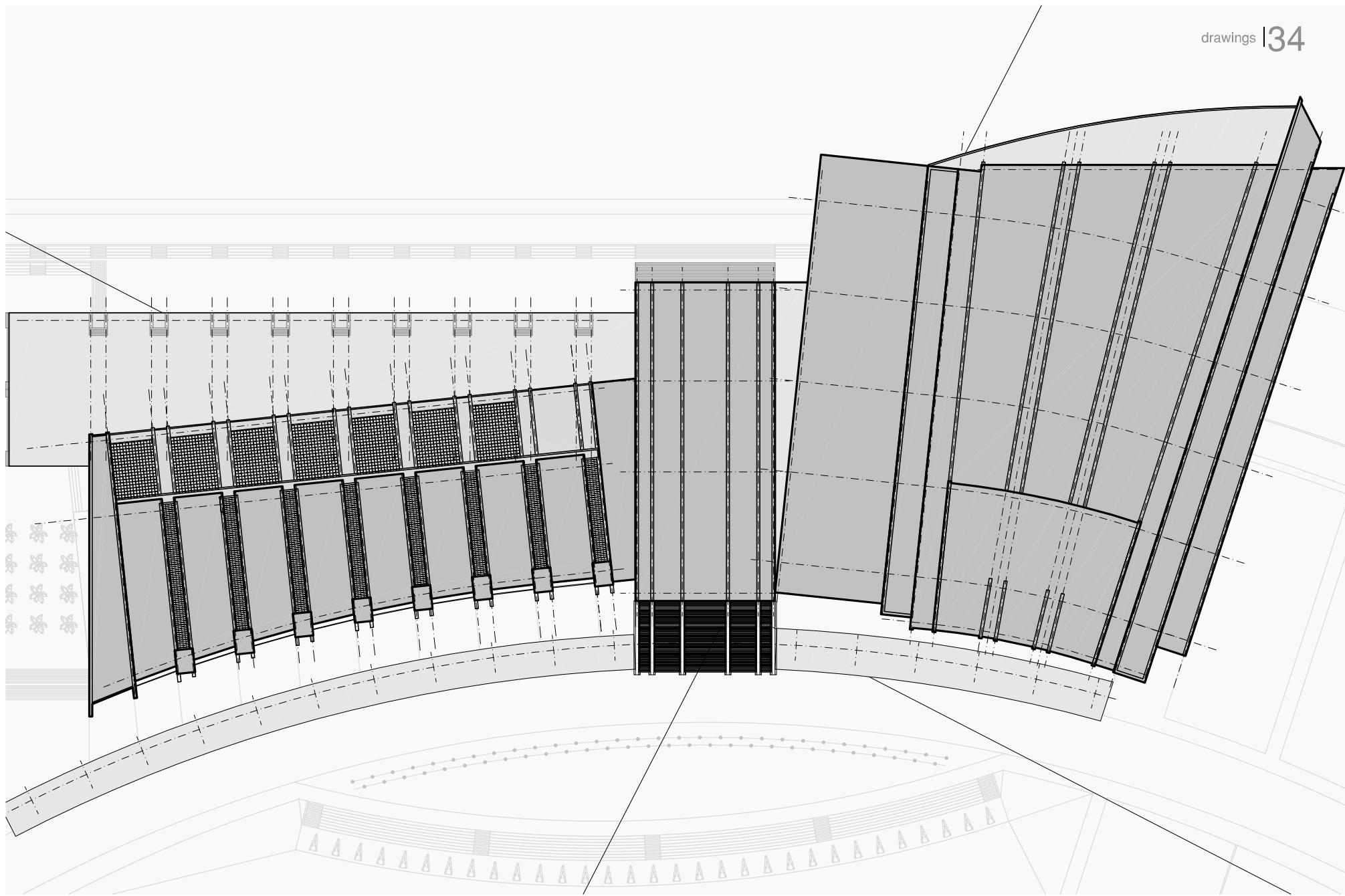


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3rd Floor Plan



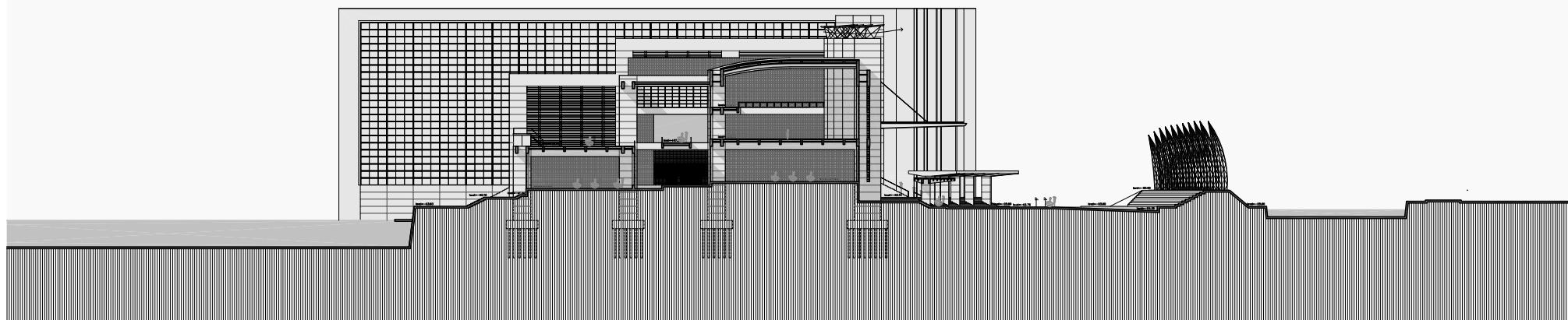


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Roof Plan

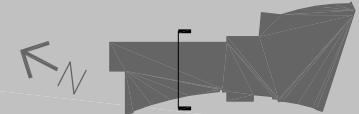


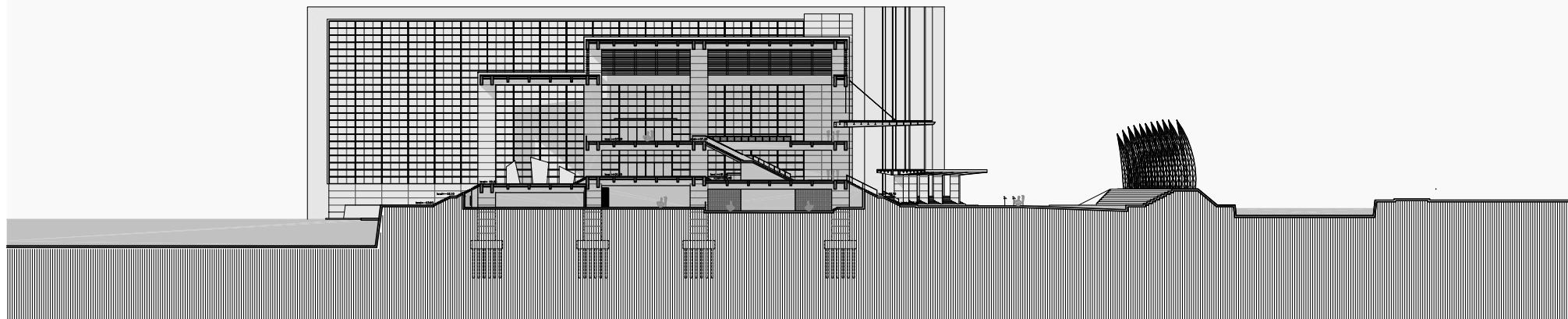


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Transverse Section



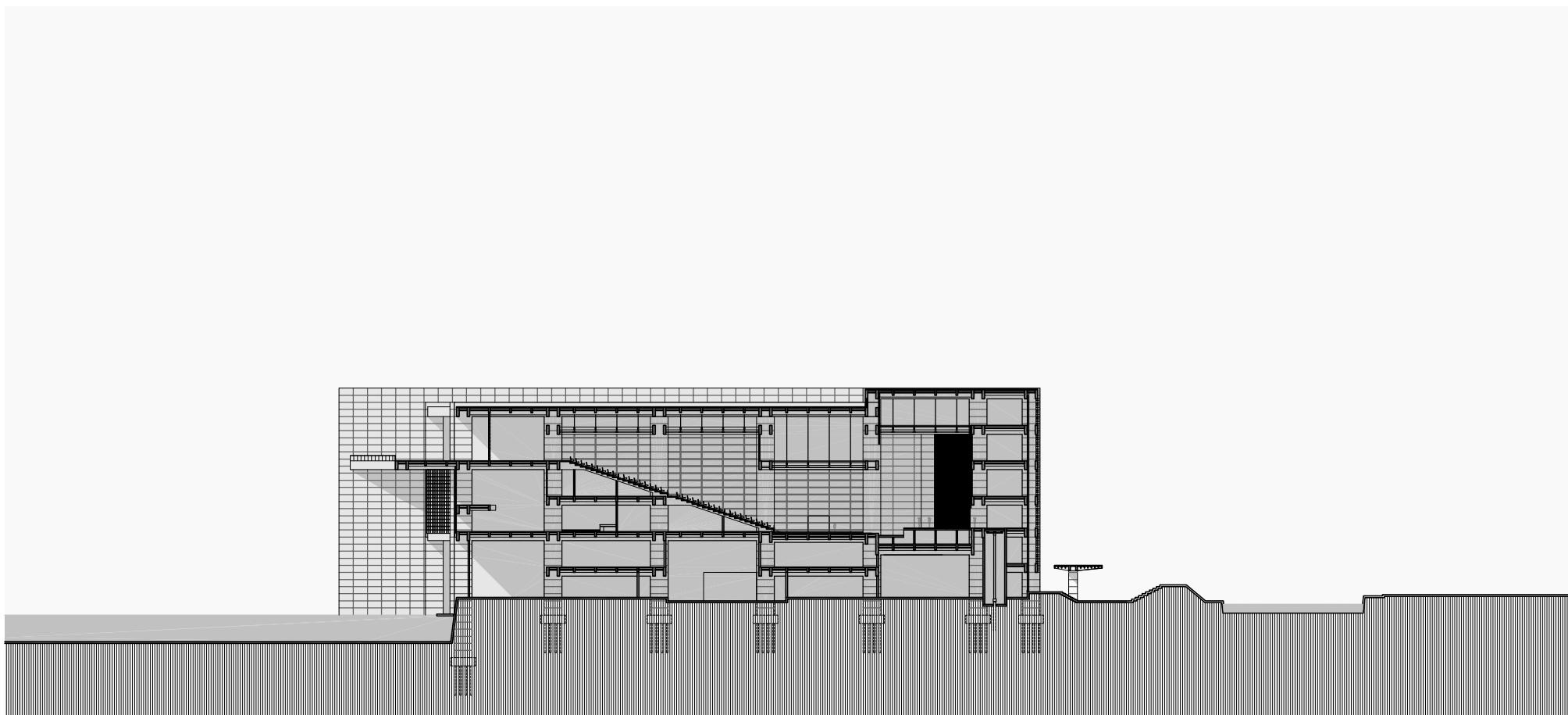


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Transverse Section



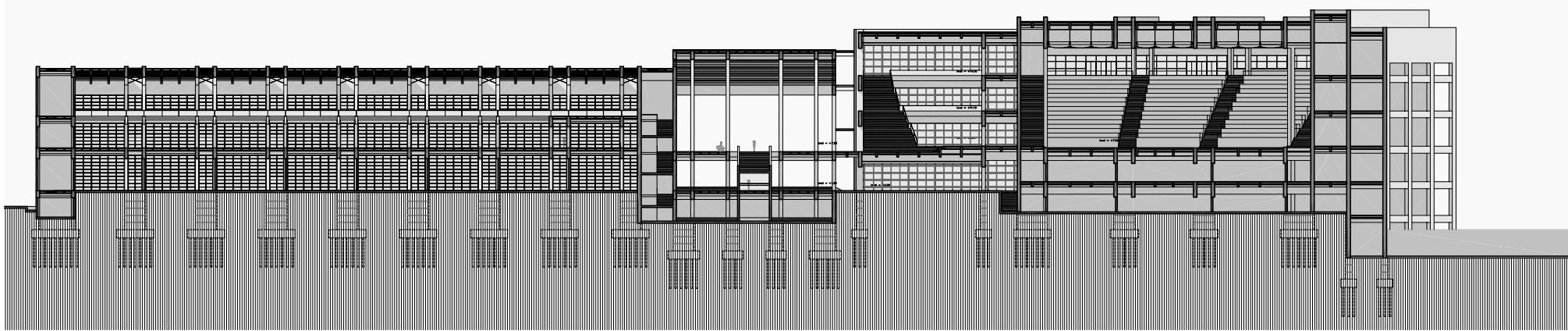


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Transverse Section



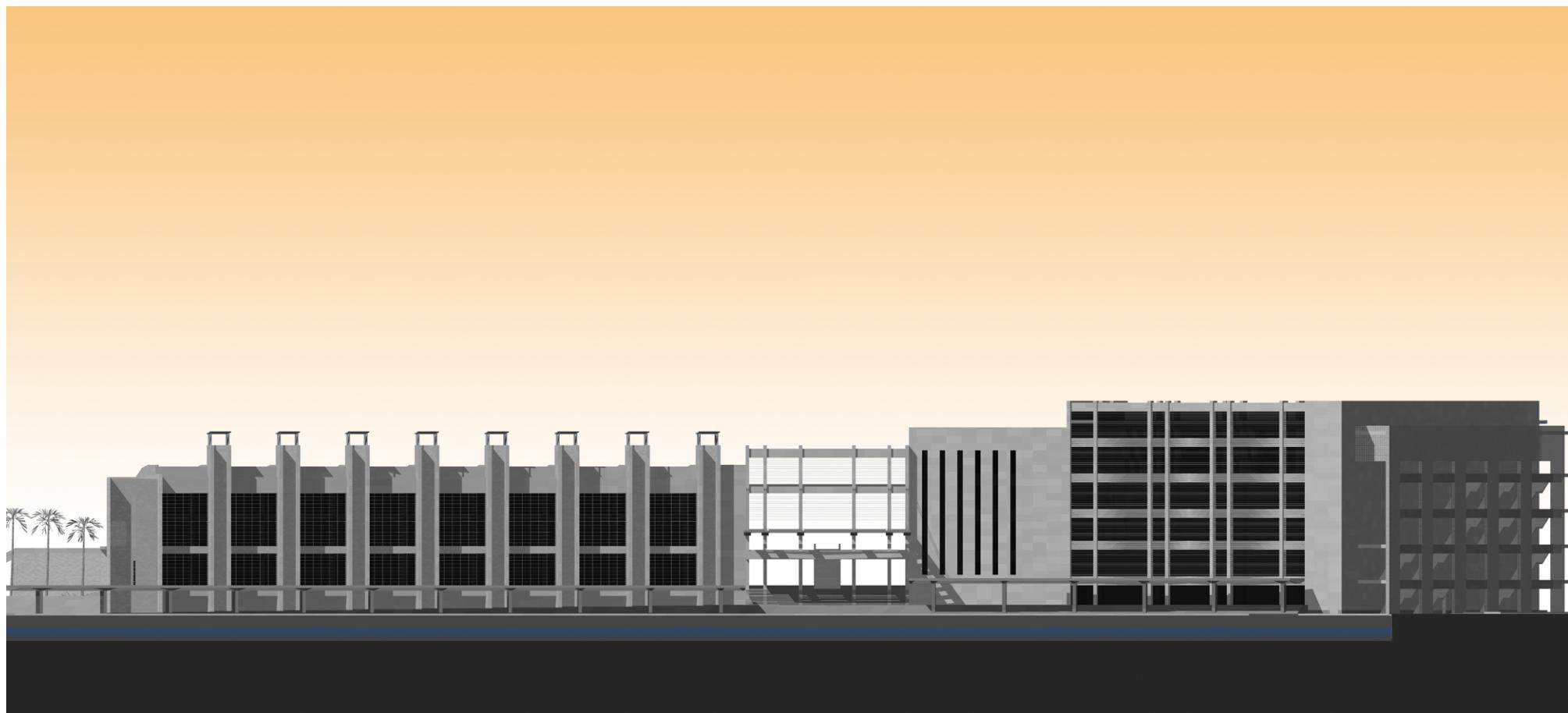


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Longitudinal Section





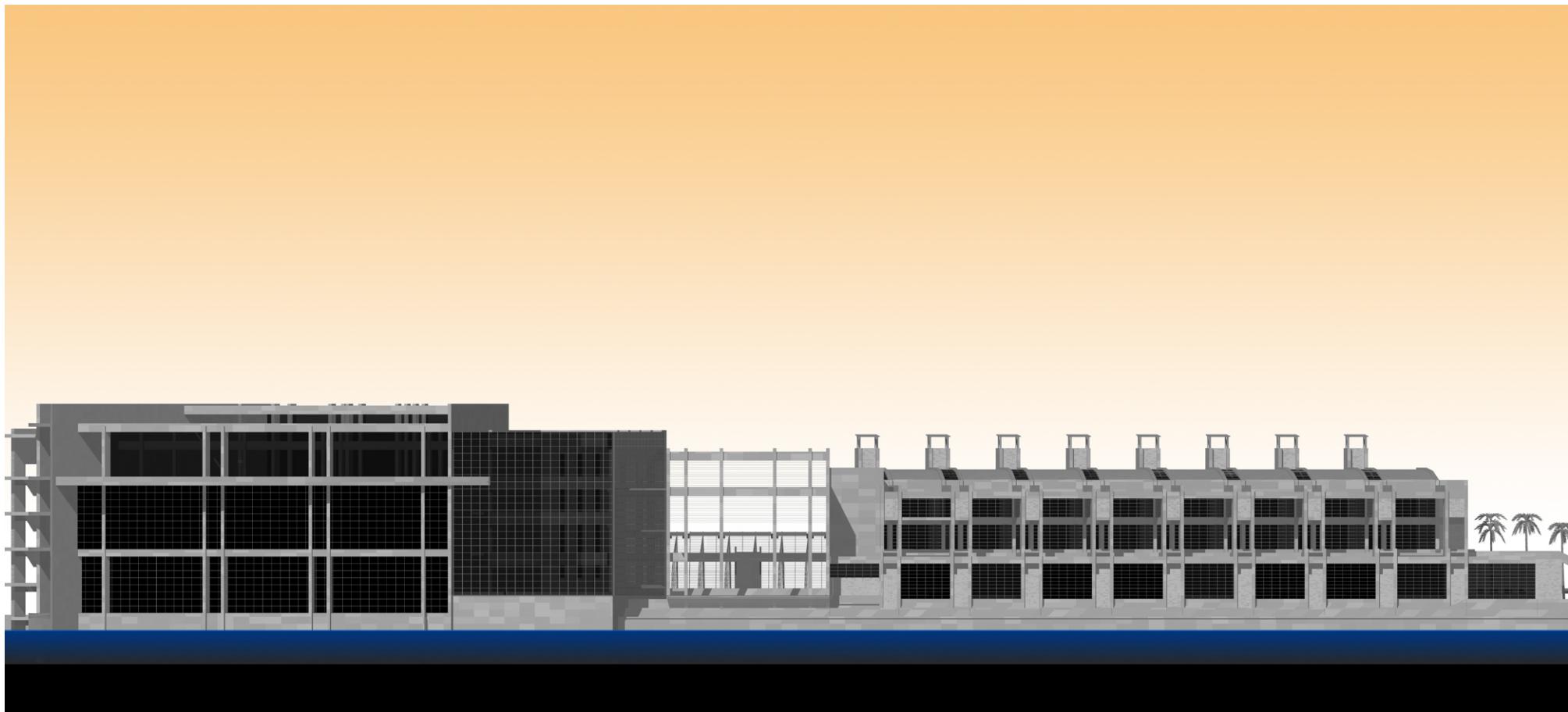
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Southwest Elevation



SCALE = 1:1000

Northwest Elevation



SCALE = 1:1000

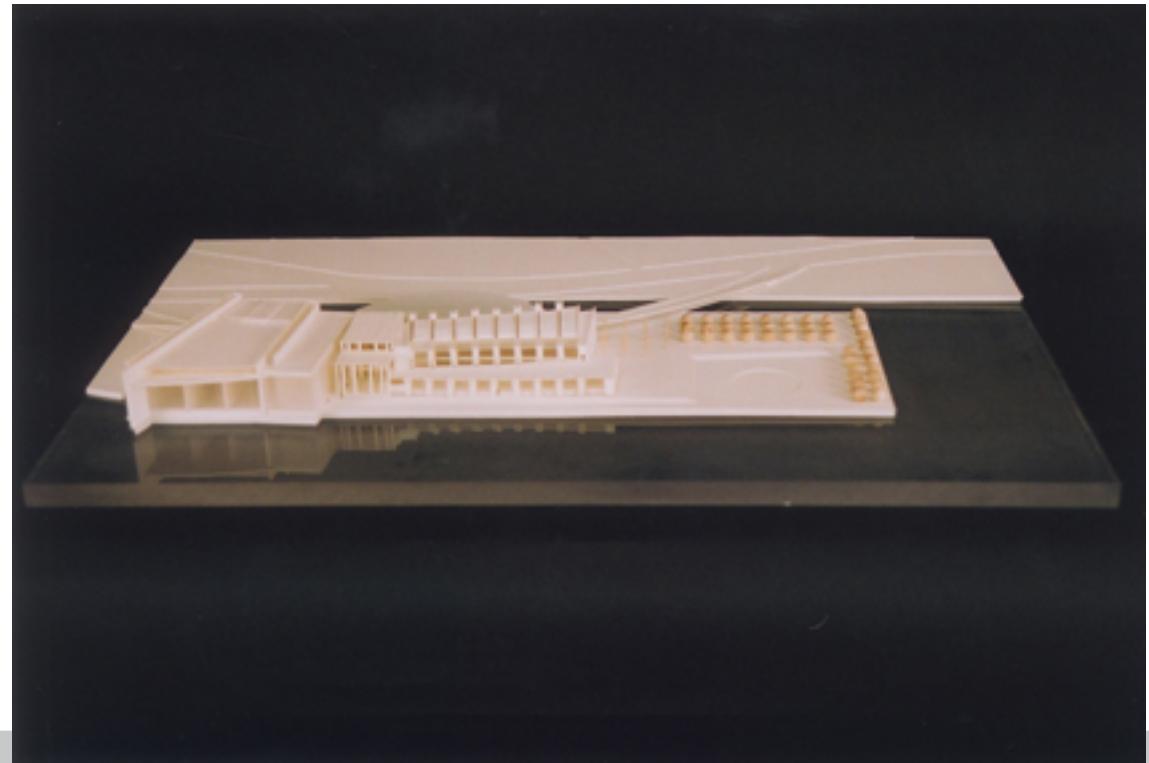
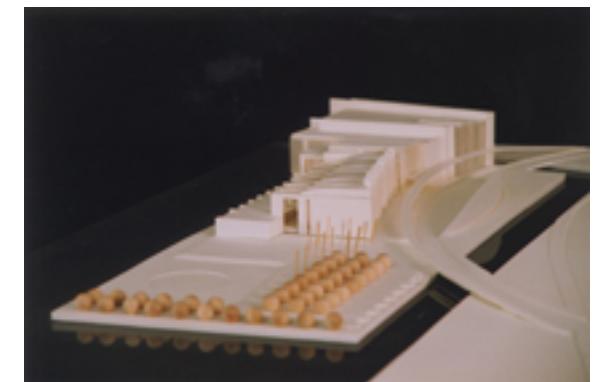
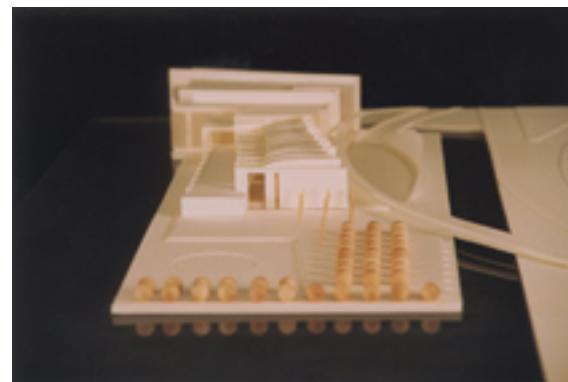
Northeast Elevation



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Southeast Elevation

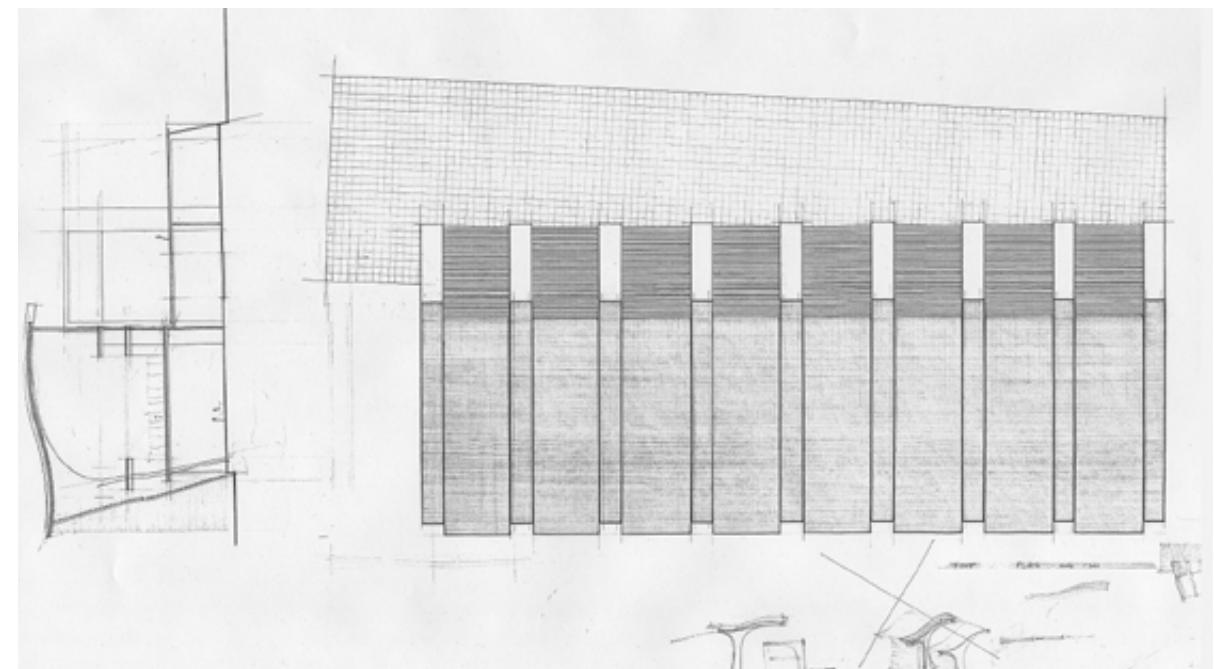
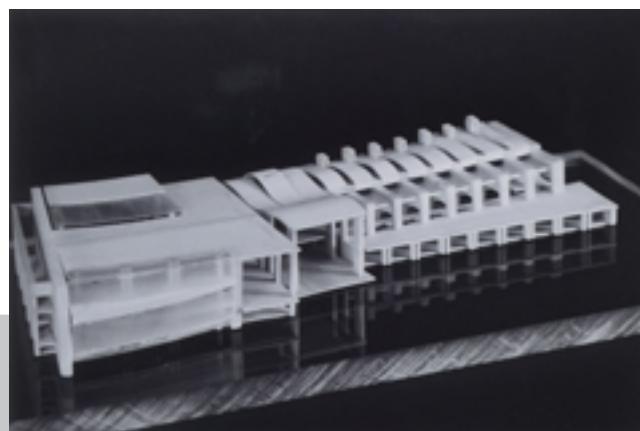
Early drawings and models

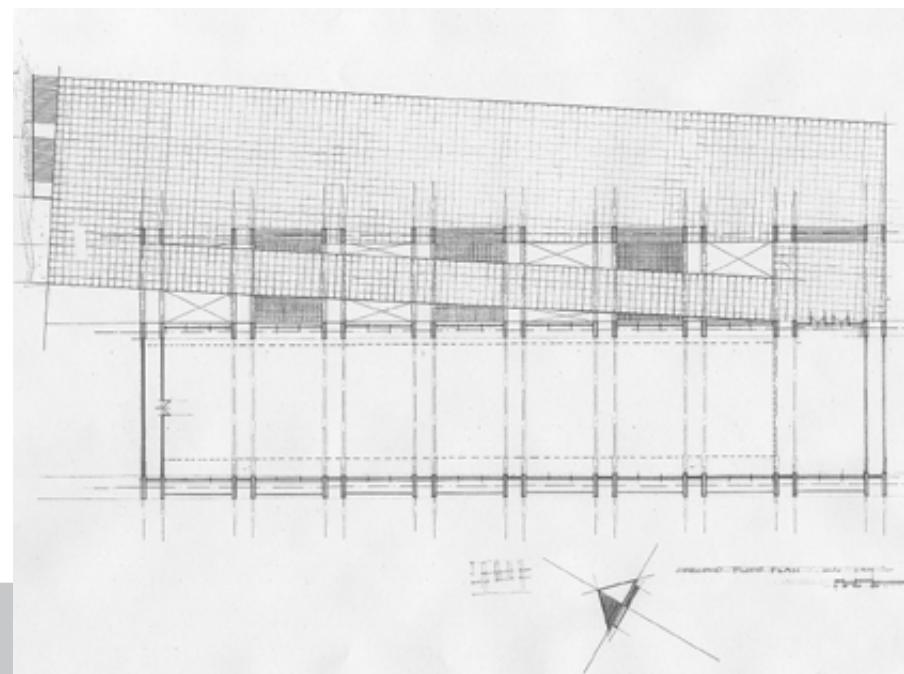
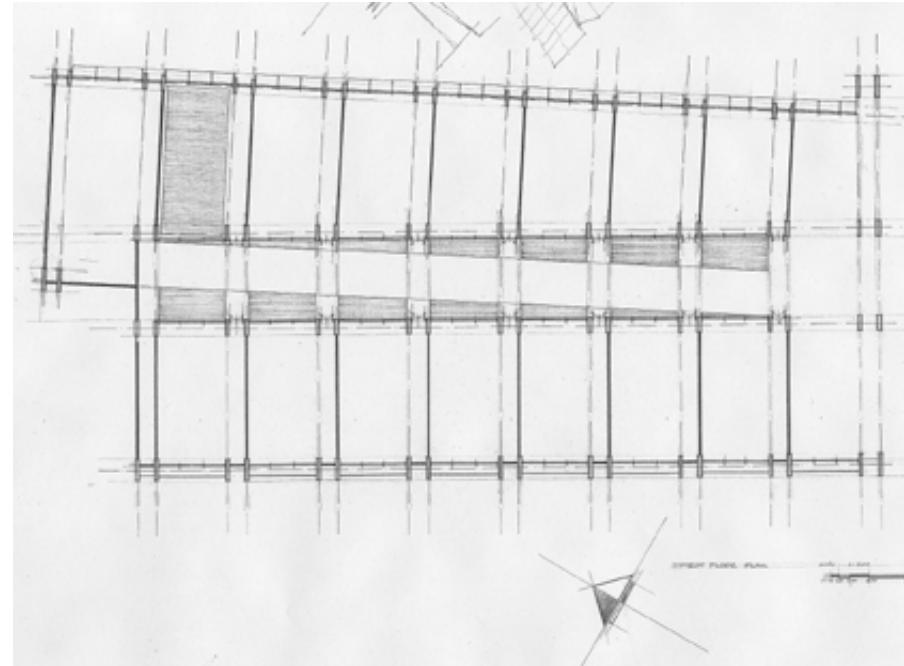


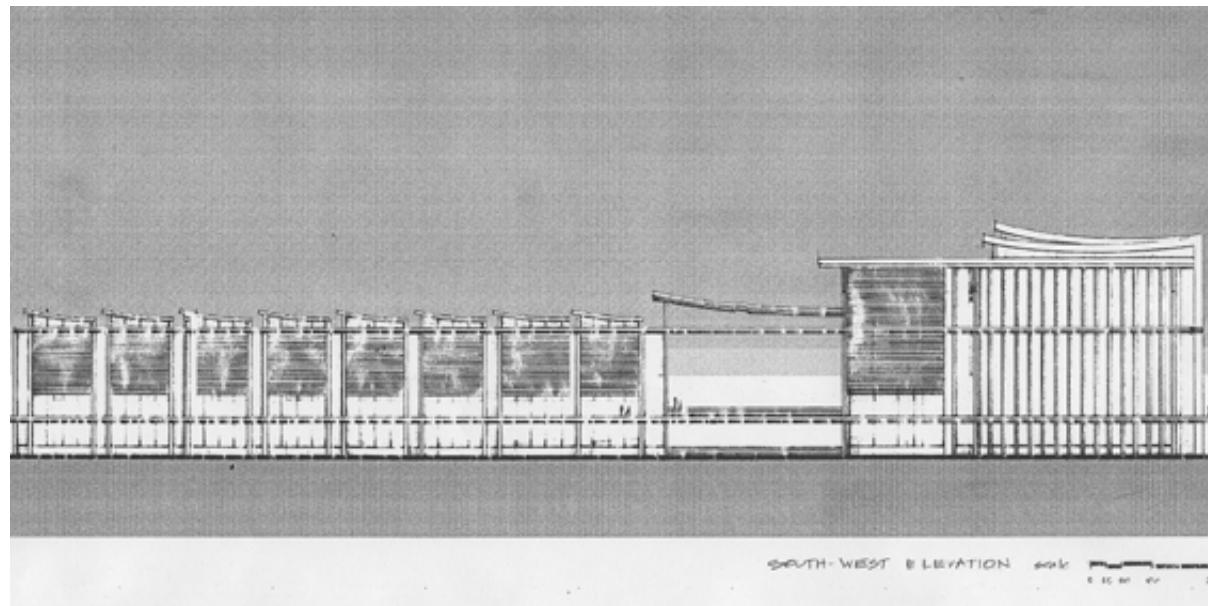
Final Presentation Model



Site Model

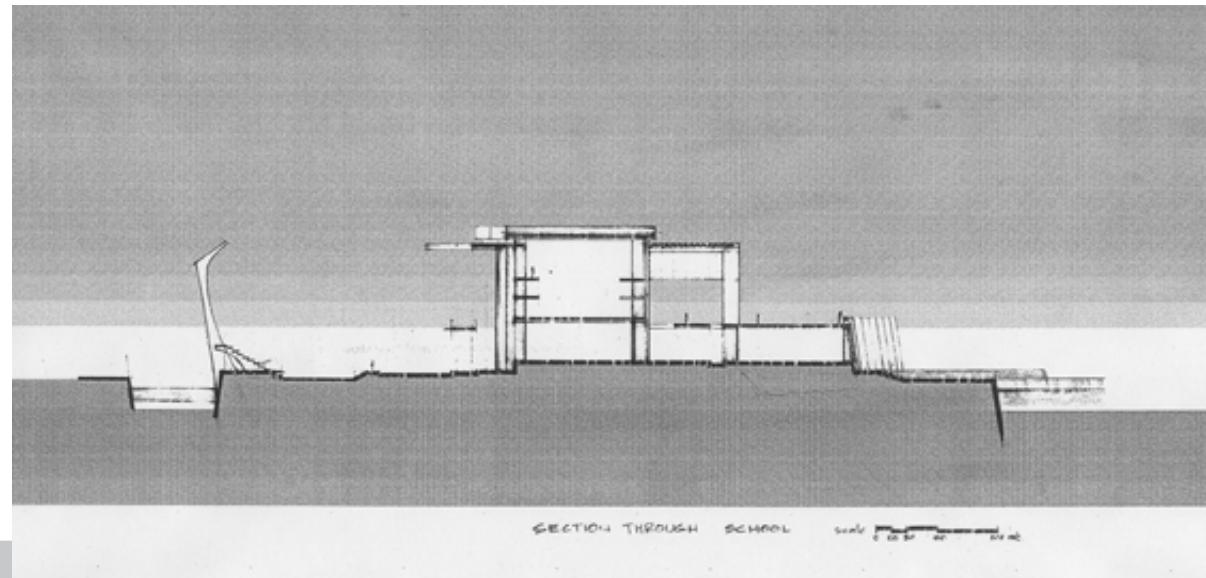
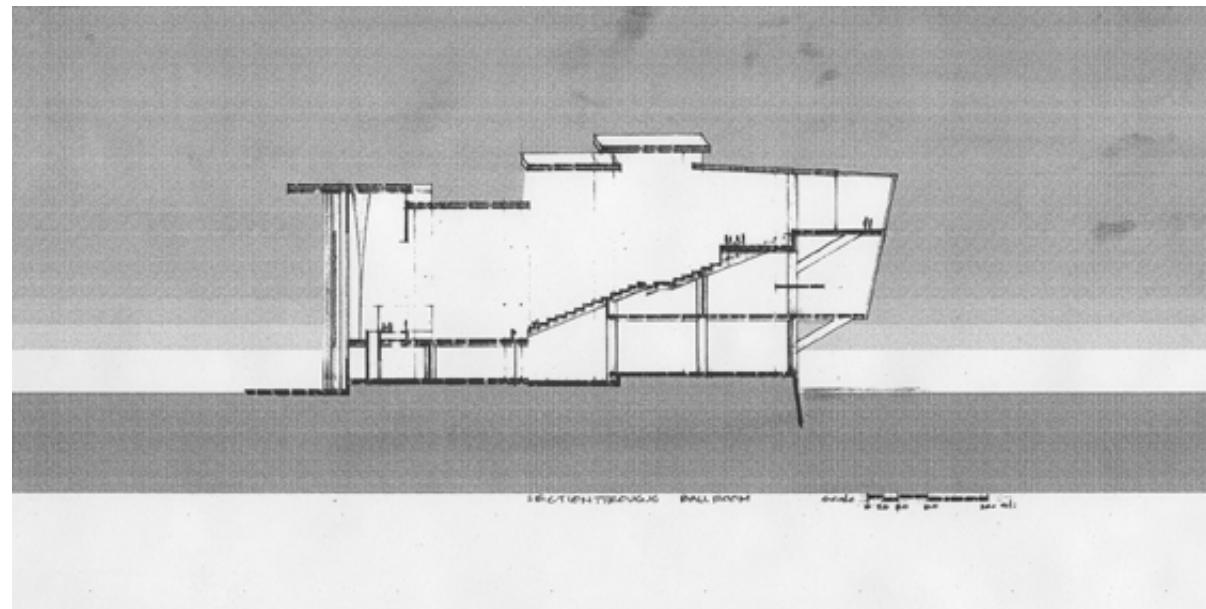


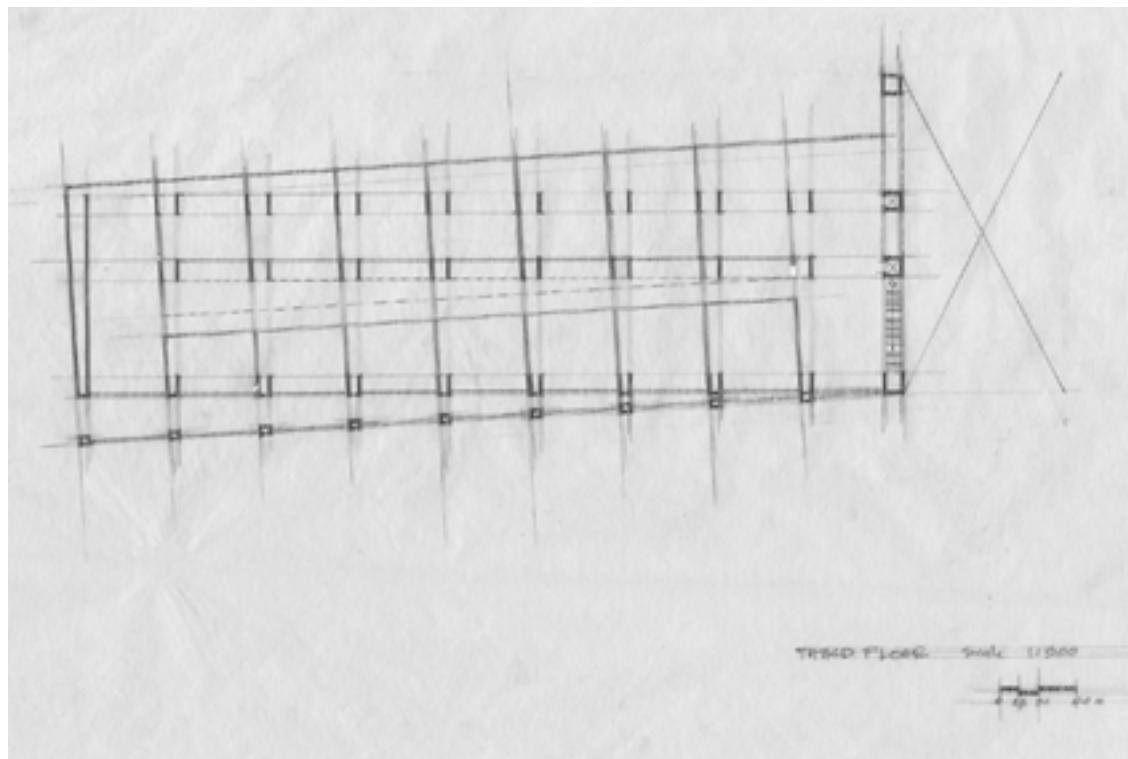


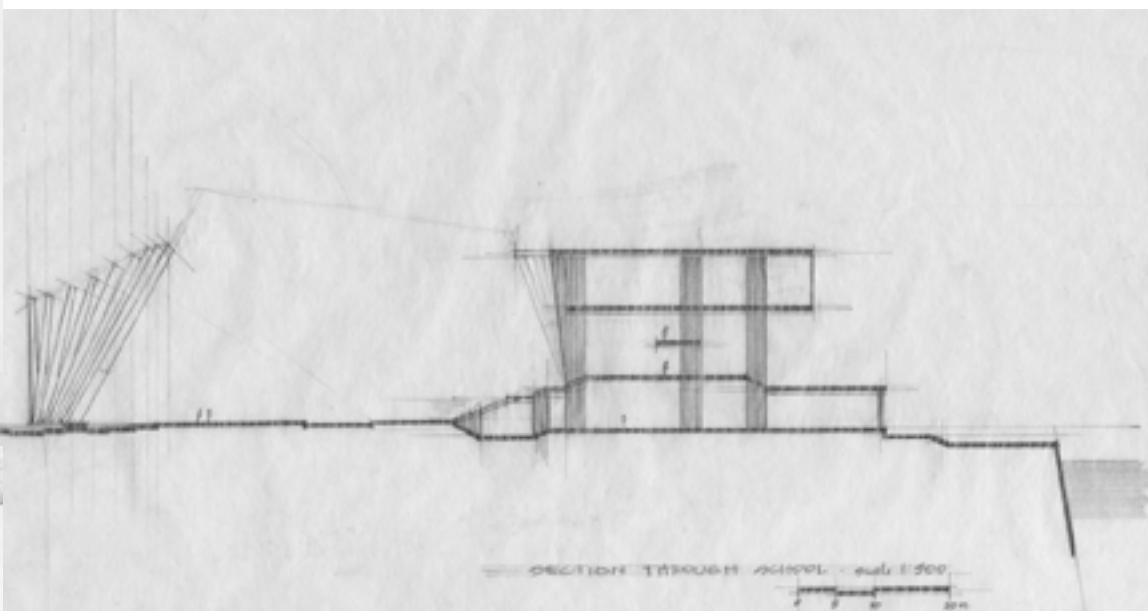
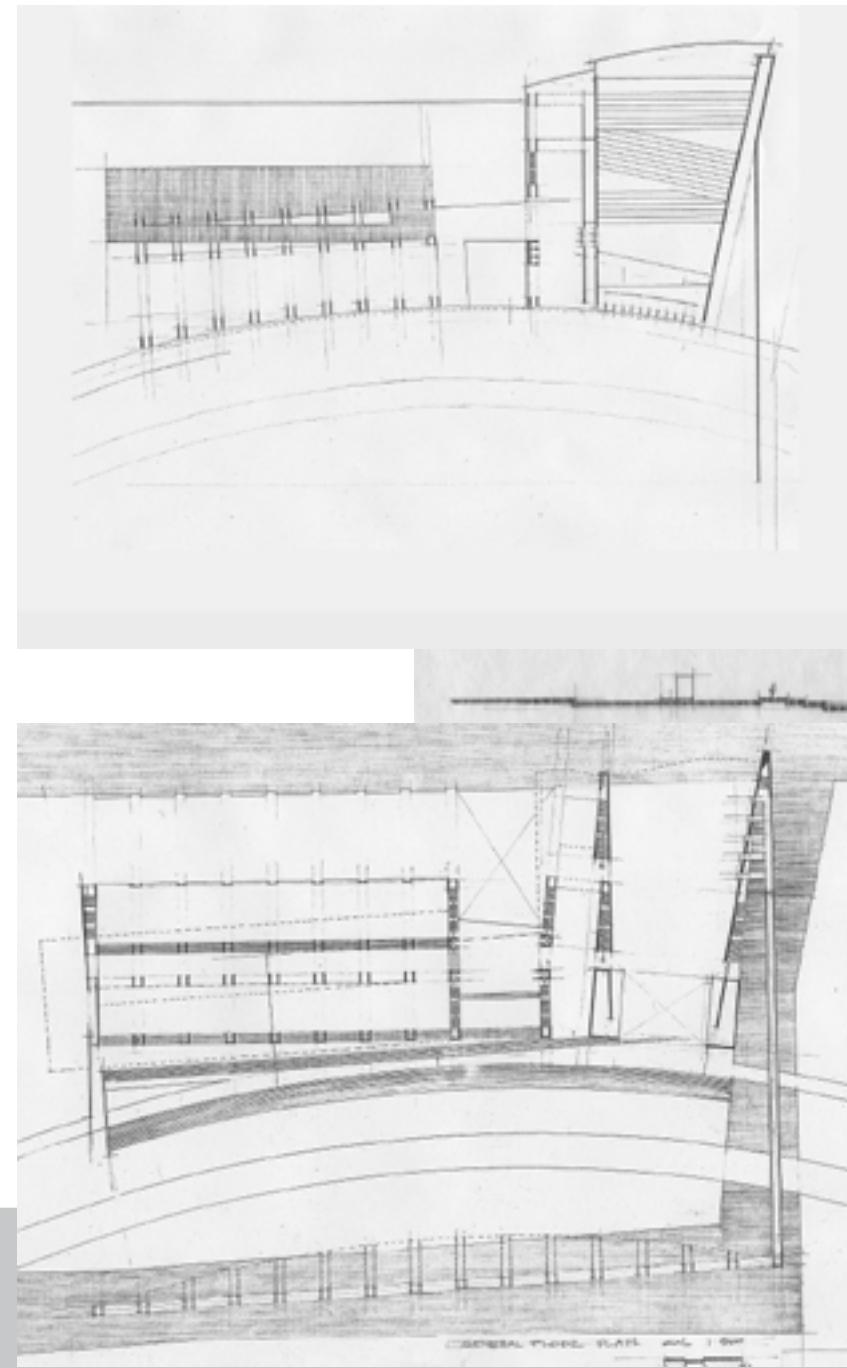


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West Elevation Study

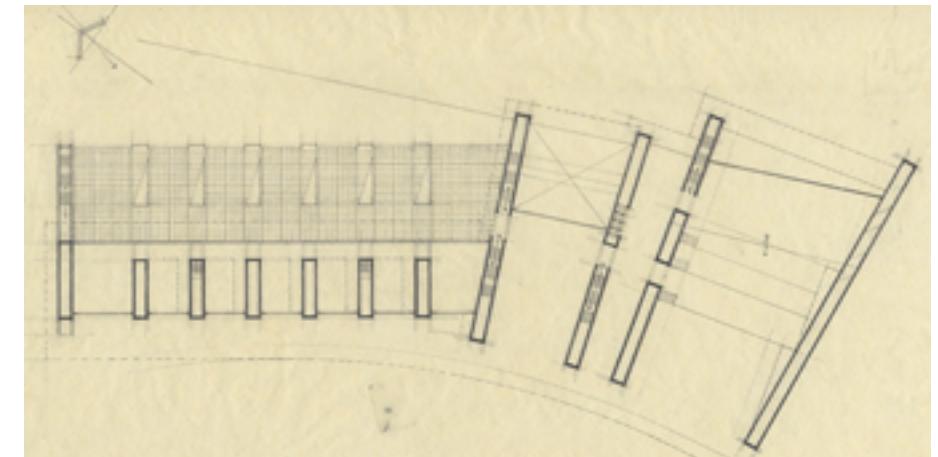
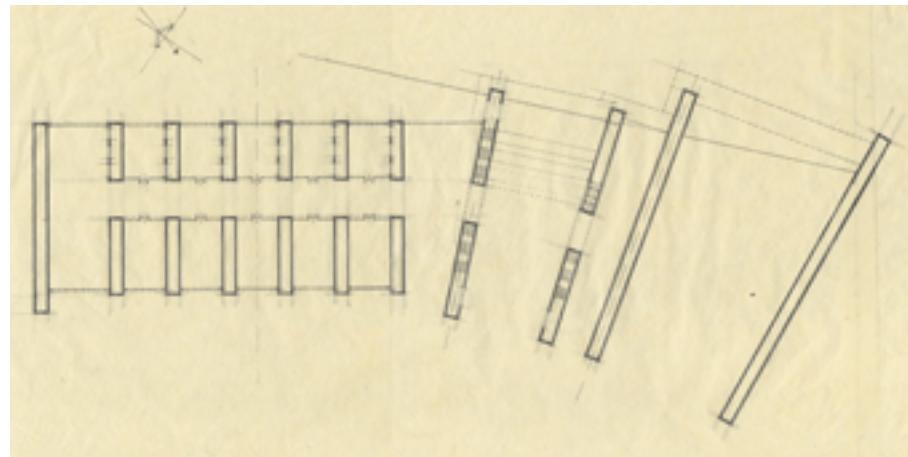


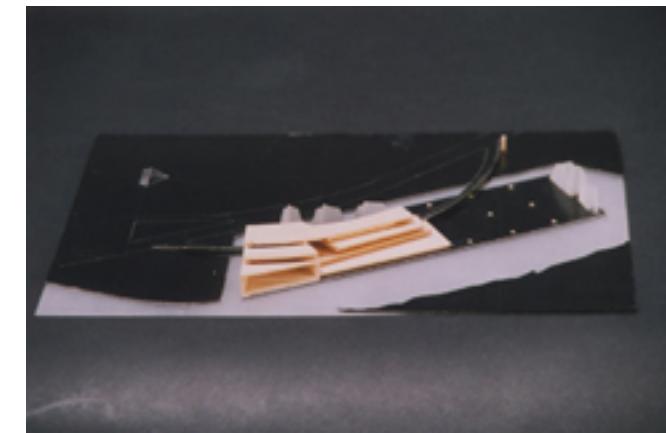
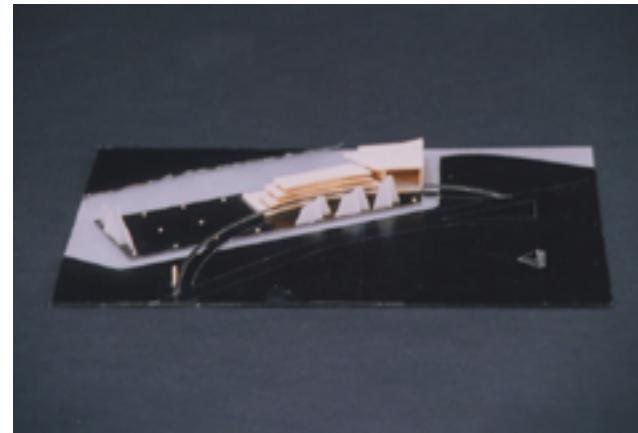
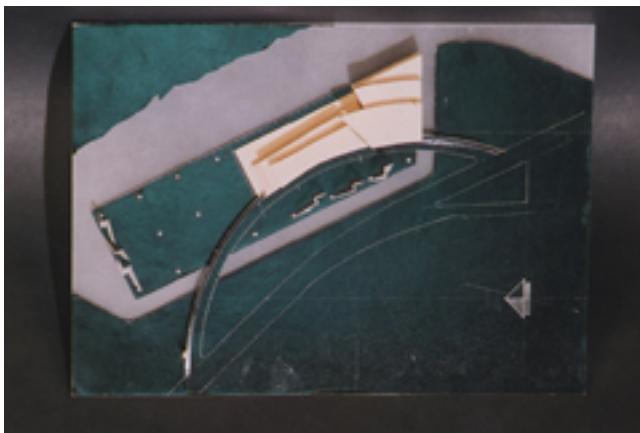




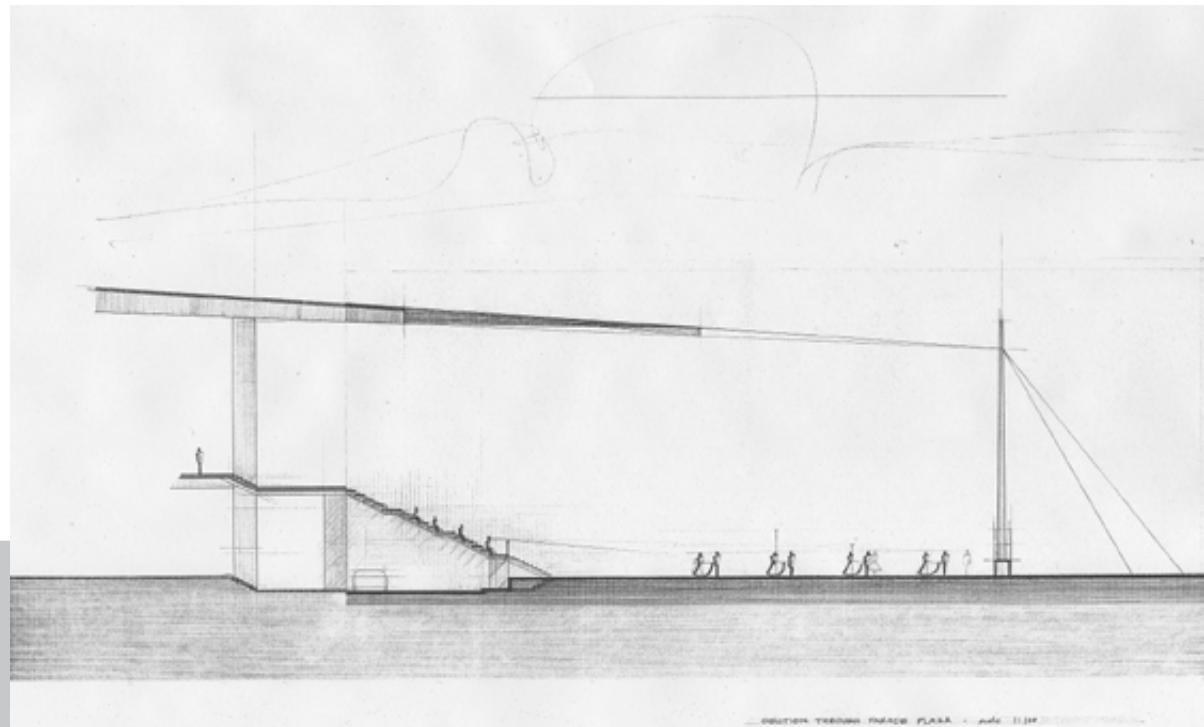
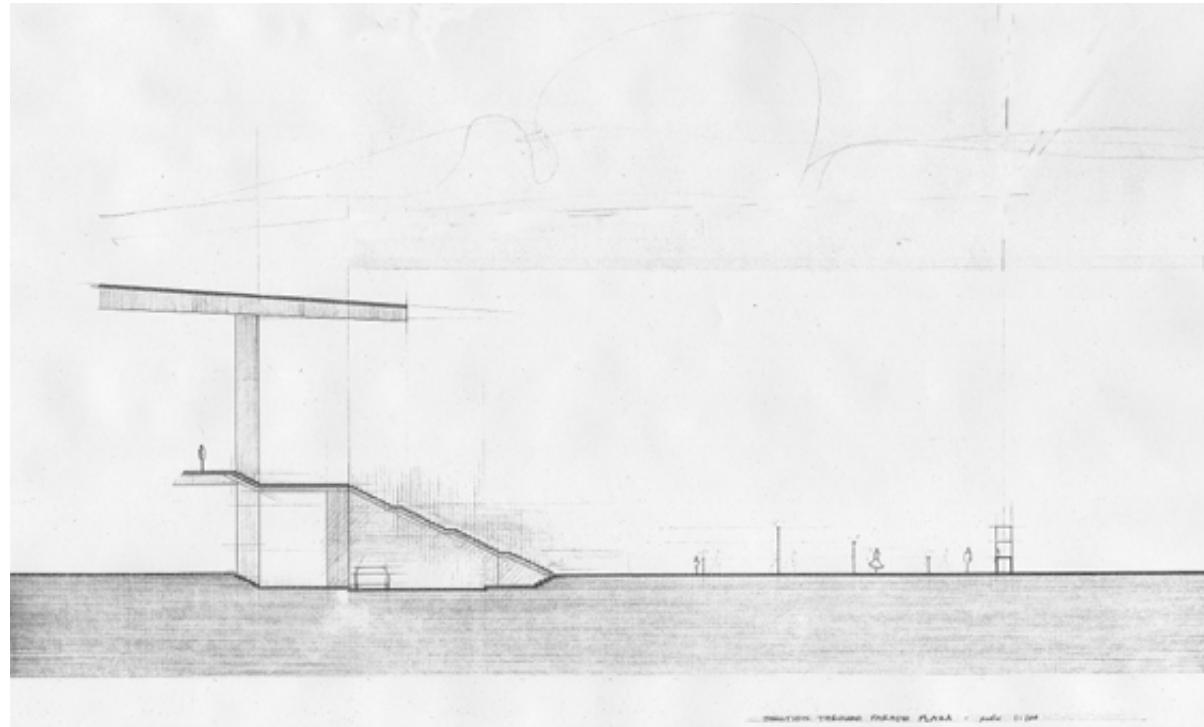
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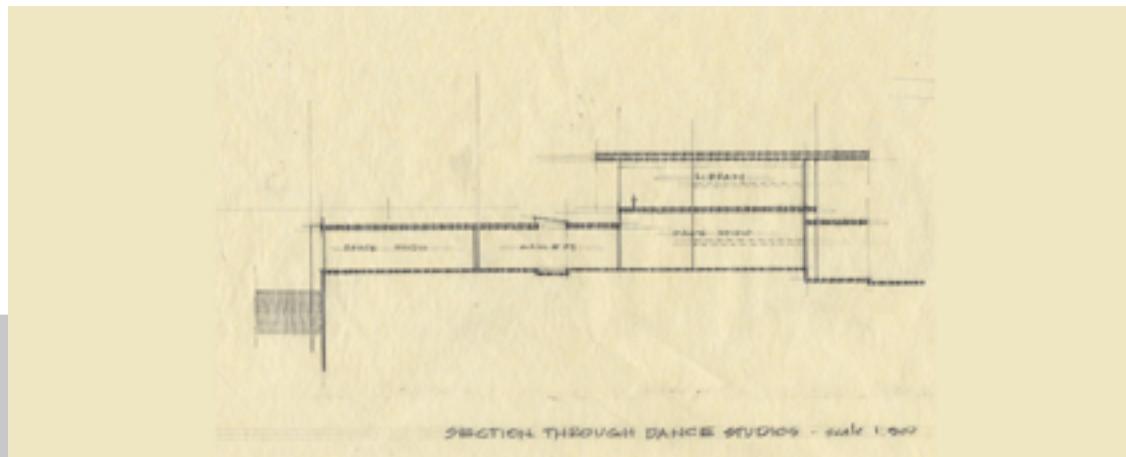
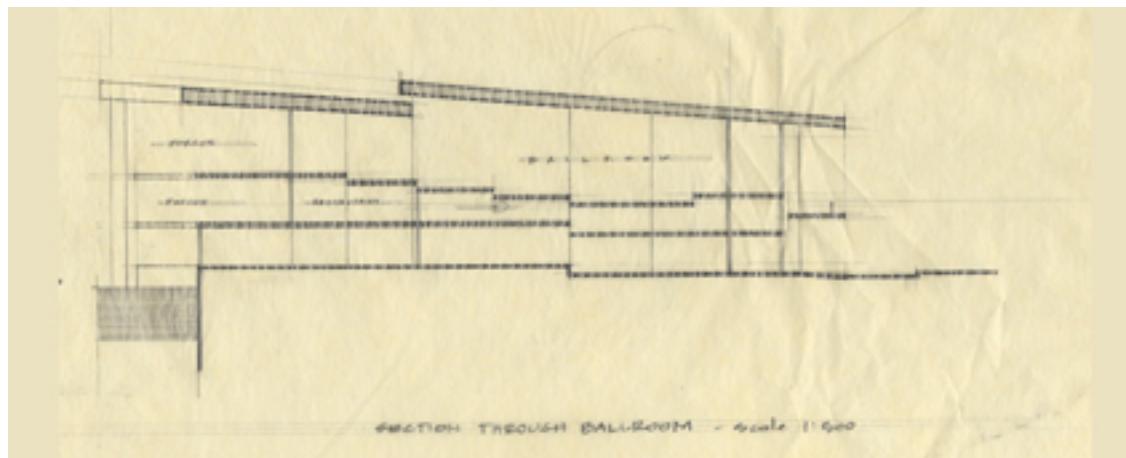
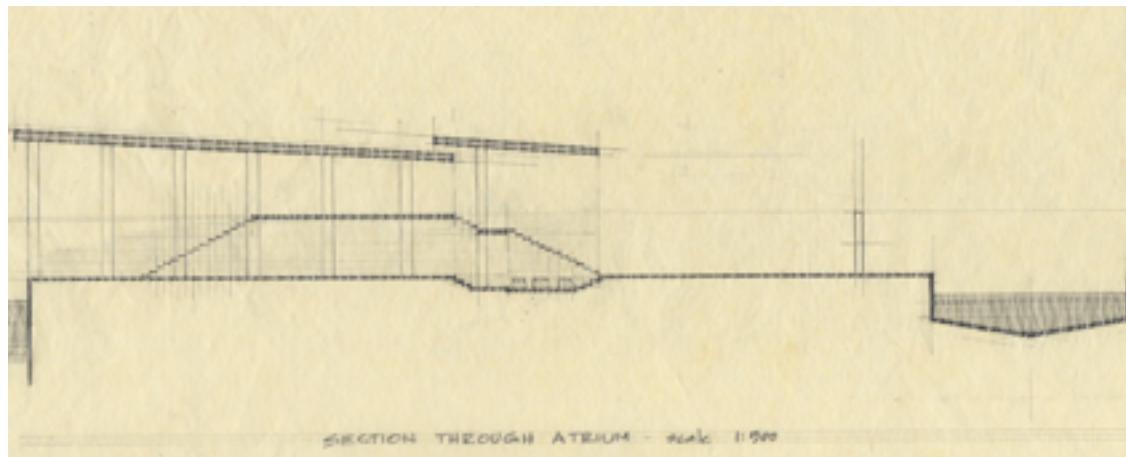
Plan and Section Studies

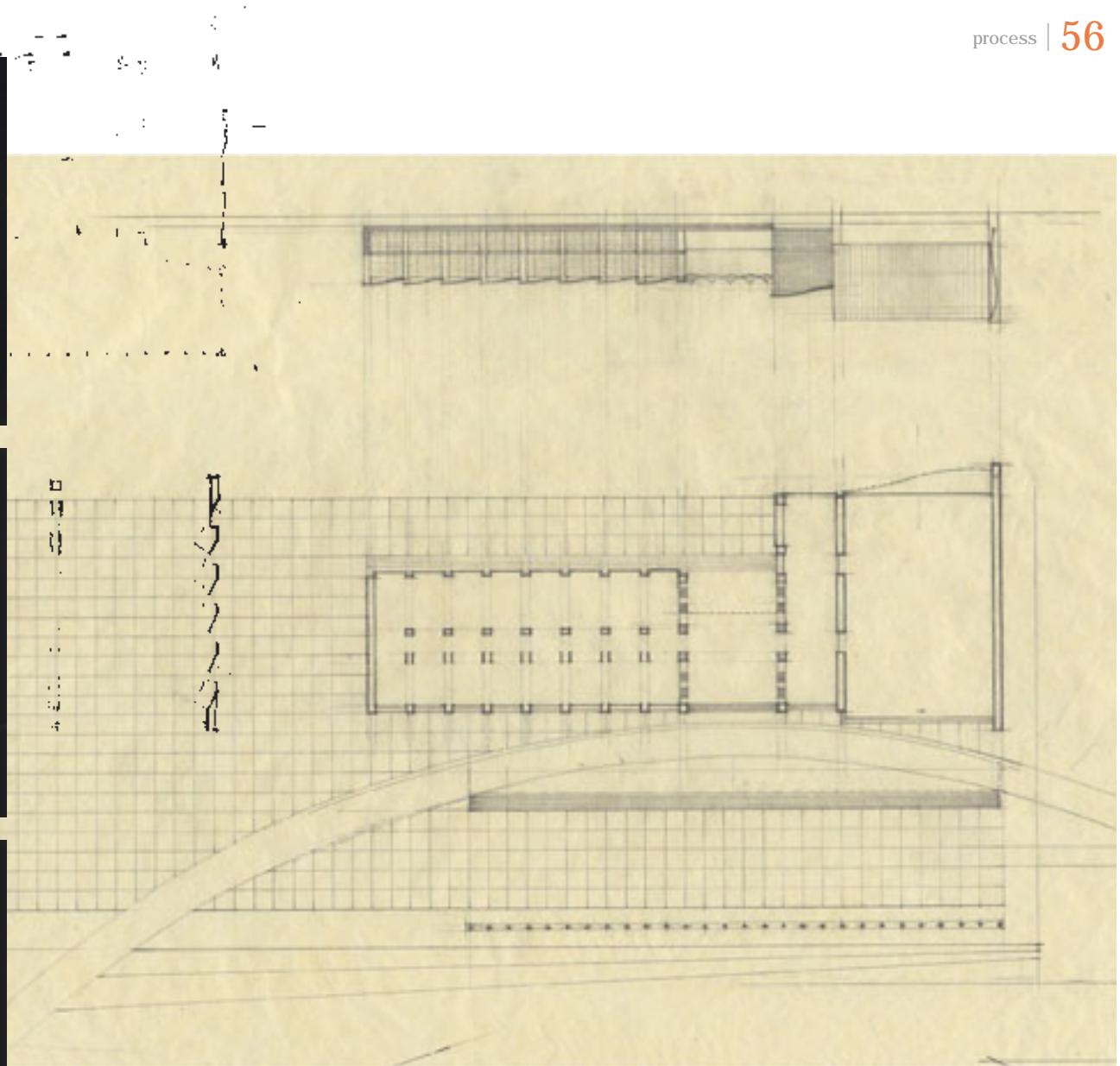
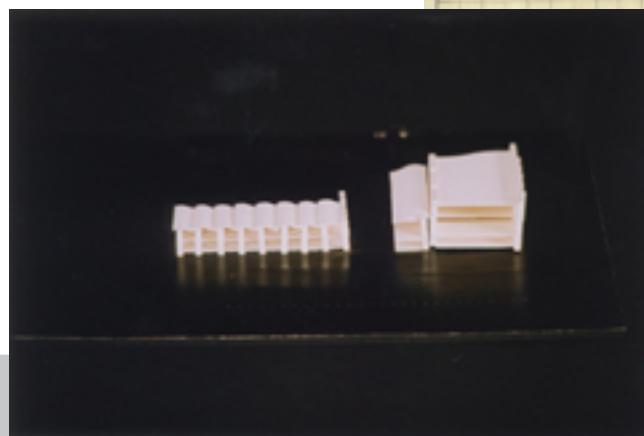
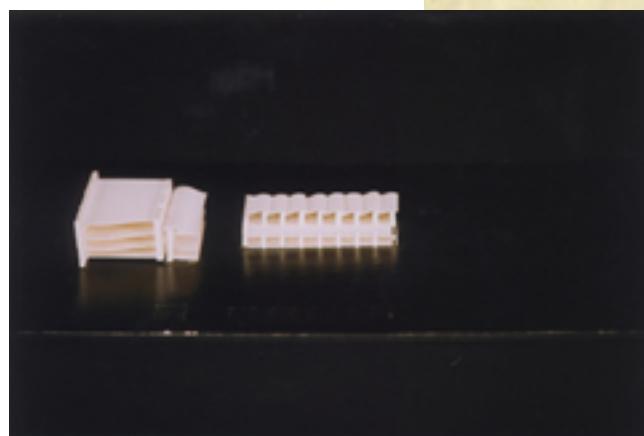
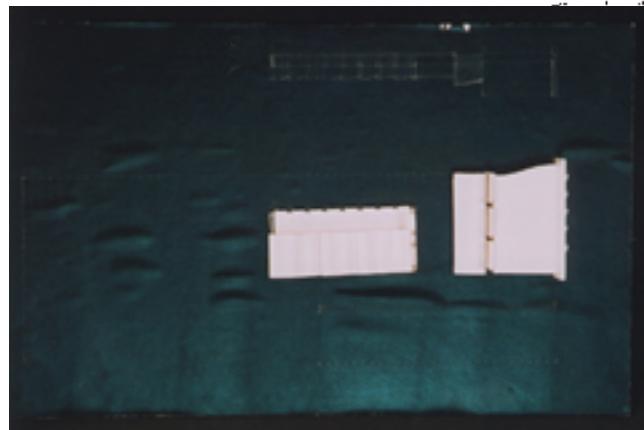




Study Model







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Photographs, drawings, and other work included in this book are by the author unless otherwise noted below.

Photographs
and
Images

Page 4

Map of South America

Taken from http://www.lib.utexas.edu/maps/americas/south_america_pol98.jpg

Map of Colombia

Taken from <http://www.lib.utexas.edu/maps/americas/colombia.jpg>

Page 5

Map of the Atlantico

Taken from the book Departamento del Atlantico 90 Años ñ See Bibliography.

Map of Barranquilla

Unknown source

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Aerial photograph

Town Planning Collaborative Consultores

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Aerial photograph

Town Planning Collaborative Consultores

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Photograph (dancers)

Diego Samper Martinez

Page 11

Photograph (dancers)

Diego Samper Martinez

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(2) Photographs

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